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De-framing video games from the light of cinema

Interactivity is the cinema of the 21st century.
David Cage (foreword of *L'empire des jeux*, 2005)

ABSTRACT
In this essay, we shall try to step back from a blinding cinema-centric approach in order to examine the impact such a framing has caused, to question its limitations, and to reflect on the interpretive communities that have relied on film (communities we are part of, due to our film studies background) to position video games as an important cultural phenomenon as well as an object worthy of scholarly attention. Using Gaudreault and Marion's notion of cultural series and wishing to spread a French theoretical approach we find very relevant to the discussion, we will question the bases on which we frame video games as cinema. This inquiry will focus on the audiovisual nature of both media and highlight their differing technical and aesthetic aspects, which will lead us to consider video games as being closer to other forms of audiovisual media.

KEYWORDS: *video game; cinema; theory; history; remediation*

It is difficult not to rephrase the theme of this issue and try to see outside its box. It seems that video games, since a while already, have been framed in the light of cinema by the designers, producers and scholars who have begun to study them. Indeed, as we have been doing for ten years throughout the activities of the Ludiciné research group (www.ludicine.ca), film theories have been one of the most important body of works used to analyse video games at the dawn of game studies. It is then hard to see why we should today re-frame such a common mode of examination. Therefore, the real query would not be to see video games through the lenses of cinema, but to show how this view is far from being (an) "objective". As Godard playfully formulated, there is nothing "objective" in looking through an objectif, the French term for the camera

lens. The methodological theories that are now elaborated in game studies show us that the video game's specificities as a playable and interactive art are calling not for a close-up but for a wide-angle shot on the complex relations between video games and cinema.

In this essay, we shall try to step back from a blinding cinema-centric approach in order to examine the impact such a framing has caused, to question its limitations, and to reflect on the interpretive communities that have relied on film (communities we are part of, due to our film studies background) to position video games as an important cultural phenomenon as well as an object worthy of scholarly attention. Using Gaudreault and Marion's notion of cultural series and wishing to spread a French theoretical approach we find very relevant to the discussion, we will question the bases on which we frame video games as cinema. This inquiry will focus on the audiovisual nature of both media and highlight their differing technical and aesthetic aspects, which will bring us to consider video games as being closer to other forms of audiovisual media.

IN THE AXIS OF A CERTAIN SERIES-CENTRISM

The link between the video game and cinema has first been made by the industry itself, as both branding and legitimation practices. These roots cannot be clearer than with the names of companies such as Cinematronics and Cinemaware. Founded as early as 1975 (and defunct in 1987), Cinematronics was originally producing arcade games with vector graphics. Despite the label, the wireframe visual representations, as well as the arcade as the context of diffusion, and the short, repetitive and competitive structure of these games' experience were all very far from the in-theater, collective, feature-length photographic records of reality structured as a fixed narrative that the "cinema" term represented. Cinemaware (1985-1991), who worked to produce games based on genre films or television series, explicitly tried to recreate different aspects of the seventh art by showing the action through different camera angles and shots of diverse scales. Lucasfilm Games, founded in 1982, is another obvious bridge between cinema and the video game, of which George Lucas has never lost interest in. The seemingly ever-present dream of fusing games with film has been fulfilled – materially at least – with the introduction of the Laserdisc and CD-ROM as high-capacity data storage solutions, enabling game developers to include "Full-Motion Video" (or FMV) in their "interactive movies" starting in the late 1980s. The craze – and quick fall, we should emphasize – of these "FMV games" in the 1990s have pushed the ties so far as to make people realize that this bond might not be so natural, after all (see Perron *et al.*, 2009, for an in-depth examination of the interactive movies, and Perron and Therrien, 2009, for an overview of the cinematic aspiration of the video game image), even if a well-known designer like David Cage is, as the epigraph of our essay highlights, widely relying on cinema to justify his work and to qualify the future of video games.

These already debated connections between films and games advocate us to take another step back and look at an even bigger picture. Because, as André Gaudreault and Philippe Marion have appositely stated: «To name a media is to contribute to its identification (to bring out its mediality, to grasp its singularity) and to jointly construct an identity for it, which is sometimes not without producing teleological effects» (2009: 27, freely translated). In their recent study of the identity crisis of cinema in the digital era, Gaudreault and Marion explain how the choice of what they call a cultural series (a series of cultural practices ordered around a common principle or paradigm, and determined by an analyst to be constituting a certain continuity of forms) has an important impact on the study of a media. For them:

> Choosing a name for a media always betrays what we propose to call a «series-centrism». This series-centrism is at work when a way of naming a media brings a cultural series to the forefront rather than another. There is always a form of series-centrism at work in the institutionalization process of any media, a powerful series-centrism that, aided by the regulatory power of the institution, comes to dominate and take an appearance of "naturality" even though it is, without contest, a cultural construction.
> This concept of series-centrism leads us to believe that one always chooses a side with respect to such and such cultural series in order to identify a media and, inevitably, to interpret its evolution. This choice confirms that a certain constructivism creates and indeed imprints any theory of media identity. Viewed through the prism of a cultural series elected among others, the allocation of the territories and of the media identities is considerably affected (2013: 215, freely translated).

Consequently, the choice to speak about films as motion pictures instead of animated views has placed emphasis on the question of capture (of a photograph) and restitution (of reality), over the important notion of animation which is in the end, according to Gaudreault and Marion, the "hyperseries" defining the movies. This is why they introduce the concept of *animage* to deal with the «type of film image that is born from the expressive potential of the digital and that crystallizes the current spreading of a cultural series formerly neglected by the cinema institution: animation» (2013: 256, freely translated). This is in line with Edmond Couchot's claims that the digital marks a major shift in the history of visual media because it replaces the capture/restitution paradigm present in photography, cinema, and some television and video, with the paradigm of simulation, with digital media offering images based on calculations computed by a machine and generated on-the-fly (often in real-time) instead of being previously recorded in detail (Couchot, 1998). This hints towards some significant differences in media specificity between the film and the video game image.

THE «VIDEO» PRISM

The designation of games since the creation of *Spacewar! i*n 1962 is as interesting as the various markers of cinema. Indeed, the expression used to describe the objects and activities we came to study is far from being "natural", which is reflected by the fact that our field hasn't yet adopted a single expression. While the title of this issue is for example referring to video games, the inaugural editorial of *Game Studies* was announcing the «*Computer* Game Studies, Year One» (Aarseth, 2001). Our international organization founded in 2003 is named the *Digital* Games Research Association (DiGRA). We can also bring to mind the 1980s magazines *Electronic Games and Computer and Video Games*, which posit neatly separated kinds of "digital" games. The last fifty years of writing about games could actually be revisited to trace the ways they created a media identity. However, if we draw on Google Ngram Viewer (an online phrase-usage graphing tool) for indications on the ways games were named between 1962 and 2008 (the year that the chart ends), we discover that «video games» was as early as 1976 more widely utilised than «computer games», and that by 2008, the first expression is about twice as likely to be used than the second, while the references to «digital games» are still pretty rare (see <http://bit.ly/1mZwLq2>). As of August 17th, 2014, a search through Google Scholar shows an obvious preference for «video games» (even if the numbers are less reliable in a simple Google search because they seem to vary too much, and this is why we are not using them, the same conclusion would still be reached):

Term	Google Scholar
Digital games	19.600
Computer games	241.000
Video games	384.000

Following Gaudreault and Marion's theoretical account, it is difficult not to see that there is behind this choice a certain form of series-centrism as well. Such a teleological effect was stressed by Aarseth in his well-known editorial:

> Games are not a kind of cinema, or literature, but colonising attempts from both these fields have already happened, and no doubt will happen again. And again, until computer game studies emerges as a clearly self-sustained academic field. To make things more confusing, the current pseudo-field of "new media" (primarily a strategy to claim computer-based communication for visual media studies), wants to subsume computer games as one of its objects. There are many problems with this strategy, as there is with the whole concept of "new media," and most dramatically the fact that computer games are not one medium, but many different media (Aarseth, 2001).

If Aarseth explicitly and rightfully stated that there are more than one media or cultural series composing what we might call, according to his cybertext theory, an *ergodic animage*, and that the "new media" labeling blurs boundaries to one's own advantage, he was also implicitly electing cinema as the first or at least as one of the main prisms on games. In fact, the great majority of game studies scholars have come to show their bias by using "video games" in common parlance. Underlining that "jeu video" has imposed itself in the language of Molière (over *jeu électronique*/electronic game or *jeu informatique*/computer game) under the francization of the English expression, Étienne Armand Amato explains how the expression has associated two neglected objects of study. After dealing on the one hand about the "game", Amato states:

> On the other hand, the word "video" highlights the iconic quality of these games. It also evokes the video, this electronic technology of capture-recording-restitution which was long perceived as a poor man's substitute for film, synonymous with household and amateur usage, or with television and commercial exploitation (Amato, 2012: 21, freely translated).

This assertion reveals two consistent and common assumptions which have shaped the media identity and theory of games in the electronic and digital era. First and foremost, speaking about "video" games has promoted the importance of the audio-visual display over the computation or, much to the discontent of those more oriented towards the second term of the expression, the ludic dimension of the activity. As we know, the quest for visual realism or the photo-realism of film did not start yesterday. «Better graphics and sounds» has always been one of the best marketing slogans of video game companies, as Mark J.P. Wolf explains in «Abstraction in the Video Game»:

> Game graphics were, and to a large extent still are, the main criteria by which advancing video game technology is benchmarked by the buying public; thus representational graphics act as a means of visually benchmarking the computer's graphics against the visual experience of unmediated reality, while abstract graphics are unable to serve such a purpose (Wolf, 2003: 53).

Even if the ergodic animage isn't in essence based on the same technical process, the idea of "video" did point toward the implied notion of capture-recording-restitution. Insofar as, and Amato's remarks are perceptive, the quality of the image did not have the quality of film, people did not – thank God! – choose to talk by and large of "movie games", nor "TV games" (except when referring to a certain kind of game system, the likes of which Nintendo used to make before its Famicom/NES), even though the latter might have been more relevant.

The expression "TV games" portends a second way of "allocating the territory" of games, to return to Gaudreault's phrasing on cultural series, and a way

that was ironically explored first, notably by the pioneer Ralph Baer. His battle was to sell his "television gaming and training apparatus" (as his 1971 patent was titled) to television manufacturers because «he had to deal with the public perception that television was for watching, not playing» (Murphy, 2009: 202). Eventually, the Magnavox Odyssey was commercialized as the world's first home video game console in 1972. Though the Odyssey managed to sell 350,000 units by 1975, it equipped less than 1% of active televisions. As William Audureau writes when describing that period:

> Though Magnavox's console is technically in a situation of monopoly in the United States, its position is not hard to attack: it is only distributed in the manufacturer's own stores, resulting in an unfortunate reputation of being incompatible with televisions from competing manufacturers. Consequently, the console market is still wide open (Audureau, 2014: 33).

In his economic study of the worldwide market of video games between 1976 and 1980, Audureau indicates that the total number of different game systems introduced made a gigantic leap from around 100 models in 1976 to a whopping 744 machines in 1977, thanks to the development of the AY-3-8500 integrated circuit chip by General Instrument, with worldwide sales of electronic games (of which video games made the bulk) amounting to a staggering 272 billion euros (Audureau, 2014: 14). The game system had really gotten into the home.

This access had a certain bearing on the identity of games. Studying the role of television largely gone unnoticed in the history of video games, Sheila C. Murphy reflects on a decisive change:

> By the time that Atari's breakthrough Sears Home PONG console was released, consumers were ready to play with and on their TVs. This shift towards seeing the television as a playable consumer device is crucial. While the histories of both computing and mass media contain important contributions from amateurs and hobbyists, the widespread public acceptance and use of home video game systems by a broader audience indicates that consumers were rethinking television's role as a home technology in the mid-1970s (2009: 202).

Murphy explains how home gaming systems were seen as «low level home computers» (p. 201) and how the television came to be considered «as part of both a larger entertainment system and as an interactive "computer"» (p. 202), but a computer solely focused on leisure rather than utility. There are much fewer advertisements presenting people gathered around a computer screen than ones showing friends, couples or family grouped in front of a TV screen in order to play or to just watch others do so; it's indeed an image used from the outset to promote the home gaming systems, from the Atari VCS to the Nintendo Wii. Nevertheless, this new appraisal of TV as an interactive system

did not discard the old consideration of the image as a capture-recording-restitution process. The popularity of Atari's Video Computer System (VCS) was overlapping with the increasing presence of the home Video Cassette Recorder (VCR) in the 1970s, with the Sony Betamax's 1975 release and JVC's VHS format appearing in 1976. Although "video games" is not designating a venue as clearly as "arcade games" does, there is a correlation to be made between "video" and "home video". It might not be mere happenstance that Google Ngram Viewer gives 1976 as the time when "video game" overtook "computer game". Home video with its cassettes, and home video games with their cartridges, were leading the commodification of visual practices.

THE VIDEO GAME AS FILM: A "SCHOLARLY SERIES"?

The accent put on the relationship between video game and film is certainly not merely a matter of commercial practices. It has also been an academic line of inquiry before this present issue, to the point that we may consider the history of views on games as cinema as forming its own "scholarly series". It was indeed one of the cases used by Bolter and Grusin, in a seminal book hard to eliminate from the discussion even if it is dated, to illustrate how the new media tried to refashion prior media forms.

> Finally, the new medium can remediate by trying to absorb the older medium entirely, so that the discontinuities between the two are minimized. The very act of remediation, however, ensures that the older medium cannot be entirely effaced; the new medium remains dependent on the older one in acknowledged or unacknowledged ways. For example, the genre of computer games like *Myst* or *Doom* remediates cinema, and such games are sometimes called "interactive films" ([1999] 2000: 47).

In a sense Bolter and Grusin were right to call Cyan's graphic adventure and id Software's first-person shooter «computer» games, since the first was responsible for the popularity of the CD-ROM, and the second for real-time first-person perspective. However, they were wrong to label them «interactive films» (and not even «movies»), as this is reflecting their series-centrism. That being said, the idea behind Bolter and Grusin's seminal concept of remediation should spur us to be conscious about the fact that even if new theoretical approaches about games remain dependant on older ones, like film theory in our case, they have to be refashioned.

Eventually, the idea of discussing video games through cinema must be engaged with. Games were never "filmic" since the term film is, even in the present-day theory of the seventh art, reserved for the material properties of the film medium – the film stock itself and the mechanical logistics necessary for its projection. Video games have seldom relied on actors and scenes photographed in real-time motion, but have been using motion-capture technologies to better record the movement of objects or people. This doesn't mean that game

developers are not taking clues and inspiration from film in structuring scenes, visual narrative, and dramatic action set-pieces, just as the artisans of cinema in its beginnings looked at theater. This is what Chris Kohler, for example, meant when he described the cinematic elements and mode of storytelling in *Final Fantasy IV* (Square, 1991):

> This was closer than ever to true beginning-middle-end narrative in the true Hollywood cinema sense of the term. Still, the differences between game and film were obvious. The characters and locations were still made out of small, pixilated drawings and 99% of the game's scenes shared the same camera angle, which wasn't even a physically realistic one […]. What is important here is that even though these extreme limitations were still being imposed, Square pressed on and attempted to make movie-like games even on computer hardware that couldn't handle complex animation. (Kohler, 2005: 113-114)

Kohler's assessment is exemplary of the "cinema envy" (Zimmerman, 2002) that has characterized many video game designers. And while we typically speak of the cinematic ambitions of game developers as if they were caressing an age-old dream or holy grail, it is important to keep in mind that this reality is historically constructed as well. Eric Zimmerman's 2002 essay "Do Independent Games Exist?" has foreshadowed a lot of the games industry's subsequent development by weighing the pros and cons of the games-and-cinema movement (p. 125; since Zimmerman uses two columns to contrast his argument, we have kept the original layout for the quotation):

Games are merging with cinema.	**Games suffer from cinema envy.**
Technological advances, particularly in real-time graphics, means that games are becoming more "realistic" and increasingly resemble film. The cinematic turn in games will allow developers a broader palette of expressive tools that will appeal to new kinds of game audiences. Games will absorb and replace film.	What passes for "realism" in games is an awkward and unimaginative use of 3D computer graphics. It's time for game developers to stop trying to replicate the pleasures of film. Games need to find their own forms of expression, capitalizing on their unique properties as dynamic, participatory systems.

We're certainly playing our "game" here, looking at essays with positions that have since been nuanced or superseded and siding with those advocating for taking a step back from cinema, even from a theoretical perspective. However, to play fair, our claim cannot be so clear-cut. For instance, settling on "video" instead of "TV" or "film" is significant, and brings a meaningful question: if games do not rely on the same semiotic materials (live-action foot-

age) and syntactic organization (tightly-edited feature-length narratives) than popular cinema, how can they be commonly held to be "cinematic"? Would video games only be "cinematic" in the specific sense of the adjective? Indeed, nowadays, the qualifying adjective "cinematic" is more used to describe the felt experience of certain games. It is closer to the way we declare that the acting in a film is «theatrical» on the account that it is suiting the exaggeration of an actor on stage, and not because we see the whole work as filmed theater. This is also explaining why we can say that *Blacksad* (Juan Díaz Canales and Juanjo Guarnido, [2000] 2010) has a «rich cinematic style» (see <http://bit.ly/1ov2eQP>) without taking the comic book for a «filmed book». With this in mind, and following Nitsche's thoughts, we realize that films do not serve as models for games, but provide a set of necessary viewing space techniques that the video game takes and adapts to its own needs : «Cinematic visualization is seen as the audiovisual means to present game spaces via moving images. Thus, parallels between games and film primarily are meant to be read as space-driven necessities and not as cinema-infused guidelines for games» (Nitsche, 2009, p.74).

Kohler's previously-cited observation was emphasizing something very important: video games face technical limitations in their visual representation that are very different from those of live-action film, which constitutes the default form of cinema, and are actually much closer to a markedly different kind of cinema: animation. And if the cinematic and the animetic face varying constraints and possibilities, the animetic must also be divided between pre-rendered and real-time animation. The first is the classic way of animating well-defined static pictures by taking photographs and ordering the images as "frames" of animation; the second method, real-time animation, was identified by Eric Zimmerman (cited earlier) as being especially important to video games. This is fundamental: video games do not merely play back pre-recorded "cut-scenes" (these are, very appropriately, called *cinematics*, owing to the common principle of record/playback that defines the cultural series "motion pictures"), but rather produce their images in real-time using art assets created by artists and simulation routines implemented by programmers.

THINKING ABOUT GAMES AND THEIR CULTURAL SERIES

The restrictions placed on the visual flux of video games because of their need for real-time graphics is highly significant when we consider the media identity of games. While cinema may not provide the all-in-one answer, animation film alone is insufficient as well since, just as we noted regarding the focus on *video*, it elevates the visual aspect of games as their chief characteristic to the detriment of their other aspects, and namely, part of their nature as computer software. In this regard, we should point out a paradox that future work would need to address: of all the computer-mediated practices, the video game is one of *the most* graphically intensive. By that we mean that even compared to a variety of digital visual practices, whether digital animation, architectural draw-

ing, or the processing of pictures received from giant telescopes, the real-time imperative sets video games in a class of their own. This explains why video games have consistently been the driving force behind the technological adoption by consumers of dedicated graphics cards for their home computers. And yet by contrast, among visual practices, the video game is one of *the least* graphically intensive. "Hardcore" gamers will routinely lower the quality of graphics rendered and displayed by their computer to optimize the game's performance; to summarize the gamer's creed, an ugly game running smoothly trumps a visually beautiful game with frame rate issues, since slowdowns negatively impact the game's interactivity. The flexible nature of graphics in games is not restricted to the competitive scene either, as "casual" gamers with bare-bone computers missing a dedicated graphics card will likewise experience visually impoverished games due to their system's performance. Game developers face the same problem, and constantly have to strike a compromise between fluidity of play and responsivity of controls (the needs of the game situation) and visual complexity (the needs of the spectacle). This is evidenced by the very different processes and skillsets implied in the work of 3D modellers in "low-poly" (for real-time graphics rendering, typically in video games) and "high-poly" contexts (for pre-rendered images in animated films).

It should be clear by now that the choice to name our object of study "video games" is not neutral. This is undeniably a question of framing and de-framing since one could just as easily decide to study "interactive audiovisual experiences", shifting the focus from *games* to another cultural series. For example, we could have talked about *user-controlled images* (with ancestry comprising magic lanterns, optical toys, flipbooks, etc.), or *indoor sports* (noting in passing that Atari's *Home Pong* console was originally marketed by Sears' winter sporting goods department), along with billiards, ping-pong, and so on. Even if we settle on examining these objects through their visual nature, there is no need to look at them through the filtered light of cinema, with its specters and shades in half-life. The interactivity of video games makes animation a much more relevant cultural series to study them, since the animation of pictures can be manipulated in time, and hence adapted to the player's actions. But if we stop looking at the motion and start studying the images themselves, there is much to say on the properties of individual pictures regarding their point of view, scale, perspective, and so on. In many cases, the realities of in-game graphics are far from those of cinema, and multiple visual cultural series would undoubtedly prove to be more appropriate to study them. Games whose graphics are drawn in parallel projection, for instance, with the game world receding in "tiles" that don't stretch to conform to a realistic perspective, derive much more from architectural and technical drawing than from the monocular perspective of illusionism in art history and cinema. Other games present their world through an overhead perspective that has more in common with maps and cartography than anything else. And this is to say nothing of text-based games associated with

the genre of interactive fiction, or their hybrid cousins, the text-heavy adventure games. Many games are not an extension of cinema (see Arsenault, forthcoming in 2016, for more on this topic). This is exactly what Jonathan Lessard illustrates in his study of *Adventure* (1977). His article «reframes *Adventure* in its historical context» in order to show how the game is «the computerized extension of a specific mesh of cultural series familiar to William Crowther and Don Woods» (2013: 122); those series are «programming, hacking, fantasy role-playing, cave mapping and, to a lesser degree, game designing» (2013: 133).

The call for papers of this issue was asking: «Can the cinematic theoretical corpus offer a contribution to the development of Game Studies? If so, what are the possible interceptions between these fields? What more can we learn about video games through the lenses of Film Studies?». Ultimately, we have taken a stand and chosen a perspective, in line with our own scholarly series framed within French theories in film studies. Yet, there is one important answer that our essay wishes to give: it is as important to remove our eye from the camera's viewfinder as it is to look through the lenses of cinema. It might be our ability to decentre our cinematic view on games that will better help us historically understand the ways we have linked together the seventh and the tenth arts. As we know, it is through montage that a film joins together in a transparent matter shots that are in fact independent. It is also through these montage techniques and all the other film practices that the spectators come to forget that it is the camera that is really doing the looking that they have in their view. As theorists, we should never forget that our responsibility is not only to view, but also to direct and shoot our subjects; more fundamentally, as we have argued through this essay trying to deal with the ergodic animage, our responsibility includes deciding when it is time to put down the camera and instead pick up a pen, a brush, or even a computer keyboard, as appropriate. The real issue is to be conscious of the scholarly series in which we situate ourselves.

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