

Videogames as drivers for film plots: booming intertextuality

El videojuego como motor de la trama fílmica: una intertextualidad en auge

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Abstract: This research focuses on films whose plot is marked by a videogame and what this implies regarding the conception of characters, structure and story. Twenty-nine film productions were observed. A thematic-discursive film analysis was carried out for the purpose of deepening into the uses and conceptualizations derived from this synergy. The results show heterogeneity in the use of digital games as contributions for the narratives. We reflect on their various implications, in particular the relationship between reality and fiction, the use of avatars, structure and rules, concept of time, the figure of demiurges, the struggle against tyranny, and also the audiences. It is concluded that this type of films may represent a subgenre of its own and a very promising one in the sphere of science fiction and fantasy.

Key words: avatar, film, videogame, plot, intertextuality.

Resumen: Esta investigación se centra en aquellos filmes cuya trama viene marcada por el uso de un videojuego y lo que éste implica respecto a la concepción de los personajes, la estructura y la historia. Se observaron 29 producciones cinematográficas. Se realizó un análisis fílmico de carácter temático discursivo, con el objetivo de profundizar en los usos y conceptualizaciones que se derivan de esta intertextualidad. Los resultados muestran una heterogeneidad en la manera de utilizar el juego digital como aporte narrativo. Se reflexiona sobre sus diferentes implicaciones, especialmente con la relación entre realidad y ficción, el uso del avatar, la estructura y reglas, el concepto de tiempo, la figura del demiurgo, la lucha contra la tiranía y la audiencia. Se concluye que este tipo de películas puede suponer un subgénero propio y muy prometedor dentro de la ciencia ficción y de la fantasía.

Palabras clave: avatar, cine, videojuego, trama, intertextualidad.

Introduction

Cinematography has contributed with traditional and emerging narrative techniques used in the sphere of video games from their inception to the present day, for example: the journey of a hero, a three-act structure, the representation of human emotions, character archetypes, the use of time and environmental re-creations (Ip, 2010a and 2010b).

In the beginning, as of the mid 1970's, stories and characters usually came from films and television, and later appeared in video games; there was even a certain aesthetical analogy between this early cinema and these primitive arcade video games (Marcos-Molano *et al.*, 2021; Planells, 2011).

At once, there are highly relevant sources and media which have also influenced video games from the start (and even cinema and television) such as comics or novels. Popular culture characters such as Batman, Dracula or Don Quixote (*Batman*, Ocean Software, 1983; *Dracula*, CRL, 1986; *Don Quijote*, Dinamic, 1987, respectively) turn into video games or inspire other similar characters, virtually from the beginning. Besides, these entail very important intertextual practices between media, for example, the case of the novel *Ender's Game* and its adaptation into a film, or the video games *Double Dragon* or *Super Mario Bros*, among others, who have produced comics of their own.

Later on, in the 80's and following decades, video games largely served as inspiration for the film and television industry (Carton, 2022; Martínez-Fabre, 2021; Stopel, 2019), particularly adapting mythical video games into films (Wolf and Perron, 2005).

These adaptations (of video games into films) may be grouped into three categories (Anyó, 2017):

a) Adaptation of the games' universes, which become diegetic universes in cinema, as for instance: *Super Mario Bros* (Annabel Jankel and Rocky Morton, 1993), *Street Fighter* (Steven E. de Souza, 1994) or *Double Dragon: The Movie* (James Yukich, 1994).

b) Adaptation of rules and structure, which turn into a narrative structure. Films such as *Fight Club* (David Fincher, 1999), *Memento* (Christopher Nolan, 2000), *Mulholland Drive* (David Lynch, 2002), *Funny Games* (Michael Heneke, 1997), or *Donnie Darko* (Richard Kelly, 2001).

c) Adaptation of participation and playability, which become a style and may attain an allegoric nature. Films such as *Lara Croft: Tomb Raider* (Simon West, 2001), *Ben X* (Nic Balthazar, 2007), or *Chatroom* (Hideo Nakata, 2010).

In this way, videogames have been a great resource in the cinematographic panorama, particularly in science fiction and fantasy (Fábics, 2017), being this inter-medialness another field of research in Game Studies (Gunkel, 2018; Heineman, 2015; King and Krzywinska, 2002; Maté, 2021; Muriel and Crawford, 2018;), mainly based upon three paradigms: ontological, methodological and field (Navarrete-Cardero *et al.*, 2014).

The various approaches that have intended to define video games consider them a unique medium (Wolf and Perron, 2005). However, despite the most attractive and studied category is that of video game adaptations, the present research focuses on films whose characters play the video game and so, it becomes the main topic and discourse of the plot (Martínez-Fabre, 2015).

Such inter-medial proposal to approach a genre inside another is not new at all. For instance, there are novels or films that deal with the world of theater such as Fernando Fernán Gómez's novel, *El viaje a ninguna parte* [*Voyage to Nowhere*], published in 1985 and turned into a film in 1986; or conversely, lyrical theater plays that deal with myths, fables, legends, or other novelistic typologies (Serra-Heredia, 2015), thus making opera one of the most comprehensive genres (music, poetry, theater, novel, dance, etc.), either at stylistic or narrative levels.

For its part, the Seventh Art (a calque of *Septième art*) also implies a patchwork; in addition to serving as a hypertext to build numerous ludic digital creations, the sphere of video games may be utilized as a basis for the creation of a film plot of its own and as an inherent part of the context where this techno-ludic cinematographic fiction takes place (Bittanti, 2003). This is the way in which films based on specific video games difference from them (Sánchez-Mesa, 2012).

The influences on the big screen may be grouped into five main categories: game universes, the gamification of missions, controller and interfaces, game experience and game structure (Larsen, 2017). At present, it is common to watch scenes where characters speak while they are playing a video game, either individually or collectively. However, fewer are the films where such action defines what occurs with the characters over the story (Bittanti, 2003).

This resource, as we will intend to demonstrate in the present research, is useful to have not only a formal and aesthetical configuration proper to video games (with all its implications), but also for the characters (and thereby, the audience) to immerse in a world where rules are not the real

world's, but those characteristic of video games, though at once, they end up modifying the characters' preestablished realities.

There are many precedents of the superposition and interconnection of fictions. The most recurrent are perhaps analepsis and prolepsis (i.e., *flashback* and *flashforward*), either to tell facts already occurred, which might take place, or could have happened (Glosario de cine, nd). Some instances are clearly noticed in *Citizen Kane* (Orson Welles, 1941) or in ¡*Bienvenido, Mr. Marshall!* [*Welcome, Mr. Marshall!*] (Luis García Berlanga, 1953). In this way, a story is introduced into another story, both at particular points or at global level, in which case it would be most determining for the initial premise, even placing it in the background (as in *Citizen Kane*).

However, there are other possibilities to include fictions as *Matryoshka* (Russian) dolls, which imply a change in the composition of the narrative rules the characters follow. One of them is when protagonists perform a play, as in *Noises Off!* (Peter Bogdanovich, 1992) or *Shakespeare in love* (John Madden, 1998); in these films, the characters who already interpret a character, play another role at once in the context of a theatrical performance. This enables theatricalized fiction, as it has its own rules and narrative structure, to promote characters behave and act differently regarding their real context, while their actions in such fiction influence their previous reality.

And finally, another possibility, even further from the original reference framework, would be introducing dreams or the oneiric sphere, as in some David Lynch's films (Sheen and Davison, 2004), in *Freddy Krueger's* saga, and in an extreme manner as well in *Inception* (Christopher Nolan, 2010). In the cases above, surrealism opens a wide variety of possibilities, in which time and the physical may be transgressed almost naturally, and the world and its characters could behave very differently from what is expected or preestablished by common reality. All in all, these instances are some antecedents or similes of video game inclusion in film history, and they all have, as all the cases commented, their own peculiarities and characteristics.

This way, the central point to understand the influence of the use of video games in film plots is to analyze the divergencies between the standard reality and that put forward by the ludic digital universe (Mateu, 2017). Some of these belong to the very concept of the game; which develops in a separate world, fictitious, it is like a game narrated with actions, far from daily life, a continuous symbolic message (Vázquez-Neira, 2011). Video games have goals and preestablished ways to carry them out: pursuing

something or someone, throwing an object into a certain place, conquer a territory, defend and keep or recover an object, etcetera. In the case of role-playing games, players may collaborate in the story that their characters follow, creating, developing and exploring a fictional world in an adventure beyond the limits of everyday life (Vázquez-Neira, 2011).

The most common characteristics of video games (some come from traditional games) for the purpose of encouraging motivation and competitiveness are: inclusion of levels or stages; various lives or health statuses, including spare lives or devices to recover health (potions, food, pills, etc.); time limit; interaction; multiple goals (short, medium and long term); and reward systems according to the progression in the game, e.g., defeat a boss, earn trophies, points, lives or money (sometimes actual money).

Another highly efficient resource for engagement is the use of storytelling (Jiménez-Sánchez and Frontera, 2019); it is the fundamental part of some genres such as graphic adventures, platform, and role-playing games (RPG) (Lebowitz and Klug, 2011; Stone, 2019). In this regard, narratology offers three relevant concepts: focalization, granularity and form of narration, which may combine to create significance and thus increase the players' involvement and interest in the game, via these narrative elements (Arjoranta, 2015).

When all this is applied in cinema, the result is characters immerse in a history mediated by a series of rules or ludic structures, differenced from their daily lives. These two interwoven fictions produce a number of proposals in the film narrative

Among the most recurrent, one finds the concept of life and death. By and large, in video games, extended life and even spare lives are allowed, modifying thus—in relation to the real world—resistance to lose it. Likewise, in some cases, death in the game does not mean the game actually ends, which allows the character to survive in spite of dying in the ludic fiction.

Another topic is that of avatars and character customization, since video games offer the chance for the original body to transform into a different one with which to act according to a context other than the actual. At once, sexual identity, the concept of gender and even sexual orientation may come into play, as the avatar may imply a transgression of them.

Another sphere is the thin line between reality and fiction perceived by the characters, which confuses spectators as regards what occurs with them is the reality or part of the game. Conversely, an idyllic fiction far

from reality may make the characters want to remain in the video game or a virtual reality —as Cypher in *The Matrix* (Lilly and Lana Wachowski, 1999)—; though, by and large, what is eventually demonstrated is that it is preferable to live in the reality (despite being bad) than in a lie.

Finally, and as a result of this creation of universes, both utopian and malicious, one wonders about the extent to which artificial intelligence (AI) and technology are capable of ruling human beings' lives, or even the concept of freedom and free will of them in the face of machine control.

Goals

All these topics will be the analysis units to research in a series of films, in which characteristics proper to video games become key factors to understand the plots and the characters. The justification is that so far, no detailed updated study has been carried out regarding this sort of films. Therefore, the main goal was to research the way such elements inherent to video games propose new or original ways of narration in films. From this, another goal would be to reflect on the evolution of this intertextuality and ascertain whether we can actually speak of a booming genre of its own.

Methodology

The most extensive references used in the methodology are Notargiacomo-Mustaro *et al.* (2013) and Sulbarán-Piñeiro (2000). A thematic discursive film analysis was run. In the first place, films whose main driver of the story was a video game were selected. To do so, an internet search was made on specialized sites such as IMDB.com and Filmaffinity.com, as well as in blogs and cinema webs, also in databases such as Scopus, WOS and Latindex in order to find research works related to films and video games. Moreover, suggestions from film platforms were accepted to gradually select less commercial or obscure films with similar premises, nevertheless.

The search yielded a sample of 25 films and four *Black Mirror* chapters, for in spite of being a TV series, each episode may be considered a short film independent from one another. It is worth mentioning that animation films were excluded in order not to extend the sample too much, and mainly because the basic purpose of this research is not to produce a listing of this sort of films, but to have a pool of cinematographic productions with which exemplify the various elements, object of study.

The final listing in chronological order is displayed in table 1¹, in which the most recurrent topics in the films were included.

It is worth underscoring that the criterion to select the sample was, in the first place, the existence of a ludic component proper to video games; therefore, fictions contextualized in virtual environments such as *The Sims* were discarded, as they propose an alternative virtual reality, though not gamified, as in the TV series *Upload* (Greg Daniels and Jeffrey Bilitz, 2020). Secondly, a sufficiently relevant video game at narrative level. Owing to this, it is important to clarify the reason why some films were left out of the listing.

The following were not selected: *VGHS: The movie* (Matthew Arnold, 2012), as it is compilation of the series; *Scott Pilgrim vs. the world* (Edgar Wright, 2010) because the presence of the video game was more aesthetical; *The Last Starfighter* (Nick Castle, 1984), *The Wizard* (Todd Holland, 1989), *Cloak & Dagger* (Richard Franklin, 1984) or *Ben X* (Nic Balthazar, 2007) because there is no plot in the video game, just particular moments of playing. *The Lawnmower man* (Brett Leonard, 1992), although the protagonist improves his intelligence (among other techniques) gaming in virtual reality (VR), the video game does not propose a fiction with which to change the protagonist's reality; *Pixels* (Chris Columbus, 2015), *Pokemon: detective Pikachu* (Rob Letterman, 2019), or *Wreck-it Ralph*, (Rich Moore, 2012), because there is no video game as such, only parts of video game aesthetics are taken, while the characters in the video game interact in their real world, not otherwise.

In the case of *Wreck-it Ralph!*, the universe is the one proper to video games, though there is no fiction inside another. Plus, it is an animation film, which were previously discarded, that is, series and short films such as *Pac-man the movie* (James Farr, 2012) or *The bishop of battle*, included in *Nightmares* (Joseph Sargent, 1983). Similarly, neither are *Super Mario Bros* nor *Assassin's Creed* included (Justin Kurzel, 2016), since the alternative universe they offer is not a video game; and despite both are based on classic games, this study is not about adaptations. Some films were discarded as they were more VR than a game, namely: *Virtuosity* (Brett Leonard, 1995) or *The Matrix*; finally, neither were chosen *Nerve* (Henry Joost and Ariel Schulman, 2016) nor *Guns Akimbo* (Jason Lei Howden, 2019), as these films deal with a game mediated by a digital interface (a technology-controlled Gymkana TN) and not based on a proper video game.

1 The table is in Annex, at the end of the present article (Editor's note).

Once the final sample was chosen, the films were watched, focusing on topics related to the contribution that the introduction of the video game would produce on the development and comprehension of the various aspects of the film narrative (Sulbarán-Piñero, 2000). To do so, as a critical discursive analysis, films (rows) related to any topic (column) were captured in an Excel spreadsheet, and in the intersection of these components, the way the film accounted for this particular object of study from video games was written.

After watching all the films and the corresponding spreadsheet was filled in, finally, the annotations in the intersections were discursively and jointly summarized in function of each topic, adding other lesser topics, which came from a reflection and observation process. All of this became the following results.

Results

These will be shown below, according to the various analysis units under research.

Reality or fiction?

As previously pointed out, there are two main topics regarding the relationship between the reality and the fiction perceived by the characters. On one side, the classic confusion between them, eloquently in the film *The Game* (David Fincher, 1997) or the already mentioned dream nightmare topic—in point of fact, the song repeated in the films *Tron: Legacy* *Gamer is Sweet dreams* (by Eurythmics and Marilyn Manson, respectively), which demonstrates allusions to the oneiric—. This leads to two general possibilities: either the characters believe they are in the reality when it is a game actually; or conversely, they believe they are playing while what occurs is real.

Although in both cases there is a revelation, characters (and spectators) experience a catharsis; in the first case, the consequences will be disappointing, for in the end everything reveals as a dream. However, in spite of this possible deception, the audience may feel a relief of the dramatic tension because the hardships endured by the characters remain at the level of fiction. Representative films are: *eXistenZ*, *Gamebox 1.0*, *Brainscan*, *Free Guy* and particularly, *WarGames* and its remake.

In the second case, where the game is real, there is a tragic catharsis, placing characters and audiences before a high dramatic tension situation to be solved. An instance is *Ender's Game*, in which the protagonists eventually found out it was not a simulation, though they actually killed numerous “buggers”, which triggers a deep change in Ender that forces him to reconsider his whole world. Albeit, cinematographic stories do not usually wait until the end to show it was not a game, by and large, increase the audience's stunned state as the characters realize their suffering is palpable. Some films that depict this are: *Beta test*, *Max Reload and the Nether Blasters*, *Level UP*, *The Call Up* or *Stay alive*.

In any case, in these instances, the tactic will be to increase the audience's confusion on what catharsis to experience, which for its part, encourages the audience to follow the story to eventually find out what parts were real and what from the game. Some films go even further, showing, at the end of the proposal, that all the events (reality and video game) were part of a larger encompassing fiction. This nesting doll is attested to in films such as: *Nirvana*, *eXistenZ* or *Brainscan*.

Furthermore, the second topic is related to the divergence between the universe of the video game and reality, which makes they want to stay in the game or leave it, though by and large, the latter is taken. Examples where this diatribe is present are: *Tron: Legacy*, *Nirvana*, *Ready Player One*, *Jumanji 2*, *Avalon*, *Spy Kids 3-D: Game over*, *Gamebox 1.0*, *Free Guy* and *Black Mirror* episodes: “USS Callister” and “Striking Vipers”.

To sum up, the reasons to remain inside are related to living idyllic situations in the game, where they are able to truly realize as individuals, or fulfill their dreams and aspirations. While for their part, the reasons to leave are more related to the lack of freedom, the feeling of being controlled, absence of free will or the nostalgic preference for the life they used to lead with its ups and downs.

Structure and rules

For most of the sample, these have an influence at narrative level. To begin with, many films establish the premise that if one dies in the video game, so does in reality, both in films where the characters are only inside the video game and also in which they use an avatar and their bodies remain in the reality. In these particular cases, death in reality is commonly caused by a mental breakdown, which directly kills (the brain interprets harm in the video game and translates it to the physical body feeling it as real) or else,

leaves the individual in a coma or permanent vegetative state. In this way, the fact of ending up dead, in spite of being in a game, serves to provide it with an irreversible dangerousness, which drives the characters to take care with their lives, and even makes the audience count the protagonists' remaining lives.

Therefore, this directly comes from the concept of life in one or another fiction, in which the characters are forced to be aware of their lives or health statuses, resorting on various occasions to several strategies to manage them. Here, spare lives would take place as well, a possibility analogous to relive or reborn. In some films, such management is fundamental to understand the evolution of the plot. For example, in *Ready Player One*, the protagonist avatar kills his female gaming partner's so that she may be able to help him in the actual world, not in the video game universe. Also, in this film this spare life is utilized in the end, an *in-extremis* resource that enables the protagonist to win. Something similar takes place in *Spy Kids 3-D: Game over*, in which the protagonist waives his own healing to his object of desire, and at once, the spare life is utilized in the end.

In this way, there are numerous ways to externalize the vital so that life may be shared via the objects found along the way, either increasing the health status or protecting it. This will be done by means of talismans, magic potions, pills or medicine, protective clothing (shields), etc., as noticed in *Stay alive*, where roses work as talismans. Moreover, other similar resources, characteristic of video games, are present in a large number of films, for instance the acquisition of coins, gain experience points, quick time events, clues, etc. At narrative level, this makes characters move, increase their motivations and plan their actions in the video game for the purpose of attaining their goals in reality, and vice versa. For example, in *Ready Player One* or *Avalon*, many people live in the real world due to the awards earned in the game (at present, it would be the case of professional gamers).

The levels or stages serve as sequences or acts, as they occasionally enable the characters to reflect in the real world about what they played before so that they can be ready to face the following levels. These intermissions make it easy for the reality-based plot to develop, successively alternating with that of the video game, as it is noticed in the two films above, or in *Gamer*, *Spy Kids 3-D: Game Over*, *Maximum surge*, *Stay alive* or *Brainscan*.

Finally, and as a counterpoint, the concept opposed to following the rules, that is to say, their tergiversation is also of interest. In this regard, it is noticed that many players break preestablished rules in the video game, permeating various narrative concepts from the cinema related to this ludic medium. For example, in a passage of *Spy Kids 3-D: Game Over*, the protagonists speak of cheats (shortcuts in the game programming) in order to reach a level, as in some scenes in *Jumanji* and *Ready Player One*.

All in all, the ludic adventure nourishes from the actual adventure and that of the game, thus reshaping the inter-media (re-mediatization) composed of two closely connected fictions (Bolter and Grusin, 2000; Rajewsky, 2005).

Avatar

Although in *Diccionario de la Lengua Española* [Spanish Language Dictionary] (RAE, n.d.) the term avatar is defined as a reincarnation or transformation, in video games and virtual environments it entails a complex set of possibilities, perhaps the closest to such definition is an identity that not only is related to the construction of the body (appearance and movement), but of the mind as well (personality, moods and emotions), which, for their part, affect the capability for communication (Oyarzun, 2010).

In any case, there would be two possibilities, to begin with, for the object of study. On one side, the characters are the players, which have been absorbed by the game; that is to say, when they are in the game, they do not exist in the reality and vice versa, there is only one body-mind. In these cases, one may think they are not avatars, but themselves in another context; this way, no digital *alter ego* is created, there is no other I, the avatars are no one but themselves.

The other possibility is that the player (present in reality) plays by means of a virtual identity, an *alter ego* that may be similar to the real or utterly different. In this way, four options arise: when the avatar is the same as the player (only one body), which is the same as the physical one (*Tron*, for instance); another in which the player is virtually (literarily) inside the game, their representation is different from their own in reality (as in the case of the two *Jumanji films*). And finally, the other options are: the player (through an interface) controls a character, either the player's physical presentation, as in the case of *eXistenZ* or *Stay Alive* (both in real life and digitally, respectively), or else, when the avatar is different, as in the

case of *Ender's game*, using a mouse, in *Ready Player One* with avatars closer to mediaeval fantasy *MMORPGs* (Massively Multiplayer Online Role-Playing Game) (WOW, LoL Dota, etc.) with dystopian futuristic features, or in *Nirvana*, where the avatar is a man very different from the player.

From the above, a fifth possibility may be considered. It would restate the concept of avatar when there is no VR as such, but the game and its characters are also real, though these are controlled by an external agent (player), as in *Gamer* or *Beta test*. These instances justify the immorality of taking control of someone in real life, arguing these are criminals or bad citizens, whose life is worthless, though they have an opportunity for salvation in the game instead of facing capital punishment or serving a life sentence. A similar situation occurred with characters in *The Jurassic Games*, in this case nevertheless, it is themselves in a virtual environment.

In this way, the narrative options related to the avatar would be richer to the extent there is more divergence between the player and their avatar. In some cases, the avatar rebels against the player, intending to take control of the situations such as in *Nirvana*, *Gamer*, or even "USS Callister", in which the crew plots a mutiny to overthrow the captain. In any case the narrative approach leads to the idea of freedom and oppression, previously commented. Moreover, other issues are noticed in these films: does the killing of someone real in a video game turn you into a killer? Are you a killer or a rapist if you are under someone else's control? Who is to blame for the actions the body or the mind? Can cruelty be justified in a ludic context? And some others.

Apart from these ideas, some others appear in relation to the identity concept in its various forms. In *Jumanji, Welcome to the jungle*, the fact of having different bodies from the physical (also intellectual capabilities) makes character hesitate whether they are in love for what they are like in the video game or the real world. Similarly, in *Ready Player One*, a girl is afraid that the protagonist is in love with her avatar, Artemis, not with the actual Samantha. Moreover, the fact of having an idealized body would also raise the issue that such individual prefers the virtual world, which would affect at once sentimental relationships with the rest of the characters, as in *Jumanji* (2017) with Spencer, played by former professional wrestler Dwayne Johnson. A more singular instance is when there is a change in gender regarding reality, as in *Jumanji* (2019), particularly in chapter "Striking Vipers", in which even the concept of gender in relation to sex is approached, but also sexual orientation.

Some issues may be: How much is sexual orientation defined by sex? Can one be heterosexual in reality and homosexual in the game? Can virtual sex be more real or intense than in reality? Can one speak of infidelity if it takes place in the virtual world?

Finally, it is worth mentioning a last instance in which the topic of avatars goes one step beyond. In *Bandersnatch*, the very spectator is the player, controlling the protagonists' decisions, a pseudo-avatar, which ends up realizing he is being controlled by the viewer. Hence, this chapter forces further what we have previously commented, as the video game would be a multi-adventure, in which the spectator would not have a passive role (as an observer), but an active one, proper to a gamer. No only does this restate the idea of a video game and avatar, but also that of the cinema, since the symbiosis between these genres finds a hypermedia diegesis paradigm in this chapter, also deemed an interactive hyper-narrative cinema, whose reception and media experience had its ups and downs, especially because audiences did not know to what extent they controlled the story or if Netflix manipulated them (Elnahla, 2019; Martín-Ramallal *et al.*, 2019; McSweeney and Joy, 2019; Roth and Koenitz, 2019).

Technology and rebellion

Some of the analyzed films use the context of computing to speak of the future of AI. Motion pictures such as *Tron* (saga), *WarGames* (saga), *eXistenZ*, *Gamer*, *Brainscan*, *Free Guy* or *Arcade* include to a varying degree dialogues on the evolution of AI. The argumentations disclose a part of the vision the cinema (at least the selection) has regarding technologic processes. In this way, many of these films sketch a future controlled by machines, which, at narrative level, makes the protagonists (humans) counteract and demonstrate that momentarily supremacy will not come from technology; for despite humans have flaws, they also have feelings, which are necessary for decision making and act with relativity, rather than coldly, as machines do so far. This diatribe between reason and emotion is clearly noticed in *Ender's game*, ultimately searching for the middle term or complementariness as the optimal, as portrayed by Spock in the *Star Trek* saga (Gene Roddenberry *et al.*, 1966-1969).

As regards the above, some films propose a fight against this tyranny, not so much of AI, but the elites that want to control or exploit the unprotected strata. This is the case of *Tron* (both), *Gamer*, *Ready Player One*, *The Jurassic Games*, *eXistenZ*, *Spy Kids 3-D: Game over*, "USS Calister"

or *Maximum surge*. Narratively, the game turns into a punishment tool, in this way, winning entails the defeat of the dominant class. This takes place in other films that do not deal with video games, but which resort to the game as a context to fight against such tyranny. Instances of this are: *The Hunger Games* saga (Gary Ross and Francis Lawrence, 2012-2015), *Spartacus* (Stanley Kubrick, 1960) or *Gladiator* (Ridley Scott, 2000). Hence, the game is initially proposed as one of the few options an individual has to go from poverty to wealth; however, what the protagonist makes is to run away from the individual prize in order to win in equality, to transform personal competition into social struggle against tyranny.

Following this idea, it is not surprising that some films offer a different concept. For example, *WarGames* (both films) put forward that by means of “*tic-tac-toe*” it is not necessary to play in order to win; that is to say, a game where none can be victorious, the winner is the one who does not play—an analogy with a possible WWII and the conjecturable zero sum of the cold war—. Also, *Avalon* supports this idea: “a game you can’t finish is not a game” or as they do in *Gamer*, the only way to win is to flee from the game, escape from it. Something similar occurs in *Spy Kids 3-D: Game over*, as the fifth level is invincible, which makes the characters change in an attempt to suppress a game impossible to win. Finally, in *Free Guy* the game *Free City* is completed, which is a dystopian gamification, characterized by a violent, competitive and ruthless society in the fashion of *Grand Theft Auto*, *GTA*, or *Fornite*, due to the lack of freedom of certain collectives, in this case for non-player / non-playable characters (*NPC*); all this managed by an enterprise (Tsunami) chaired by a childish egotistic despot. Instead, a new order is established far from the components proper to the game (levels, quests, rewards, etc.) and closer to noncompetitive virtual worlds, based on the contemplation, harmony and coexistence of their members. All in all, this demonstrates that the use of video games and their intrinsic characteristics in the cinema sphere may serve to depict with certain originality, the traditional replacement of an unfair and dictatorial *status quo* with another egalitarian and democratic.

Target

It is worth underscoring that the target audience of many of the films analyzed here is youths and adolescents, something logical, since at present as in the past, young audiences have been the largest consumers of video games (Statista-Porcentaje, 2022). This has an influence on films, since

some characters are depicted as *nerds* or *freaks* in reality, though idealized in the game (*Level Up*, *Max reload* and *the Nether Blasters*, or *Jumanji*), trying thus to appeal to the public knowledge on computing. At once, these face the adult world, which would pose an apology of the arrival of a new generation, thereby, another reason for the youths to like this sort of films. For example, as in *Ready Player One*, it is mentioned that in order to beat the adults, that have to skip the rules, that is to say, the typical disobedience and rebelliousness of adolescents would be fundamental to be able to beat the game, connecting further with young audiences.

Some films also show that in order to earn victory, cooperation is a must; a value to be fostered, mainly among the youth and adolescents, who because of their age, live a large part of their around friendships and social groups. In this way, some of the latest films are based on *RPGs*, which allows each character to have not only an avatar, but also a differenced role from the rest. This encourages working in teams, against individualism (often depicted by the antagonists' traits), a necessary component if the intention is to beat the game. In this way, they are reminded that union means strength, or even that friends are better than foes, as particularly noticed at the end of *Max Reload...*

Creators

Many of the protagonists and antagonists are directly related to the world of video games and even to their inception. This will serve to introduce the figure of demiurge, a creative artist, adding thus a meta-ludic component, for in some films the goals is not to beat the game for the sake of it, but to destroy the creator or master of the game.

In this way, the vision of the demiurge varies according to the film. *Tron: legacy*, *Nirvana*, *Gamer*, *eXistenZ* or *Beta test* deal with the topic of the artists and their works of art, as well the idea of *playing god* or a god as an artist, perfectly describing the antagonist's arrogant mentality, or as it is called in "USS Callister": "a sadistic god". In others cases such as *Free Guy*, *Ready Player One* or *Max Reload...*, the original designers are good, they consider themselves writers —or as they express it: "words are zeros and ones"— and produce a game for the purpose of doing good, hence some of the plots deal with combatting enemies that hinder these plans.

Time

Another relevant topic is the concept of time inside the video game, a recurrent topic in many films and one that conveys a divergence, adding to the spatial, that of temporariness in reality versus that in the game. In *Tron: legacy*, the same characters are aware of that, comment it and give it a definition of their own (cycles).

What we want to point out is that not only does immersion in the game cause changes in space, but also in time, and moreover, this change may be psychologic, or depend on our perception. Something similar is noticed in dreams; for example, in *Inception*, five minutes of real life are sixty in oneiric time and successively, in each dream within a dream (Gon, 2010). Or else, *White Christmas*, a *Black Mirror* episode, in which the perception of time inside a cookie varies according to the case, ending up in the imposition of 1000 years per each actual minute.

Discussion and conclusion

As it has been noticed, the use of particular characteristics of video games implies a renovation in film narrative; these resources are increasingly utilized in cinema to the extent of becoming a genre of its own, or at least a well-defined subgenre other than fantasy and science fiction (occasionally closer to one than to another).

Therefore, after the film analysis run, the presence of the origin and evolution of a typology of films with a character of their own in the aforementioned genres may be verified (Fábics, 2017). Attesting to this, one may look at the production year of the sample: two films in the 1980's, four over the 1990's, eight in the 2000's, and eleven films and four *Black Mirror* chapters over the last ten years.

As noticeable in the age range and consumption volumes, video games have been gradually positioning, as of the 1980's, in the lives of millions of people, which enables the cinema industry to reach broader audiences. Moreover, computing advances relentlessly and it favors devising new plots or scenarios to place the characters. Well now, we also witness the proliferation of *MMORPGs*, with professional players and massive competitions. This makes it clear, these are not freak or nerd audiences, thereby, neither are these films for video game aficionados any longer. Finally, business models have improved and broadened in this industry; some processes under way are online sales, i.e., free-to-play, microtransactions, subscriptions, or pay-to-play.

All the aspects above make cinema and television use more frequently resort to this audiovisual entertainment mechanism. Then we have to wonder about the future or evolution of this symbiosis, partially depending on techno-ludic advances and the various tendencies of the players. As demonstrated by the present research, this sort of cinema has taken advantage of the continual renovation of video games. The possibilities for the cinema are multiple, there are disparate genres or approaches such as cinema for children, terror, science fiction, comedy or war. In this way, cinema increasingly combines and renews the analyzed elements in various manners, putting forward new possibilities (as in the cases, particularly, the four *Black Mirror* episodes), which allows foreseeing a growth in such cinema sector in coming decades.

Owing to this, the present article is expected to serve as a contribution for the promising field of study of the dialectic between cinema and video games; likewise, it is recommended carrying out with the updating of the topic in order to witness the evolution of this fruitful synergy.

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Anexo

Table 1

List of films (director, production year) and sections where they appear:
 1= Reality or fiction? / 2= Structure and rules / 3= Avatar / 4= Technology
 and rebellion / 5= Target / 6= Creators / 7= Time

<i>Tron</i> (Steven Lisberg, 1982) => 3, 4	<i>WarGames</i> (John Badham, 1983) => 1, 4	<i>Arcade</i> (Albert Pyun, 1993) => 4
<i>Brainscan</i> , John Flynn, 1994) => 1, 2, 4	Nirvana (Gabriele Salvatores, 1997) => 1, 3, 6	<i>eXistenZ</i> (David Cronenberg, 1999) => 1, 3, 4, 6
<i>Avalon</i> (Mamoru Oshii, 2001) => 1, 2, 4	<i>Spy Kids 3-D: Game Over</i> (Robert Rodriguez, 2003) => 1, 2, 4	<i>Maximum Surge</i> (Jason Bourque, 2003) => 2, 4
<i>Gamebox 1.0</i> (David Hillenbrand and Scott Hillenbrand, 2004) => 1	<i>Stay alive</i> (William Brent Bell, 2006) => 1, 2, 3	<i>WarGames 2: The dead code</i> (Stuart Gillard, 2008) => 1, 4
<i>Assault girls</i> (Mamoru Oshii, 2009)	<i>Gamer</i> (Mark Neveldine and Brian Taylor, 2009) => 1, 2, 3, 4, 6	<i>Tron: Legacy</i> (Joseph Kosinski, 2010) => 1, 4, 6, 7
<i>Level UP: The movie</i> (Peter Lauer, 2011) => 1, 5	<i>Ender's Game</i> (Gavin Hood, 2013) => 1, 3, 4	<i>The Call-up</i> (Charles Barker, 2015) => 1
<i>Beta Test</i> (Nicholas Gyeny, 2016) => 1, 3, 6	<i>Jumanji: Welcome to the jungle</i> (Jake Kasdan, 2017) => 2, 3, 5	<i>Ready Player One</i> (Steven Spielberg, 2018) => 1, 2, 3, 4, 5, 6
<i>The Jurassic Games</i> (Ryan Bellgardt, 2018) => 3, 4	<i>Jumanji: The next level</i> (Jake Kasdan, 2019) => 1, 2, 3, 5	<i>Max Reload and the Nether Blasters</i> (Scott Conditt and Jeremy Treppe, 2020) => 1, 5, 6
<i>Free Guy</i> (Shawn Levy, 2021) => 1, 4, 6	<i>Black Mirror: -Playtest</i> (Dan Trachtenberg, 2016) <i>-USS Callister</i> (Toby Haynes, 2017) => 1, 3, 4, 6	<i>Black Mirror: -Bandersnatch</i> (David Slade, 2018) => 3 <i>-Striking Vipers</i> (Owen Harris, 2019) => 1, 3

Source: own elaboration based on IMDb.com and filmaffinity.com.

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