“EVOLUTION AND DEVELOPMENT OF FILM INTO TRANSMEDIA & VIDEOGAMES”
SUMMARY

In the 21st Century we are sharing stories in multiple platforms and mediums, in a way that the consumer becomes a franchise fan. We can buy the movie, toys, books, and clothing of that movie. Now more than ever, we can also play the video game of the movie. We can be the hero of a story we love and have an active role in, becoming active consumers of stories. The intention of this paper is to research on the hypothetical future of storytelling industries, such as the film industry into the video game industry currently focused more than ever in the development of a virtual reality.

Key words: film, new media, creative industry, transmedia, videogames
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ABSTRACT

Being in the 21st Century we cannot deny that in our present time the reality of film and its industries is not as it used to be and it is starting to look more like a storyline franchise. We sell stories in multiple platforms and mediums, in a way that the consumer becomes a franchise fan. We can buy the movie, toys, books, and clothing of that movie. Now more than ever, we can also play the video game of the movie. We can be the hero of a story we love and have an active role in, becoming active consumers of stories.

We are moving towards a more interactive reality, and thanks to the development in new technologies, being part of the fictional world of a story is becoming more of a fact. Today's highest grossing movies are made in big part with Computer-generated imagery (CGI), for example Avatar, or the Avengers, in a way that reassembles the aesthetic of a video game. Video games provide us the narrative storyline, visual, and sound elements that a movie contains, however they also provide us the opportunity to interact and be part of the fictional world of the story.

The intention of this paper is to research on the hypothetical future of storytelling industries, such as the film industry (one that has reached the summit of some of the most developed technology already), into the video game industry currently focused more than ever in the development of a virtual reality. I'll analyze today's situation of film, and the technology it uses, in order to come up with a prediction of the film industry and the video game industry as mediums that communicate stories.
INTRODUCTION: CONVERGENCE IN THE FILM AND VIDEO GAME INDUSTRIES

“In the next 10 years, we're going to see all the forms of entertainment - film, television, video games, and print - melding into a single-platform 'story-engine'. The moment you connect creative output with a public story-engine, a narrative can continue over a period of months or years. It's going to rewrite the rules of fiction.”
(Guillermo Del Toro - Hollywood Gamers Digital Convergence in the Film and Video Game Industries)

With the continuous advancement and development of communication technologies, today we find a multitude of different mediums in which to communicate our stories. Now more than ever we have the opportunity to experience the narrative of all these fictional worlds in a way that we couldn't have imagined years ago.

Since the beginning of times, humans have been looking for ways to escape from reality by creating parallel universes or realities through storytelling that we can only dream of. To accomplish that creation of new dimensions, over the history we have developed a big variety of mediums and electronic platforms that allow us to display information and creative creations in either a visual or audio way: paintings, novels, photography, music, movies, television shows, or video games, which allow us to step vicariously into a new experience, into an imaginary world that we could not experience otherwise.

Over the years, the technology of video games has improved significantly, allowing them to offer cinematic visuals and complex narratives, in a way that video games have become more like movies, and consequently movies have become more like video games. A wide array of the
technology used in filmmaking today is also used in the production of video games. In about every
film production today prevails the use of green-screen compositing, computer-generated graphics
(CGI), and even some productions, like the *Avatar* franchise, went further regarding the use of
technology. They did this by using motion-capture suits, sensors, and even a new type of motion-
capture technology that films in photo-realistic stereoscopic 3D. This mixes live-action and CGI in
a seamless blend.

CGI is present in the highest-grossing movies, proving that it really is about what you put on the
screen, rather than having the best actors performing. Having a great visual that provides nonstop
action coming from a computer can be as important as heavyweight actors and a legion of writers, as
we can for example see in the movies *300*, or *Lord of the Rings*.

Nowadays there is a clear convergence between the entertainment industries such as the
video game and the film industry, that are continuously seeking to sell and adapt their products to
different media. We can see that in the cinematographic industry, where out of the hundreds of
thousands of films in the world that are currently in development, a large number of them serve as
adaptations for successful video games and video game franchises (*Cheatsheet.com*. Upcoming
movies based on video games).

In the last few years Hollywood studios have witnessed the largest drop in box office
revenues (*Boxofficemojo.com*. Domestic grosses). In turn, studios have come to depend on other
markets, seeking alternatives like, selling DVDs for home entertainment, and entering the internet,
devising new strategies for online marketing like; selling books, comics, extra content, toys, and of
course video games.

Along with the drop in the box office sales, there seems to be a lack in developing original and
creative ideas. Most film releases are based on adaptations from previous successful stories found in
books or comics. Once a movie has been a blockbuster the industry will focus on
developing and stretching the storyline in order to obtain the maximum economic benefit into sequels, pre-sequels, or spin-offs. The *Fast & Furious* saga, or the Spanish saga of *Torrente* saga are a good example of the exploitation of a franchise that has worked well in the box office. For this reason the franchises keep getting extended further.

The film and video game industries share similar business practices. This has facilitated the convergence in industry. Millions of dollars can be spent on the development of a film and of a game even before the cameras begin to roll. Film producers must secure funding to begin the actual making of the film, most of which is spent in the processes of production and post-production. Once it is finalized it is not as expensive to distribute prints. It is the same process for the video game production. A game can spend several years in development in the phases of design, testing, and redesign. Both industries are high-risk businesses, and many lose money once they are released. When it comes to marketing, both film studios and game developers target the same audience. Given that the film and video game industries confront similar challenges in the marketplace it is not surprising that these two industries often work cooperatively, rather than competitively.

While the Hollywood industry seems to run out of original ideas, the video game industry is having an increased impact and it is clearly expanding its market on a growing industry.

Is society generally looking for a more interactive experience? Could video games be the future of storytelling? The next chapter will analyze today's entertainment position and hopefully predict what direction the entertainment industry will be evolving.
STORIES AS FRANCHISES AND EXPANSION OF THE MEDIA

With the expansion of the media and the adaptation of stories to multiple platforms, we have the so called franchise of stories. Among some of the most relevant franchises we can mention the multiple stories that are the comics of Marvel. These superheroes and characters fill the theaters with new blockbuster movies every year. Franchises like The Lord of the Rings also have been taken into multiple platforms. It started out as a book, and then was taken into movies and video games, not to mention the big amount of toys and merchandising related to the saga that is sold.

The market of these franchises doesn't only focus in selling these stories in a single media like it could be a comic, or a movie but they are also adapting their stories with the development of technology into interactive stories that allow the consumer to become a more active viewer and experience the reality of the movie on his or her own. Video games are often used by these franchises to offer extra content that they cannot find otherwise in the movies, comics or books. Moreover it gives the viewer the opportunity to be the hero, the actor, to play the movies and to have a main role in the development of the story.

Video games, as well as movies, have genres and developers hold firmly to these established game genres because they have been proven in the market. By developing franchises, video games attempt to secure success. Video games based on popular films already have a built-in market, and also much of the work of the development stage is already completed for these games, which reduces the cost for the video game company. The story is established in the film, although it may deviate from the film's narrative. The characters are already developed and designed and often the actors themselves want to offer their voice-over for the video game characters. When a film is popular studios try to maximize the commercial value of that popularity by releasing sequels. This
helps both film and video games industries since the video game industry doesn't have to invest time and money to develop a brand-new game. The licensing agreements give these companies a set story, set characters, and access to film actors with established fan bases.

Now more than ever film companies are adapting successful narrative stories from video games to make them into movies, known as “video game movies”, or into a variety of series. When a film franchise is established, video games can be released with every film, as in the case of the Spider-Man games and Lord of the Rings. Another good example is the video game series Halo. A movie adaptation has been proposed due to its popularity. There are also an anime series about it. This is a web series with 5 episodes strategically released prior to the release of their Halo 4 video game, and it is also known that Steven Spielberg is producing a live-action television series based on the game, that will be released prior to the release of the next Halo video game. Both industries seem to be working together and collaborating on reaching a shared goal, that is to communicate a story or idea.

There is no doubt that franchised entertainment, and entertainment in general, is moving more in the direction of sub creational world building (Mark J.P. Wolf, Building Imaginary Worlds). Science Fiction and Fantasy have been major mass-market publishing genres for several decades now. Digital special effects technology has renewed both genres in cinema. Many of the top-grossing movies of all time take place in secondary worlds (such as Middle-earth, Hogwarts Academy, and the Star Wars galaxy). Video game worlds have become tough competition for the worlds of film and television, not to mention those of novels and comics. These sub created worlds often span all different media simultaneously.

The creation of an interactive fictional space, video game immersion, would allow us to

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1 Subcreation: Tolkien’s word for the making of imaginary worlds. The “sub” prefix designating a specific kind of creation distinct from God’s ex nihilo creation. Imaginary worlds have been referred to in a number of ways “subcreated worlds”, “secondary worlds”, “diegetic worlds”, “constructed worlds”, and “imaginary worlds”. 

complete the story by finding out ourselves the different paths, and to interact in the space of the story. Whether through verbal description, visual design, sound design, or virtual spaces revealed through interaction, it is the world (sometimes referred to as the storyworld or diegetic world) that supports all the narratives set in it and that is constantly present during the audience’s experience. Worlds extend beyond the stories that occur in them, inviting speculation and exploration through imaginative means. For example, we could move in a room and look what there is inside the closet, behind the bed, or to have a closer view of that letter that occupies the table, allowing us to discover more facts about the movie and story. We would be participants in the virtual world, through interaction with objects that the flat screen doesn't allow us to enjoy. Overall, we would have our own conclusions on the development of the plot.

Regarding the creation and sub creation of virtual worlds, J.R.R. Tolkien suggested that: “What really happens is that the story-maker proves a successful “sub-creator”. He makes a Secondary World which your mind can enter. Inside it, what he relates what is 'true': it accords with the laws of that world. You therefore believe these accords while you are immersed in the story. The moment disbelief arises, the spell is broken; the magic, or rather art, has failed. You are then out in the Primary World again, looking at the little abortive Secondary World from outside.” (Mark J.P. Wolf, Building Imaginary Worlds).

Cyber culture and postmodern theory have popularized the view that we own not simply a physical body that is limited in its abilities. Moreover, we can have numerous virtual bodies which we can clothe, interpret, hide, or take place of the physical body.
Film industry today: presence of CGI in Hollywood's blockbusters

It is noted and clear that there has been an unstoppable intention to find ways to fake reality in movies and special effects have been applied since the beginning of primitive cinema. We can mention George Méliès as the pioneer of the trickery and special effects in films.

Cinematographic technology has gone through a big development over time, changing the way we understand film production and reality. The technology applied in films as to recreate scenery and special effects has reached its summit thanks to the advancements in computer technology, and more specifically in the graphic development industry, that permits to create Computer-generated imagery (CGI) that nowadays pretty much reassembles reality.

The presence of Computer animated films (CGI) and Computer-generated imagery dominates in today's productions. The movie *300* is one of the first blockbusters where CGI had a very important role. Most of the action was filmed in front of a green screen. The traditional way of producing movies as we understood it before has changed forever. It is rarely the occasion where the production team travels to a specific location or recreates the scenario. Now we can do all this simply by shooting in a room with a blue or green screen that is filled with CGI later in postproduction with a computer. Postproduction has become the new phase where most of movie production takes place, becoming the main phase of creation. This is similar more to the production or development phase and aesthetic of a video game production. The film industry is constantly in motion. While the stories that keep the Hollywood money machine churning run in cycles, technology continues to evolve with every passing decade. A new revolution is stirring as 3D releases, DSLR cameras and free Internet distribution (YouTube, etc.) bring the digital age of filmmaking to Hollywood’s front door.

Many producers and cinematographers who have been working in the field for decades have
decided to make a move and switch to digital photography. Filming in digital makes it a lot easier to later combine the digital clips into a computer and apply special effects. One of the industry’s most renowned cinematographers, Roger Deakins, recently revealed his intention to move into digital photography. Many people wonder why would a 35-year veteran give up the authenticity of film for the look of digital? The recent developments in 3D have something to do with it. With around 25 movies releasing theatrically in 3D per year many of them are between the highest-grossing films, the money is clearly in the digital realm. In 2014 animated movies like Big Hero 6, How To Train Your Dragon 2, Rio 2 or The LEGO Movie had some of the highest worldwide gross of movie releases. But that doesn’t mean a filmmaker has to make a total switch and give up on film entirely. Yet, we have rarely heard from famous filmmakers who tested the waters of digital cameras and come away wanting nothing to do with the format again.

The clearest benefit of digital cameras is the immediate result. There is no time consuming process of handling the film, sending it to a post-house and watching dailies in a screening later. In some cases, you can even deliver the final product the same day to an editor reveal modes.

Blockbusters like The Lord of the Rings and Spider-Man make an extensive use of chroma key to create effects and stunning visual environments. This has created an entirely new form of filmmaking in which actors interact with imaginary costars who have yet to be composited into the frame, and directors create entirely new worlds out of nothing more than computer-generated images.

In addition film productions today make use of very similar technologies to video game productions, other than the green or blue screens mentioned before, the motion capture suits technology is also present in some of the most important productions of all time. The motion capture suits work with Xsens MVN, a type of sensor that captures an action motion and can transform it into CGI in a very realistic way. A clear example is the case of the Avatar movie, where
suits where used to record the actors, and in addition to the sensors, headmounted cameras, that enabled the director to capture the actors' facial expressions were used. Each motion capture actor dresses in a black jumpsuit covered with reflective panels. Each actor has a different splash color on their suit so the director and animators can tell them apart. Another new technology was the 3D facial scanning that transformed the facial expressions into the virtual characters created in 3D and with a special type of motion-capture camera that filmed in photo-realistic “stereoscopic 3D” mixing live-action and CGI. The cinematographers had the possibility of seeing in the virtual camera the virtual world with the bodies created in 3D on a real actor. It is the same technology used in many video games before.

Judging from the top ten box office hits of all time, computer-generated special effects seem to be an essential part of a blockbuster, based on the top 10.

5. *Toy Story 3* (2010) $1.06 billion Pixar
Video games are electronic games that involve human interaction with a user interface, such as a controller, and generating visual feedback on a video device like a TV screen or computer screen. Video games allow us to be participants in that somewhat imaginary and fictional space that has been created in which we interact generally through a joystick, keyboard, or mouse giving a more interactive experience of that virtual world created in the game.

We have also seen the evolution of video games in terms of its graphical quality, so much so that one would have difficulty differentiating a video game from a real-life scene today. It appears that there is a movement towards more immersive digital entertainment, from movies to games. The question is, where do we go from real-life 3D graphics and beyond?

The answer will be Virtual Reality. Major leaps in technology have resulted in improved hardware capabilities, virtual reality (VR) has started to surface in the gaming industry. Gaming technology is currently working in the development of the upcoming Oculus Rift, the cutting edge in virtual reality technology. The Oculus Rift is a head-mounted display (HMD) created by Palmer Luckey, that allows us to enter a digital reality. It has had very good reception so far and it is creating a market. It is intended to be released sometime in 2015 for a mere $300. Oculus Rift features a massive field view (107 degrees), quick-response (ultra-low latency), head-tracking system, and incorporates immersive stereoscopic 3D rendering capabilities as well. Its prototype which was showcased in various gaming conventions received numerous positive reviews from game developers and internet reviewers alike. There are about 200 games that already offer Oculus Rift support. It will be used in several computer platforms like Microsoft, Linux, and Macintosh. The success of Oculus Rift was so important that it was acquired by Mark Zuckerberg's Facebook.
On a side note Zuckerberg announced on his platform Facebook the following:

“Our mission is to make the world more open and connected. We're in a position where we can start focusing on what platforms will come next to enable even more useful, entertaining, and personal experiences. This is where Oculus comes in. They build virtual reality technology, like the Oculus Rift headset. When you put it on, you are completely immersed in a computer-generated environment, like a game or a movie scene or a place far away. The incredible thing about VR technology is that you feel like you're actually present in another place with other people. The Rift is highly anticipated by the gaming community. We're going to focus on helping Oculus build out their product and develop partnerships to support more games. Oculus will continue operating independently within Facebook to achieve this.” (Mark Zuckerberg on Facebook)

It was later announced that console platforms like Xbox and Sony PS4 are also developing their own VR headset which indicates the gaming industry is moving towards a more virtual direction. VR in video games can go a few steps further than traditional films by combining sound, graphics, text (spoken or written), and movement, both by the interactor and the objects within the virtual environment, olfactory effects, and haptic sensations (these last two have already been taken into experimental movie theaters before). Haptic sensations are still used nowadays in specific theaters mostly in theme parks like for example Disneyland that offer 3D or 4D screenings, where they try to create new sensations and experiences by applying vibration to the seats.

A computer-simulated environment offers a unique combination movie and theatre features. The trademark of the movie screen is the fluidity of its pictures: camera movements and special effects allow shifts in point of view, instantaneous change of decor and the morphing of shapes. The movie screen is a flat surface composed by images in movement, while the theatrical stage opens a three-dimensional space populated by physically present bodies.

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2 Olfactory effects: Smell-O-Vision was a system that released odor during the projection of a film so that the viewer could smell what was happening in the movie. The technique was created by Hans Laube and made its only appearance in the 1960 film *Scent of Mystery.*
“Whereas film is used to show a reality to an audience, cyberspace is used to give a virtual body, and a role, to everyone in the audience. Print and radio tell; stage and film show; cyberspace embodies... Whereas the playwright and the filmmaker both try to communicate the idea of an experience, the spacemaker tries to communicate the experience itself. A spacemaker sets up a world for an audience to act directly within, and not just so the audience can imagine they are experiencing an interesting reality, but so they can experience it directly... Thus the spacemaker can never hope to communicate a particular reality, but only to set up opportunities for certain kinds of realities to emerge. The filmmakers says “Look, I'll show you.” The spacemaker says, “Here, I'll help you discover.”

(Randall Walser).

The 21st Century is the century of digitalization, and the expansion of communications. Society has never been as connected as we are today. Now more than ever we are in constant exposure to data and information. We have our laptops, smartphones, tablets, and of course traditional media like TV, radio or newspapers. We live in a multitasking society where we are not focused in one single thing anymore, but in a society where at the same time we are watching a TV show or holding a conversation.

As Marshall McLuhan states in his book Understanding Media: “technology is an extension of our senses”. It is that same desire of expansion of technology that leads us to extend our senses through technology. Virtual reality means we have reached the pinnacle of development in technology, allowing us to sense a space that is not physically real.

Naturally, humans are consumers of stories, whether they are fictional or fact-based.
narrations. We enjoy reading books, watching films, and listening to other people's stories regardless of the medium we are using.

We cannot doubt that almost everyone has at least once in their life wished to be able to take part in a participatory way in the fictional space of a narration or story. This includes being able to experience the information of that imaginary world projected in our minds thanks to the data we perceive through the sight and hearing senses. We feel that we are present in the virtual space and can, interact with the objects and people in the fictional world.

Generally when we consume an audiovisual product like a TV show or a movie, we are constantly receiving information. This information has an impact on the viewer that will be followed by a reaction, but that won't have a direct impact on the story-engine, or audiovisual product. There is not a directional feedback between the source communicating on a medium/channel and the receiver. We can find a certain reaction from the consumers when for example purchasing a certain product or object that has taken part in the story, but it doesn't have a direct influence in how the story is going to evolve.

According to Marie-Laure Ryan and the promise of interactivity: “In a VR environment, full-body participation is made possible by a quasi-Cyborgian symbiosis of human and machine. Computer equipment worn like a prosthesis tracks the user's movements and relays data to the senses. This electronic extension of the body enables the user not only to "move the sensors" across the world projected by the data, but also to build and change it by grabbing, transporting around, manipulating, and molding objects. Insofar as the computer projects a continuous three-dimensional space, the user can move in all directions, rather than being sent along linear pathways. And finally, since the computer generates data "in real time," the virtual world can be said to respond dynamically to the user's input, and their relation is one of mutual interaction. The virtual world does not mechanically display hidden parts of itself at the user's command, but actualizes through a
constructive activity one of the many states that it contains potentially. “

In the sensory illusion of the VR environment objects will be fluid like movie pictures, yet their appearance of solidity will invite the user to reach out toward them. The introduction of technology in interactive drama expects to turn the event into a film whose world can be walked into and touched, into a play whose props, characters, and setting.

Not long ago we were spectators, passive consumers of mass media who had no choice is what to consume. Now, thanks to online social networks and applications like YouTube, blogs, Facebook or Twitter we can approach television shows and movies at our will.

Today when we consume entertainment products we use secondary devices that either immerse ourselves in the product we are consuming, or they will either distract us. Among these secondary devices that we use when for example watching TV or a movie, we can mention smartphones, tablets, or laptops. All of these devices offer us interactive information that we can access whenever we like. Many audiovisual products today are working in providing extra content on these secondary devices that can make us more engaged with the show or program we are watching. Almost everyone today owns a smartphone that allow them to download and install multiple applications. These applications provide us an interactive space. We find applications for all sort of picturesque things. There are games we can play, and applications that will provide us with all types of information. Video games, and TV shows have begun to create their own applications, and soon enough we will be able to experience a more interactive and virtual experience. Most digitally purchased movies offer the possibility to be watched in multiple platforms, this way you can be watching a movie in your tablet and you can switch to the movie screen or laptop if you need to.

Among people's behavior, the consumption of TV in an actual TV screen has slowly decreased and more people watch TV on their laptops or tablets due to the easy accessibility one
can have to the media products on the Internet. For this research I conducted a survey that would help me analyze people's behavior when consuming media products. Those who watch TV on a screen also tend to use a secondary device like a smartphone, a tablet or a laptop, and the majority replied they mainly use it to obtain extra content or information on the product they are consuming at the time. All of the participants watch movies, and all of them use secondary devices at some point. When asked what they were using the devices for, other than for texting and chatting friends in the mean time, they are also interested in obtain extra content or information from the movie. When it comes to the consumption of video games, we can see an evolution towards the use of video games in smartphones due to the development of applications.

Whereas video game consumers used to be mostly boys from 6 to 32 years old, as times go by there has been a big change in the demographics and many video games and consoles are expanding their market by attracting the rest of society like targeting women, girls, and men of all ages. We can mention the game “Brain Training” for the Nintendo DS, or “Wii Fit” on the Nintendo Wii. We can also see this demographic expansion in games for Android, or iPhone like the “Candy Crush Saga”, “Ingress”, “Clash of Clans”, “Plants vs Zombies” or “Empire” that are accessible to every person who owns a smartphone, that means men and women of all ages.
CONCLUSION

The media has changed and will continue changing. Storytelling is a natural instinct for humans and we will have to coexist and adapt to the multiple media that are being created. Nowadays we are moving towards the discovery and use of a virtual reality, that will allow us to interact with our stories and the imaginary worlds and environments that we create when it comes to storytelling, allowing us to play the main role in the stories and proving an active role in a fictional reality.

Technology in movies is being used in a way very similar to the technology used in video games, and process of filming movies is becoming more similar to video games. Playing a movie in a video game will go further than sitting a looking at a flat screen but will make us participants of the created world in the fictional reality.

Being able to enter a parallel reality and take part in a fictional space definitely sounds like the acme of all creation and storytelling, and we are on our way to acquire it. It will allow us to experience in first person situations in our lives that we can only dream of. Nonetheless, even if we are able to experience the virtual reality and feel like we are completely integrated in it, we will still have the human limitations of our body. It is the body that will contain the virtual space in the reality of our bodies, that are actually real. That will leave the virtual space subordinated as a subcreation to the world and reality that we live in, where we can always take control on our actions, both within the limitations of our physical body, and in all the spaces the virtual reality will open to us thanks to the freedom of the mind, breaking the limitations of our bodies, but being aware at all times that there is a distinction between the real world and the fictional world. We will experience entertainment and storytelling in a fresh way that will make us participants as we haven't been before.
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