Computer Games / Cinema / Interfaces

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Abstract

What is the relationship between computer games and cinema? Spin-off games based on major film franchises are common, especially in genres such as science fiction, action-adventure and horror. Some games have also made the transition to the big screen, none more prominently than the Tomb Raider series in Lara Croft: Tomb Raider (2001). The potential benefits of such tie-ins are apparent at the industrial level, in a global media economy in which games and cinema often exist in the orbit of the same corporate giants. To what extent, though, is it useful to look at games more closely in the light of cinema? The aim of this paper is to explore points of contact between computer games and aspects of cinema, but also to highlight important differences and distinctions. The main focus is on the formal/textual qualities of games in relation to cinema, although reference is also made to aspects of industrial and broader cultural context. The paper also considers some more general questions raised by the use of paradigms from one media form in relation to another.

Keywords

Cinema, textual analysis, industry, narrative, cut-scenes, interactivity

INTRODUCTION

The field of computer games studies is a relatively new one, especially in terms of detailed textual analysis of the forms of games themselves (as

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opposed to studies based on assumptions about social or psychological 'effects'). A number of different theoretical paradigms are in potential competition in current efforts to map the field. Cinema might seem a logical point of reference for many games, especially with the movement of adventure-type games from text to pictures, and subsequently to three-dimensional graphics, a process that began in the early 1980s. This paper will suggest some ways in which games borrow from, or can be understood in the light of, aspects of cinema. It will not, however, be an 'imperialist' venture of the kind feared by some game theorists (see, for example, Aarseth [1] in reference to the use of literary theory in relation to games). The paper will argue that perspectives drawn from the study of film offer one set of tools with which to approach computer games (although not all games or all types of games), tools that might be more useful in highlighting some aspects of games rather than others. We will start by examining some broad areas of similarity or connection between games and cinema, as well as some key points of differences.

A number of areas of broad similarity, or overlap, can be identified. Direct movements from cinema to game are found in some titles. But many games draw on cinematic resonances more generally. If some games are based directly on films, or film franchises, others are associated with genres and sub-genres: the James Bond games, for example, and many other 'secret agent' games. The same goes for genres such as science fiction and horror that have proved popular in both media. Many games draw on iconographies that can be linked to particular film titles but that have also become more widely prevalent: the *Blade Runner* look, for example. Some games draw on more specific and localized cinematic devices. A good recent example is the 'bullet-time' mode used in the action-adventure game *Max Payne* (2001), based on slow-motion bullet effects used by the Hong Kong action director John Woo and especially its translation into Hollywood in *The Matrix*. *Medal of Honor: Allied Assault* (2002) includes a Normandy beach-landing sequence in one mission that follows almost exactly the initial moves of the film *Saving Private Ryan*.

CUT-SCENES

The use of cinematic cut-scenes is one of the more obvious connections between cinema and games: the short, pre-rendered sequences found in many games in which the player usually performs a role closer to that of detached observer than is the case in more active periods of gameplay. Cut-scenes tend to employ camera movement, shot-selection and framing similar to that used in the cinema. Many games use cut-scenes to establish the initial setting and background storyline. Opening cut-scenes frequently employ the same expository devices as cinema, using a combination of long shots, mid shots and close-ups to provide orientation for the player. Cut-scenes are also used at varying intervals throughout many games, to forward the storyline and to entice or reward players with sequences of spectacular

action and/or dialogue. They may be used to provide clues or to establish enigmas that have a bearing on the narrative trajectory of the game. Critics of the use of cinema as a reference point for games often suggest that cut-scenes provide the only formal connection between the two because they are freer than interactive sequences to use the particular formal devices associated with film. There has, to date, usually been a clearly visible gap between the higher quality of graphics found in cut-scenes and the lower-quality images that characterise more interactive periods of gameplay. This gap is likely to be reduced, however, with the introduction of more powerful graphics processors, a development that might change somewhat the nature of the relationship between cut-scenes and other aspects of gameplay.

POINT-OF-VIEW

The point-of-view structure of games can also be examined from a perspective informed by approaches to the study of cinema: the specific ways, for example, in which particular first or third person perspectives operate from moment to moment or from one game to another. This is an area in which we immediately run into complications, however, and have to confront some major differences between cinema and games. Pre-rendered camera angles are used during gameplay in some third-person shooter games, including *Dino Crisis* (Capcom, 1999), the *Resident Evil* games (Capcom, 1997, 1998, 1999) and, to a lesser extent, the *Tomb Raider* series. Predetermined framing of this kind acts like that of a film, to some extent, directing the attention of the player and creating visual diversity through shifts of perspective, although this comes at the expense of player freedom. Such devices are not found in first-person shooters or games designed to be playable in multi-player mode (such as *Quake* and *Half-Life* (Valve/Sierra, 1998)). The resonances of framing in 'stand-alone' first and third-person shooters are perhaps more 'cinematic' than those found in most other types of game, although important differences remain.

The first-person perspective used in many games is a rarity in film in other than brief sequences (the major exception being the 1946 film noir *The Lady in the Lake*), a point highlighted by the limited extent to which it is used even in the combat sequences of *Wing Commander* (1999), a direct adaptation from the game. Third-person cinema, meanwhile, usually involves a much greater and more fluid range of orientations between camera, protagonist and viewer than is found in games. The fixed views offered by games such as *Resident Evil* and *Dino Crisis* have a rigidity that creates a very different, sometimes frustratingly limited, perspective on the action. Role-playing games (RPGs) and 'God' games such as *Sim City* (Maxis), in its various incarnations, and *Black & White* (Lionhead/Electronic Arts, 2001) – in which the player creates a world or presides over a society – are among examples of formats that suggest little if any cinematic association in terms of formal strategies. Most real-time strategy (RTS) games and RPGs such as the *Final Fantasy* series (Squaresoft, 1990–), *Baldur's Gate* (Bioware/Interplay,

1998) and the campaign mode in *Emperor: The Battle for Dune* display the field of battle or action in aerial shot. The priority is the pragmatic value of the omniscient view to the player as opposed to potentially more cinematic qualities of the restrictive tracking, point-of-view and eye-level shots used in first and third-person shooters.

Different devices of visual orientation operate in games, even if they have some cinematic resonances, because of the different relationships established between players and the space-time coordinates of game worlds. Mainstream cinema has developed well-established systems of spatial orientation, especially the continuity editing system, to avoid confusing the viewer during shifts from one camera position to another. Many first or third-person games permit the player to look and move throughout 360 degrees (as far as obstacles permit). This is possible with less disorientation than would usually be expected in a cinematic context because the player/avatar moves through a particular virtual space in real time with the camera-view often seamlessly anchored to a single viewpoint. This is not an absolute distinction – the camera can break the 180 degree 'rule' in cinema, for example, particularly in first-person "subjective" sequences, and the exploration of 360 degree space in games can become disorienting, especially when done under pressure or in a rush – but it does help to explain why particular devices are generally more suited to one medium than the other. Games are far less likely than films to use ellipses to eliminate 'dead' time. Time in games may be spent exploring (without always getting anywhere) or interacting with objects that do not have any significant bearing on the main tasks. Most films only give screen time to what is deemed to be essential to storyline or the building of character or mood. Action-adventure type games operate mainly in something closer to real time with ellipses occurring primarily at the end of chapters and levels. This creates a significant difference between the pace (and length) of games and that of films. Despite the shared use of some aspects of framing, *mise-en-scène*, dialogue and music, the handling of time and space are quite different.

DIGITAL ANIMATION

Some important developments in technologies, and the formal capacity they offer for rendering versions of new fictional worlds, are also shared between cinema and games, most obviously in the area of digital animation. The fact that new standards of 'realism' in computer-generated graphics are offered as one selling point of games and animated films creates a point of cross-over between the two media. This is especially the case in a film such as *Final Fantasy: The Spirits Within* (2001), based on the successful *Final Fantasy* games series. The cross-over between more overtly 'fantastic' digital special effects in live-action cinema and those used in games, such as the transformational morphing effects in *American McGee's Alice* (EA Games, 2000), is another prominent point of contact. Similar representational capacities are drawn upon by the two media, a fact of significance to the

repertoires of images, image-textures and devices available to each. The availability of particular kinds of effects might in some cases encourage particular types of production. Horror and fantasy, for example, lend themselves especially well to the spectacular display of morphing effects in both films and games.

This is another area in which important differences remain, however, even when such fundamentally similar building blocks are involved. The standard of surface 'realism' attained in the film version of *Final Fantasy* is much higher than that found in any game at the time of writing, for example – even those at the cutting edge played on machines using the most advanced graphics cards – partly because priorities other than graphical realism have an important call on the resources of games processing. The same goes for the morphing effects in *Alice* as compared with their equivalent on film. A similar *kind* of transformation might be presented in some films and games, creating similar potential for the development of particular narrative-type developments or spectacular effects. But the quality of resolution – and, arguably, the importance of this factor among others – remains different. This has various implications for effects produced in the name of both 'realism' and spectacular-attraction-for-its-own-sake. The relative scales at which all of these qualities are produced vary greatly from one medium to the other, because they are driven by substantially different agendas and priorities.

Future developments in graphics cards might close the gap, however, a promise that figures largely in advance publicity claims for forthcoming products such as the new generation of games and games designed to take advantage of the capabilities of the nVidia GeForce3. According to Gabe Newell, managing director of the games developer Valve: "The GeForce3 pixel and vertex shaders allow us to create characters and environments that rival those previously reserved for the big screen and multi-million dollar Hollywood production budgets" (quoted in [6]). NVidia itself has discussed its intentions in terms of the achievement of 'photorealistic' images such as those produced in *Final Fantasy: The Spirits Within*. The potential to realise such an ambition was suggested in a joint demonstration by nVidia and Squaresoft at the SIGGRAPH computer conference in Los Angeles in August 2001. Scenes from the film were generated in real-time (as required in ongoing gameplay) using nVidia's latest workstation graphics technology "to overcome the technical challenges presented in creating realistic skin, hair, clothing and other organic attributes" [14].

The development of new generations of graphics technologies contributes to the ability of games and cinema to create spectacular audio-visual effects. Action-adventure type games and some kinds of cinema also share an investment in the production of intense sensational experiences that impact forcefully on the player or viewer. Varying combinations of rapid editing and unstable camerawork are used in contemporary Hollywood action cinema to create a vicarious sense of impact for the viewer. Games sometimes mimic devices used in Hollywood – the omnipresent fire-ball impact effect, for example – but they also take this a stage further, requiring

a frenzied response on the part of the player, a key aspect of games to which we return below.

It is important to acknowledge that there are major differences between games and cinema, even in the case of the kinds of games that have most in common with cinema in some respects. Games clearly need to be studied in their own terms, the criteria for which often diverge considerably from those most relevant to cinema or any other media. The act of comparison should not be one of reduction of one medium to the terms of another; it should, instead, be a way of highlighting factors specific to each.

INTERACTIVITY

One of the most important points of difference between film and games lies in the much used – some would say, abused – notion of 'interactivity.' If games can offer something like a cinematic experience, in some respects, this is extended (and/or complicated, and maybe 'reduced') by the most obvious distinguishing characteristic of games: the fact that they are to be 'played,' engaged with in a manner that is much more active and formative of the resulting experience than anything usually involved in the process of film viewing. An initial caution is required here. It is easy to set up an opposition between game-playing and film-viewing that falls into an overly simplistic distinction between 'interactivity' or 'activity,' on the one hand (games), and 'passivity' on the other (cinema). There is a clear difference between the experiences offered by the two media, but it is not quite as simple as such a formulation suggests. Cinema-going, or film-viewing in other arenas, such as on videotape, is far from an entirely passive process. It involves a range of cognitive and other processes in the act of interpretation.

Games, however, place a central emphasis on the act of *doing* that goes beyond the kinetic and emotional responses that might be produced in the cinema (responses such as laughter, tears, shock, physical startling, increased heart-rate, and so on; responses that might also be generated by games). To describe specific qualities such as these, the term 'interactive' is problematic, Espen Aarseth suggests, because the term is often used very loosely. Taken literally, the term can be applied so widely as to have little value in distinguishing between the inter-actions that occur between users and texts of all kinds; it tends to imply a less 'interactive' point of negative reference, such as literature or cinema, with which games are compared. In its place, Aarseth proposes the term 'ergotic' (derived from the Greek *ergon* and *hodos*, meaning 'work' and 'path'), to identify forms in which "nontrivial effort is required to allow the reader to traverse the text" [1], an effort greater than that involved in reading a novel, watching a film, or cognitively processing the material contained in such forms.

The videogame player has to *respond* to events in a manner that *affects* what happens on screen, something not usually demanded of readers of books or viewers of films. Success often depends on rapid responses, effective hand-eye coordination and learned moves or skills effected through

devices such as joypads and keyboards, or puzzle-solving skills. Games are, generally, much more demanding forms of audio-visual entertainment: popular, mainstream games require sustained *work* of a kind that is not usually associated with the experience of popular, mainstream cinema. It is possible to 'fail' games, or to be 'rejected' by them – to give up in frustration – if the player does not develop the skills demanded by a particular title, a fate that does not really have an equivalent in mainstream cinema.

NARRATIVE

Another key point of difference that is often highlighted between games and other media, such as cinema or literature, is the role of narrative. Narrative, generally, plays a less important or central role in games than it does in cinema. This is despite the widespread claim that narrative has become attenuated in recent or contemporary Hollywood cinema. Narrative remains a central component, a major aspect of the dynamic architecture, of even the most nosily and special-effects or action-packed Hollywood blockbusters. Narrative is present in many games, and has a role to play. Narrative progress is sometimes offered a reward for successful gameplay, or provides a general context within which gameplay is conducted. But, generally, it is a rather secondary one – secondary to engaging in more active or frenetic gameplay, for example, or secondary to the process of solving puzzles or exploring new worlds.

Narrative rationales tend to disappear into the background during much of gameplay. Jesper Juul suggests that there is an inherent conflict between interactivity and narrative:

> [There is a conflict] between the *now* of the interaction and the *past* or "*prior*" of the narrative. You can't have narration and interactivity at the same time; there is no such thing as a continuously interactive story. The relations between reader/story and player/game are completely different – the player inhabits a twilight zone where he/she is both an empirical subject outside the game *and* undertakes a role inside the game. [11]

Narrative is pre-set, built into the fabric of the game, available to be discovered or realised, in whole or in part – or, in some cases, in one version or another, depending on the paths taken by the player. Narrative has *happened*, or been created, while 'playing' is always *happening*, a particular realisation of the potential offered by the game, the precise shape or outcome of which is indeterminate.

The ideal suggested by the game designer Richard Rouse is to achieve a balance between narrative as predetermined and structured into the game and the variable 'player's story' generated in each individual experience. The player's story, Rouse argues, "is the most important story to be found in the game, since it is the story the player will be most involved with, and it is the story in which the player's decisions have the most impact" [17]. Carefully predetermined narrative structure is necessary, however, to games in which

dynamics such as variable pace, tension, the foreshadowing of events and building towards a climax are important or desirable. The extent to which narrative dimensions are experienced as separate from, or a part of, gameplay is also determined by the kinds of storytelling devices used by individual games. The sense that narrative is essentially separate from gameplay is encouraged by the prevalence of what Rouse terms 'out-of-game' narrative devices, such as cut-scenes, that break into gameplay. Strongly favoured by Rouse is the use of 'in-game' devices to provide story information during the course of gameplay: written material such as signs or notes in the game-world that can be read without switching out of the scene into a separate screen filled with text, dialogue with non-playing characters (NPCs), behaviour of NPCs and the design of level settings [17]. *Half-Life*, for example, is a first-person shooter with a narrative more complex than is usually found in the format, but it does not resort to cut-scenes or information that has to be accessed by the player outside the main game-space. Instead, scenes that are important to the trajectory of the plot are fully interactive, allowing the player to move around, while basic information is relayed in-game by NPCs and other integrated devices. The effect is a sense of seamlessness closer to that usually experienced in the cinema. As Rouse puts it:

> If one stops for a moment to consider the nature of out-of-game devices for storytelling in games, one will be struck by what a strange concept it is to disrupt the interactive experience with a non-interactive one. For instance, when you go to a movie, do the theater workers ever stop the film, bring up the lights, and direct the audience to read a book that they handed out? Sometimes text is shown on the screen, but never in a way that requires the audience to read more than a few words at a time. Instead, films present a consistent media experience for the audience. Games, on the other hand, still mix media in seemingly unnatural ways, forcing users who may just want to play a game to have to read a bit of a book, watch a movie, and only then actually get to play. [17]

Moments of the most heightened and intensively interactive gameplay often entail features such as cause/effect relationships and linear progression (although the latter, in particular, is far from always guaranteed: it is quite possible to regress, to lose ground, during activities such as combat or the negotiation of difficult terrain). These are qualities often associated with narrative, as, for example, in David Bordwell's [3] influential formulation of 'classical' Hollywood narrative. By themselves, however, at the local level, they are not sufficient to constitute narrative or story, unless these are to be defined at a very minimal level. Moment-by-moment developments gain narrative resonance through their position in a wider frame that is largely pre-established. One of the major dynamics of many of the kinds of games considered above is the oscillation between these different modes of engagement, the rhythm of which often varies from one example to another.

Both games and recent Hollywood cinema have been criticized from some quarters for alleged shortcomings in the realm of narrative. In the case of Hollywood, this tends to be very much overstated [12, 13]. In games, it is

often the attempt to impose a different agenda upon the medium, to make it somehow 'more responsible' by situating the events of gameplay (especially where they are violent) in some kind of 'moral' context [10].

REMEDIATION OF CINEMA

Where games do borrow from cinema, this is for reasons that are far from arbitrary. 'New' media tend to borrow from their older equivalents more generally, as suggested in Jay David Bolter and Richard Grusin's concept of 'remediation.' As Bolter and Grusin argue, the experience of playing computer games that offer cinematic milieux might be understood in terms of a move 'inside' the world of the cinema screen. The 'immediate' thrill produced by direct engagement in the interactive experience is often based on a sense of 'hypermediacy,' of awareness that the world 'occupied' virtually is akin to that of another form of representation. Film-based or film-related computer games are sold at least partly on the basis of the attraction of an occupation of worlds the contours of which have been established elsewhere, often on film. The player can, at one remove, 'become' the central figure in a cinematic milieu, following and extending the kinds of experiences offered in film. *Aliens vs. Predator 2* (Sierra/Fox Interactive, 2001), for example, can be played as either marine, alien or predator. The world of the film is extended in terms of both interactivity and variation of perspective/allegiance. A novelty offered by the sequel is the ability to experience the world of the alien through its entire life-cycle; the opportunity to take on the first-person point-of-view of lowly forms such as the 'face-hugger' and the 'chest-burster,' to inhabit the game from a perspective very different from anything available in the films. A sense of immediacy, here, is closely tied up with the process of hypermediacy. The sense of presence exists at a second-order level: presence within another form of mediation, specifically, in this case, that of cinema. As Bolter and Grusin put it in an analysis of *Myst* (Cyan/Broderbund, 1993), that can be applied more widely, the game satisfies the viewer's desire for immediacy "by seeming to put her in a film. Her sense of immediacy comes only through an awareness of mediation" [2]. The cinematic dimension, in this case, is a substantial component of the specific experience offered by the game *as a game*, and not merely something imported externally as a weak form of comparison between one medium and another.

An incorporation of elements of the 'cinematic' can be a substantial component of the specific experience offered by some games *as games*. The importance of the "cinematic" needs to be understood both in terms of the use of particular textual devices and the discursive situation of the qualities of games. Games draw on other media, as well as cinema. Television is a major reference point for many games, for example. But cinema is the remediated form to which attention is most often drawn by the industry, as well as by some academic commentators. The reason for this is the greater cultural prestige enjoyed by both cinema (as an institution) and film (as a medium of expression). Computer games tend to be relegated to a place

low in the dominant hierarchy of media-taste formulations, for a number of reasons into which this paper will not go in detail. Association with the 'cinematic,' for games, is generally seen as a form of praise – hence the readiness of publicists (and reviewers) to use such references in advertising and other promotional copy, as in the case of *Max Payne*. 'More cinematic' is generally assumed to equal 'better' and more distinctive gameplay, even if this is an assumption resisted by some members of the game-playing and game-designing community (many gamers and game reviewers are, not unreasonably, suspicious of directly movie-linked games, many of which are viewed as transparent attempts to cash-in on successful movie franchises with products that lack much in the way of compelling gameplay of their own – *Evil Dead; Hail to the King* (2001) and *From Dusk Till Dawn* (2002) are two recent examples). The opposite tends to be the case when films are compared with games: games tend to be seen as a deleterious influence especially in terms of the alleged erosion of qualities such as character and narrative in Hollywood action-adventure cinema.

INDUSTRY

At the level of industry more generally, the linking together of cinema and games is far from arbitrary in an environment in which some of the key producers and distributors of both forms of entertainment are located within the same media corporations and in which game spin-offs offer substantial additional revenues to the Hollywood studios. At the larger, corporate level, the Sony Corporation is the most obvious example, home to both Sony Pictures and the PlayStation games platforms. In the year ending March 2000, sales and operating revenue accounted for $4.6 billion from pictures and $5.9 billion from games (Sony, Annual Report, 2001). On a smaller, more independent corporate scale, companies that form part of the empire of George Lucas, the creator of the lucrative *Star Wars* franchise, include the original Lucasfilm and LucasArts Entertainment, a major developer of game software for a variety of platforms. Universal Studios signed a five-year licensing agreement with the games developers Konami to produce film spin-off games including *The Mummy* (2000), *The Grinch* (2000), *The Thing* (2002), and *Jurassic Park 3* (2003) [15]. Whether licensing deals for film tie-ins are negotiated in-house or with outside developers, games represent a significant source of profits for the studios. The numerous *Star Wars* games developed by LucasArts generated revenues of more than $450 million during the 1990s (these and the following details are from Donahue and Swanson [5]). James Bond games developed by Electronics Arts, in conjunction with the studio MGM/UA and the production house Danjaq, achieved sales of $250 million in the three years to December 2000. Studio owners of the rights to titles usually take from 10 to 20 per cent of the profits earned by spin-off games, in addition to licensing fees paid in advance.

In addition to such earnings, tie-in games are also valued by Hollywood as a way of attracting new audiences for major properties such as the Bond

franchise, particularly via the youth market. Exit polling conducted during screenings of *The World Is Not Enough* (1999) suggested that games had helped to broaden the audience "to include a whole new generation of Bond collectors," according to David Bishop of the MGM home entertainment group (quoted in [5]). The development and production process required by games has also come to take on some of the characteristics, and scale, of the film business. Very much on the model of contemporary Hollywood, the games industry has become a strongly hit-driven business. The bulk of profits are earned by a small number of increasingly expensive top-selling titles. Fewer than 5 per cent of some 6,000 games released each year make money, according to the *Financial Times* [7], a commercial dynamic that tends not to encourage innovation (for more on this see interviews with game designers Chris Crawford and Jordan Mechner in [17]). Game design and programming has moved from a small-scale enterprise to an effort requiring many separate skills, development typically over a period of about two years and Hollywood-style budgets running up to tens of millions of dollars [16].

The games industry also shares with Hollywood the continued use of individual 'author' names, in some cases, to sell products within the more anonymous corporate context. Some programmers have gained high-profile status within the gaming community – individuals such as John Carmack, creator of the game engines *Quake* (1996) and *Doom III*, built by id software. A figure such as Carmack might be seen as the games equivalent of a high-status 'auteur' in the film business, working collectively with many others but with his name carrying a marketable cachet, signifying a certain level of quality in any individual product to which it is attached. Other examples include the addition of possessive 'auteur' credits to the titles of games such as *American McGee's Alice* (Rogue/Electronic Arts, 2001), sold on the name of the designer, and *Clive Barker's Undying* (Electronic Arts, 2001), sold on the basis of associations with the author-figure's work in the same genre (horror) in other media.

CONCLUSION

The emphasis of this paper has been on games in the light of cinema, rather than vice-versa. This is partly the focus we have chosen to take for the purposes of this conference. But it also reflects the main flow of influence between the two media. Games in general do not lend themselves particularly well to cinematic adaptation. It is hard to find examples of films that draw, formally, on the characteristics of games, rather than superficially reproducing aspects of content, despite claims made by some commentators (for example [4]). As Henry Jenkins [10] suggests, the core characteristics of games tend not to emphasise narrative and character, dimensions that remain important – even if not developed with any great subtlety – to films, even those that put the emphasis on qualities such as action, adventure and spectacle. Films provide ready-made character and narrative resonances that can carry over and play into the experience of a spin-off game, even

where the dimensions of character and narrative are not greatly elaborated in the game itself. This is an effect that is generally much harder to achieve in reverse, although how exactly any of these dynamics work in practice, in terms of the ongoing experience of the viewer/player, is difficult to ascertain in anything other than a subjective or speculative fashion.

Videogames, even at their most 'cinematic,' are not a form of 'interactive cinema', as has sometimes been implied. Whether they might point in that direction, along with formats such as interactive movies on DVD, as one potential line of development among others, remains to be seen. We have sought to resist the temptation to speculate about such 'future potential' – a problem endemic in the consideration of new media forms generally – to focus instead on points of similarity and difference between cinema and games as they currently exist or are likely to be shaped in the immediate future. The specific qualities of both media will have to be taken into account, and some central contradictions overcome, for any such hybrid medium to become viable, but that is another story.

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