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Dott.ssa Flavia Montecchi

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Abstract

Live-action and animation films deceive us into believing in fictional, complex worlds through realistic expedients and references that evoke our personal and daily experience of reality.

The realistic debate in film theory has often associated realism to documentary and live-action filmmaking because of the camera ability to record reality. The popularity and trend of photorealistic, computer-generated animation has recently raised questions about realistic representations without photographic basis in reality.

This thesis analyses what kind of realism computer-generated animations achieve and investigate for which purpose the animators have turned to realism, despite having the potential of portraying the unreal.

In order to answer these questions I analysed two representations, one live-action and one animated, of a similar, fictional reality by investigating the same realistic conventions in both adaptations: *Spider-Man: Into the Spider-Verse* (2018) is an animated feature film that mixes traditional and computer animation, while the *Spider-Man* trilogy (2002-2007) is a live-action production that blends natural acting, mechanical and CGI special effects. Both belong to the superhero genre, which consciously exploits intermedial and perceptual references to convey a believable, fictional experience to the audience. This thesis concludes that the viewers' awareness of the medium artificial nature and the lack of photographic references do not undermine the realistic and immersive quality of the animated experience.

My research relies on different theories about realism from the cinematic and animated fields of study and it is structured in three chapters: the first is dedicated to realism in live-action films, the second to realism in animation and the third to the film analysis.

Deutsche Zusammenfassung (German abstract)

Live-Action- und Animationsfilme lassen uns an fiktive, komplexe Welten glauben. Dies geschieht durch die repräsentative Mittel und Bezugnahmen, die unsere persönliche und tägliche Erfahrung der Realität evozieren. Die Debatte über Realismus in der Filmtheorie hat diesen oft mit dem Dokumentar- und Live-Action-Film in Verbindung gebracht, da die Kamera die Fähigkeit besitzt, die Realität aufzunehmen. In letzter Zeit hat der Trend zur fotorealistischen, computergenerierten Animation und deren Beliebtheit neue Fragen nach realistischen Darstellungen ohne fotografische Grundlage aufgeworfen.

Diese Arbeit analysiert welche Art von Realismus computergenerierte Animationen erreichen können und untersucht, zu welchem Zweck die Animatoren sich einem Realismus zugewandt haben, obwohl sie die Möglichkeit hätten auch das Unwirkliche und Irreale darzustellen.

Um diese Fragen zu beantworten, analysierte ich zwei Darstellungen (eine Live-Action und eine animierte) einer ähnlichen, fiktiven Realität, indem ich die realistischen Konventionen in beiden Werken untersuchte. Spider-Man: Into the Spider-Verse (2018) ist ein animierter Spielfilm, der traditionelle und Computeranimation mischt, während die Spider-Man Trilogie (2002-2007) eine Live-Action-Produktion ist, die natürliche, mechanische und CGI-Spezialeffekte miteinander verbindet. Beide gehören zum Superhelden-Genre, das intermediale und wahrnehmungsbezogene Bezugnahmen bewusst nutzt, um dem Publikum ein glaubwürdiges, fiktives Erlebnis zu vermitteln.

Ich komme zu dem Schluss, dass das Bewusstsein der Zuschauer für die künstliche Natur des Mediums, sowie der Mangel an fotografischen Referenzen nicht die realistische und immersive Qualität der animierten Erfahrung untergraben. Meine Arbeit stützt sich auf verschiedene Theorien zum Realismus in den Bereichen Film und Animation und gliedert sich in drei Kapiteln: das erste ist dem Realismus in Live-Action-Filmen gewidmet, das zweite dem Realismus in der Animation und das dritte der Analyse der genannten Beispiele.

TABLE OF CONTENTS

INTRODUCTION
CHAPTER 1: REALISM IN LIVE-ACTION CINEMA
1.1 Defining realism
1.1.1 Dictionary definition (Merriam-Webster's Dictionary)
1.1.2 "The problem of realism" (Christopher Williams)
1.2 Different forms of realism
1.2.1 Realism
1.2.2 Illusionistic realism
1.2.3 Naturalism
1.2.4 Social realism
1.2.5 Photorealism and Hyperrealism
1.3 Recording technology and realism
1.3.1 Invention of Photography
1.3.2 Invention of the Movie camera
1.4 Questions about realistic representation
1.5 Realism in film theory and history
1.5.1 Documentary: Nanook of the North (US 1922, Robert J. Flaherty)
1.5.1.1 Williams, "Realism and Cinema": camera as the intermediary of truth
1.5.2 Poetic Realism: Menschen am Sonntag (DE 1929, Siodmak and Ulmer)
1.5.2.1 Kracauer, "Theory of Film": indexical and documentary film qualities
1.5.2.2 Arnheim, "Film as Art": partial illusion, the constancy of size and form
1.5.3 Neorealism: Germania Anno Zero (IT 1948, Roberto Rossellini)
1.5.3.1 Rossellini: real events and truthful stories
1.5.3.2 Bazin, "What is Cinema": essence of human reality, mise-en-scène
1.5.4 Classical Hollywood
1.5.4.1 Bordwell, "Film Art": authenticity and continuity
1.6 Codes of realism in live-action
1.6.1 Mise-en-scène: authenticity
1.6.2 Acting: mimic
1.6.3 Photography and montage: continuity editing
1.6.4 Character development: human experience
1.6.5 Fictional context: social realism

CHAPTER 2: REALISM IN ANIMATION	37
2.1 Defining animation	
2.1.1 Dictionary definition (Merriam-Webster's Dictionary)	
2.1.2 "Drawings and not living beings" (Sergei Eisenstein)	
2.2 Animation techniques	
2.2.1 Traditional animation	
2.2.2 Stop motion animation	
2.2.3 Computer animation (2D, 3D)	
2.3 Different forms of animation	
2.3.1 Orthodox animation	
2.3.2 Experimental animation	
2.3.3 Developmental animation	
2.4 Questions about realistic representation	
2.5 Realism in animation theory	
2.5.1 Hyperrealism (Eco) and Ultra Realism (Wells)	
2.5.2 Second Order Realism (Darley)	
2.5.3 Perceptual Realism (Prince)	
2.6 Codes of realism in computer-generated orthodox animation	
2.6.1 Realism of Motion (illusion of physics)	
2.6.2 Logical continuity (of the characters)	
2.6.3 Realism of Space (mise-en-scène, world building)	
2.6.4 Consistent style (image and sound)	
2.6.5 Realism of Narrative (unfolding of main and secondary stories)	
CHAPTER 3: FILM ANALYSIS	59
3.1. Analysis criteria	
3.1.1 Comparison of the cinematic and animated codes of realism	
3.1.1.1 Summary of the codes of realism in live-action	
3.1.1.2 Summary of the codes of realism in computer animation	
3.1.2 Codes of the Analysis	

3.1.2.1 Realism of space

3.1.2.2 Realism of action

3.2.1 Why Spider-Man cinematic and animated adaptations?

3.2 Object of the Analysis

3.2.3 Persichetti, Ramsey & Rothman's Spider-Man: Into the Spider-Verse	
3.3 Film Analysis	
3.3.1 Spider-Man trilogy (US 2002 – 2007, Sam Raimi)	
3.3.1.1 Sam Raimi's cinematic approach	
3.3.1.2 Realism in the live-action films	
3.3.2 Spider-Man: Into the Spider-Verse (US 2018, Persichetti, Ramsey & I	Rothman)
3.3.2.1 Persichetti, Ramsey & Rothman's animated approach	
3.3.2.2 Realism in the animation film	
3.3.3 Scenes comparison	
3.3.3.1 Spider-Man introduction: an ordinary day	
3.3.3.2 Spider-Man's abilities: power testing	
3.4. Analysis findings	
CONCLUSION	129
BIBLIOGRAPHY	135
FILMOGRAPHY	137
ONLINE REFERENCES	139
VIDEO REFERENCES	141
PHOTO REFERENCES	143

3.2.2 Raimi's *Spider-Man* trilogy

INTRODUCTION

Scope of the investigation

Grasping and representing the nature of our reality is one of the most ambitious aims that the representative arts pursue. In the past artists required high mastery and technique to achieve a faithful representation of the real, but anyone has become able to record an impression of reality in a video or in a flat picture along with the technological progress and the spread of cheaper, accessible tools.

Since the invention of the photo-camera and subsequently of the film-camera, realism has been regarded not only an aesthetic goal of the representative arts, but also as an inherent quality of the recording technology.

Animation shared and evolved from the same technology, but it was often dismissed as a secondary art, related to abstract, illusory representations and most of all, to the animation of inanimate objects. Despite the lack of photographic references, animation holds the potential to represent an unprecedented kind of imagery and reality. Nowadays, computer-generated images can be extremely photorealistic and close to the physical reality sometimes at the expense of the truth.

Not only do animators challenge themselves by creating realistic representations of fictional realities, but the pursuit of their goals has been further enhanced by modern technology.

In this thesis I questioned the actual potential of animation when it comes to realistic representations and whether realism is an intrinsic quality of the animated medium or a shared ambition with live-action filmmaking.

The emulation of live-action realistic codes by the animated practice suggests a common ground between the disciplines that could either confirm or expand the existing and on-going debate about realism in the film industry. The investigation of realism in animation could contradict the theories that regard a representation realistic only in terms of the authenticity of its photographic references, being the animated reality a metaphysical plane with its own references. The technological progress and popularity of the animated genre urge film scholars to reconsider animation in terms of realism. The realistic tendency as well as the realistic achievements of the animators compelled me to investigate the extent of the medium potential and its consequent influence on an already complex debate.

Theoretical context

Despite the various and distinct approaches in the visual arts, realism has often been associated either to the indexicality or authenticity of the representation. Not only can the artists redeem the real world, offering a fair portrayal of the real and displaying related human experiences, but also unveil honest, social and even uncomfortable issues of reality.

The cinematic art tackled the same realistic dilemmas of previous art forms and, by doing so, generated even more questions about reality and its subjective understanding. Cinematic realism only became part of a larger theoretical debate after the Thirties, mainly due to the emergence of British documentary and later of the Italian Neorealism in the Forties.

Theorists like André Bazin and Siegfried Kracauer, influenced by the realistic tendency in the film industry, suggested that realism is an intrinsic quality of the cinematic medium, having photographic basis in the physical reality.¹

Media scholar Richard Rushton suggested that there is not "one reality of film", therefore there is not only one way to do realistic filmmaking. In order to account for the cinematic realities, which are real in their own terms, we have to accept that "films are part of reality".²

However, both Bazin and Kracauer dismissed the animated practice as a secondary art, stating that its purpose is not to achieve realism, but to represent the unreal.³ The introduction of photorealistic computer-generated graphics and special effects in the live-action filmmaking urged the realistic debate to re-examine the nature of animation.

Media scholar Paul Wells paved the way for a theory about animated realism, identifying the potential of the medium in its hyperrealistic exaggeration of reality, while film theorist Stephen Prince investigated the subtle difference between reference and perception when it comes to the experience of realistic, yet fictional computergenerated images.

Despite the lack of photographic references, in particular in the computer-generated animations, the animated and live-action media share the potential of representing complex realities that can mirror or distance themselves from ours.

¹ André Bazin, What is Cinema Vol.1 (Berkley: University of California Press, 1967), 108.

² Richard Rushton, The Reality of Film: Theories of Filmic Reality (Manchester: Manchester University Press, 2011), The Reality of Film, 18-19.

³ Siegfried Kracauer, Theory of Film: the Redemption of Physical Reality (Princeton: Princeton University Press, 1997), 12.

American philosopher Stanley Cavell tried to grasp the paradox of visible, alternative worlds that are not related to ours, but are represented through ways of expressions that belong to our reality. He defined "automatic world projections" those fictional realities that recall impressions of the physical world, but whose arrangement of physical things differs, sometimes even radically, from the experience of the reality as we know.⁴ The audience is actively engaged in a personal reflection on the interplay between the real and the fictive worlds, despite the realistic degree of the realities depicted, either live-action or animated.

Even if some film theorists defined the portrayal of the unreal as the true potential of animation, the medium ability to present over-detailed, closed realities that can address the viewers' knowledge of their own reality should be no longer ignored by the realistic debate.

Structure and film analysis

In order to answer the guiding questions of my research, the third chapter is dedicated to the comparison of similar scenes and the analysis of the live-action Sam Raimi's Spider-Man trilogy (2002-2007) and the animation Persichetti, Ramsey & Rothman's Spider-Man: Into the Spider-Verse (2018). Both belong to the mainstream superhero genre, which usually blends fictional elements of the comic stories with contemporary themes and social realities. The two adaptations are about the origin story of a Spider-Man, therefore they rely on a similar narrative formula and structure, but display an innovative approach to the genre as well as to the comic book character. The analysis is founded upon two distinct sets of realistic codes which I have drawn from both animation and live-action realistic theories. I have identified for what purpose these two media rely on realism even when portraying a fictional reality by measuring to which extent they respect the same realistic codes. The second chapter exclusively focuses on the animated practice, discussing a variety of techniques and forms, but ultimately concentrating on the theories regarding computer and orthodox animation such as Spider-Man: Into the Spider-Verse. The first chapter contextualizes the realistic debate through a historical and theoretical excursus that pivots on the invention of the recording technology, tackling questions about live-action realism.

It is essential to consider the complex etymology of realism before addressing the realistic debate in film theory.

⁴ Stanley Cavell, The World Viewed (New York: Viking, 1971), 72.

CHAPTER 1: REALISM IN LIVE-ACTION CINEMA

1.1 Defining realism

Nowadays it seems impossible to talk about cinema without considering realism, but it is also difficult to talk about cinematic realism without considering the achievements of the previous art disciplines.

An inner desire to faithfully portray the self and the surrounding world, either on a visual or on a content level, has been noticed throughout a long period of time. Each form of artistic expression has tackled the challenge of a realistic representation. It still remains hard to define realism because a different definition can be adopted depending on the time period or the art form considered. It is an on-going discourse that is deeply influenced by the past technological innovations and that will continue to be affected by the future technological achievements.

1.1.1 Dictionary definition (Merriam-Webster's Dictionary)

According to the Merriam-Webster's Dictionary, 'realism' is defined as:

- "concern for fact or reality and rejection of the impractical and visionary"
- "a doctrine that universals exist outside the mind"
- "a theory that objects of sense perception or cognition exist independently of the mind"
- "the theory or practice of fidelity in Art and literature to nature or to real life and to accurate representation without idealization".⁵

The concept of realism is *per se* abstract, therefore its definition is often subjective and it changes with the perspective that one assumes.

Primarily realism refers to an interest in reality, a fascination for details and foremost for the truth. Indeed a close observation of reality can unveil both, satisfying realism differently.

Realism even defines the philosophical doctrines which hold that Nature (the physical reality) exists whether anyone has perceived it or thought about it.

Realism means both the theory that studies the realist subject and the style that the theoretical debate has always tried to define. Theories and artistic practices share the

⁵ Realism .(o.d.). In *Merriam-Webster's online dictionary*. Retrieved on: https://www.merriam-webster.com/dictionary/realism, (02.01.20).

same "concern for fact or reality", questioning the ways and methods to portray the real. It is necessary to define the meanings of 'real' and ' reality' before analysing how a representation can be recognized as realistic.

1.1.2 "The problem of realism" (Christopher Williams)

British scholar Christopher Williams underlined that the difficulty of defining realism is in the very conception of the world as such, depending on what reality signifies, realism assumes a different meaning.

"The problem of realism arises once we have accepted, even as a hypothesis, that the world exists, either as an objective fact for people to look at, or as a set of possibilities, which they construct through their intelligence and their labour, or as the product of their imagination, or, most plausibly, as a combination of all three."

The multifaceted nature of realism is related to the complexity of reality, which can be interpreted differently too. As Williams suggested, there is not just one way of accurately defining the world in all its aspects and the same happens with realism. Then, a realistic portrayal of the world could be a representation of "an objective fact for people to look at" or of "a set of possibilities" or of "the product of their imagination" or a mix of the three.⁸

Many artists and theorists discovered different methods of portraying the real. In Art history, realism has been interpreted and associated to different forms of artistic expression, from painting to cinema. The more they drew closer to reality, the more they questioned their ability to capture and understand its essence.

The realist debate was often opposed between realism as verisimilitude, a correlation to perceptual reality, and realism as truthful reality, a faithful display of social realities.

Consequently, the multi-faced nature of reality is the proper challenge despite the artists' mastery or the realistic qualities of the medium adopted. All the representations can be regarded as realistic and true because they are faithful to the reality they contemplate, even if perceptual, social or a subjective layer of reality.

⁶ Realism .(o.d.). In *Merriam-Webster's online dictionary*. Retrieved on: <u>https://www.merriam-webster.com/dictionary/realism</u>, (02.01.20).

⁷ Christopher Williams, Realism and Cinema (London: Routledge, 1980), 1.

⁸ Williams, Realism and Cinema, 1.

1.2 Different forms of realism

A fervent interest in realism emerged in all artistic practices in the second half of the nineteenth century, so many artists conceived new techniques that could better convey a sense of reality.

1.2.1 Realism

After the 1848 French revolution, Realism arose in France as a rejection of the romantic forms of Art. Romanticism was an artistic, literary and philosophical movement that originated in Europe at the end of the 18th century: its idealistic imagery was mainly focused on the individual and the emotional spheres with a strong emphasis on Nature and on the Past, in particular Medieval history.

On the contrary, Realism promoted artworks related to real-life and social events since it was deeply influenced by the technical, social progress of the Industrial Revolution. In the nineteenth century, literary realism attempted to display 'reality as it is' by illustrating episodes from everyday struggles and characters from the middle or lower classes, above all in French and Russian literature. In the realist novel, the narrative prose, or "metalanguage", provided knowledge about the reality and the characters within the text, offering to the reader "truths of human nature".

Both in painting and literature, Realism preferred content to method in order to promote social and political awareness.

1.2.2 Illusionistic realism

Painters were mainly concerned with an accurate visual representation of reality. Many improved their study on perspective, but it was only after the discovery of the *camera obscura* that artists confronted themselves with the illusion of three-dimensional space as well as with the technical aid of such an optical device.

The invention of the *camera obscura* dated from the Renaissance and despite its many improved versions in the following decades, it was undoubtedly the first mechanical technology of reproduction: the incoming light (and picture) would be projected upside down through a small pinhole on a screen inside the box, so that the artist could easily trace a proportioned image of the surroundings.¹⁰ The *camera obscura* was useful to realize geometrical perspectives and enable artists to satisfy two ambitions: one

⁹ Colin McCabe, "Realism and the Cinema: Notes on some Brechtian theses", *Screen* vol. 15, no. 2 (Summer 1974): 9-10

¹⁰ James Monaco, How to Read a Film (Oxford: Oxford University Press, 2000), 72.

"primarily aesthetic, namely the expression of spiritual reality wherein the symbol transcended its model" and one "purely psychological, namely the duplication of the world outside".¹¹

In the early 17th century, many painters perfected the "Trompe-l'œil", which literally means "deceive the eye", a technique that helped them to create a three-dimensional illusion of a two-dimensional picture.

The Illusionism or Illusionistic realism became quite common in architectural spaces, where the painted subject could better trick the human eye: murals of private houses often portrayed windows or doors to enlarge the perception of the space while the painted rooftops of the churches enveloped and intimidate the viewers under stunning, realistic compositions.

1.2.3 Naturalism

Naturalism emerged in the late nineteenth century as an artistic and literary movement that rejected the romantic forms of expressions for a more authentic, almost scientific representation of reality, artists assumed an objective method of observation and their main goal was to unveil and convey the truth of nature. Before the invention of the camera, the artists had offered their service to the scientific community documenting creatures, plants and even anatomical studies with their drawings.

Naturalism combined the romantic landscapes with the ideology of realism, putting emphasis on the human figure in a natural scenario in order to highlight the relationship between Man and Nature. Despite the similarity between the realist and the naturalist movement, they are different in their approach to the real. In painting, Realism aimed to portray the world as it appears, while Naturalism depicted the world in a deterministic way. In literature, Realism presented the characters' decisions as responses to determined situations, while Naturalism emphasized the influence of the social environment and natural forces on the individual action.

Naturalist artists aimed to replicate Nature and people without corrupting their painted subjects through personal interpretations.

1.2.4 Social realism

After the economic depressions and the social conflicts in the 1920s and 1930s, social realist artists adopted realism to make their art accessible to everyone and portrayed

¹¹ André Bazin, What is Cinema Vol.1, 11.

common people and notorious personalities as heroic figures opposed to the sociopolitical adversity. Social realism emerged as a movement drawn to the representation
of social and political realities: its aim was to demand truth and underline the effects of
political and economical crisis on human conditions. The artists often represented the
masses of workers and labourers in order to criticize the power structures within the
society and the government which were held responsible for mistreating those social
classes. Social realism redefined the artist not as a distant, elite figure but rather as a
member of the society, close to human afflictions. Through realism, social realist artists
desired to transform their own socio-political reality.

1.2.5 Photorealism and Hyperrealism

Since the sixteenth century painting has not ceased its quest for realistic illusion and has been further influenced by the advent of new technologies, in particular by the invention of photography.

In the late 1960s, Photorealism, known also as Hyperrealism or Super-realism, emerged as a painting style strictly related to the use of photographs, some artists used the projection of images to replicate them on canvas, others painted on developed photographs and many tried to achieve the verisimilitude of a high resolution photograph with their painting. The imagery usually concerned objects and icons belonging to the consumer culture without expressing a social commentary. Photorealist artworks relied on the photographed subject, questioning traditional forms of representation, rather than directly observing the subject. The photographic medium both simplified and complicated the artists' approach to realism.

1.3 Recording technology and realism

The evolution of technology played a fundamental role in the quest for truth, enlarging the range of accessible phenomena, as well promoting new forms of realistic expression.

Artists had always required high mastery and techniques to achieve a satisfactory representation of the real and anyone seemed able to record an impression of reality on film after the invention of the photo and movie cameras.

1.3.1 Invention of Photography

Photography resulted from the combination of different technical inventions, but it was

strictly related to the *camera obscura*. The optical device lacked a support, a material on which the projection of light could be permanently recorded and photography was consequent to this concern.

Many inventors explored and tested different ways and materials to fix the incoming light inside the *camera obscura*: in 1824, the French inventor Nicephore Niépce was successful by adopting bitumen of Judea on a silver plate and a long exposure time. In 1838, following Niépce's achievements, the French artist and chemist Louis Jacques Mandé Daguerre invented the daguerreotype, a process that involved silver iodide on silver plate to capture long light exposure in the *camera obscura*, mercury vapours and sea water to fix the image.

Successive inventions reduced the time of exposure drastically and even perfected the process of development, producing paper and film prints.

Muybridge's scientific observation of life and movement

During the 1870s and 1880s, the English-American photographer Eadweard Muybridge became quite famous thanks to its photographic studies of people, animals and machinery in motion. One of his first subjects was a galloping horse, which he recorded in a sequence of shots with twelve cameras. In 1878 Muybridge's 'The Horse in Motion' demonstrated that the human eye is incapable of breaking down movement and that photography can overcome the limits of human perception.

His sequence of photographs was animated through the *zoopraxiscope*, an early form of projector that worked with glass disks on which painted or photographed silhouettes were impressed. At that time Muybridge's photographic approach was considered scientific, inclined to the observation of life and movement, nowadays he is mainly considered one of the precursor of cinema and animation art. Photography deposed the previous representative arts in their pursuit for realism, thus relieving painters from likeness and satisfying their devotion to the real.¹²

The photographic medium has always been considered an accurate, objective document, a record of light on film, connected to the real world and the past, able to convey a story as well as an image of reality. Muybridge's experiments demonstrated that photography can fix an action in time, analyse and grant it to posterity.

After the invention of photography, the main concern of realism was rather a matter of investigating and criticizing historical reality more than a matter of illusionistic

¹² Bazin, What is Cinema Vol.1, 12.

perception or verisimilitude, already achieved through the chemical impression of light on film

1.3.2 Invention of the Movie camera

Cinema has always been defined as the art of motion and today Muybridge's shots of movement are considered as "the first series of cinematographic pictures". However, while the English-American photographer deconstructed the motion through his scientific inquiry in order to overcome the observational limits of the human perception before a moving subject, the inventors of the movie camera desired to synthesize movements that could be perceptible to the human eye.

As it had happened with photography, the invention of the movie camera resulted from the effort of many creators.

In 1889 the British inventor William Friese-Greene patented the first motion picture camera that used transparent flexible film, next in 1895 the French inventors and brothers Auguste and Louis Lumière patented the *cinématographe*, a device that functioned as a motion picture film camera, a projector and a developer.

After the invention of the movie camera, many experimented and patented chemical processes in order to fix colours on the film, but it was only in 1906 with the Kinemacolor, a system of colour filters, and later in 1917 with the Technicolor, a combination of filters and of subtractive colour prints that the cinematic film gained colours.

Lumière brothers' and Méliès's approaches to the camera

Following photography, the cinematic apparatus seemed deeply related to reality, but the early approaches suggested the contrary. After their photographic experience, the Lumière brothers approached the medium driven by a "scientific curiosity", recording everyday life events. On the other hand, following his experience as a stage magician, the French director and actor Georges Méliès "exploited the cinematic device systematically", merging photography and staging techniques in order to achieve deceptions and dreamlike scenarios.¹⁴

As an unstaged recording of physical and social realities, the Lumière brothers' films had a documentary value drawing the audience close to actual phenomena that were

¹⁴ Siegfried Kracauer, Theory of Film, 32-33.

¹³ Bazin, What is Cinema Vol.1, 18.

distant in time and space to the viewers.

Méliès discovered the versatility of the movie camera almost by mistake when his camera jammed briefly during the filming of a street scene. In the developed footage, Méliès remarked an interesting effect consequent to the jamming: a rapid substitution in which objects and persons instantly disappeared or became something else. Méliès exploited the cinematic medium to tell fantastic stories, adopted visual techniques of other cultural forms and devised the first special effects to distort time and space. The opposition between the Lumières and Méliès was defined as "the first dichotomy of film aesthetics" and it had a fundamental role in shaping the subsequent theoretical discourse about realism in film. ¹⁵

The invention of the photographic and cinematic medium offered to both artists and amateurs a way of recording and comprehending the world, while painters and sculptors work with a shapeless matter, the medium of photography and cinema is physical reality. The cinematic directors manipulate physical objects and actors before the camera and despite their influence on the recorded material, the films are compositions of recording technology and material from the real world. However, despite the technical achievements which enable to capture reality on film, many questions about realism remain unanswered.

1.4 Questions about realistic representation:

What is the purpose of Art? Should Art present or represent reality? During their pursuit for truth, artists and theorists were often haunted by philosophical questions such as: can Art actually represent the world as it is? Should Art refer to reality or take a radical distance from it?

The style and the subject of an artwork usually convey the authors's ideologies: their messages about reality can be comprehensible but even contradictory. This does not mean necessarily that a relation between Art and reality must be implied or explicit in order to communicate. On the contrary, non-realist, abstract Art has an informational and an emotional value, despite being opposite to realism.

Art is a human product and its fruition is related to the thinking mind, therefore it is inevitable that an artwork is shaped and understood through the human experiences of both the author and the consumer.

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¹⁵ Monaco, How to Read a Film, 285-286.

¹⁶ Erwin Panofsky, "Style and Medium in the Picture", Critique vol.1, no.3 (January/February 1947): 31.

Artists confronted themselves with reality by getting closer or far away from it by aspiring to extreme realism or to extreme abstraction.

In the past the mastery of the realistic painters was as an artistic expression as well as a scientific tool, but after the invention of photography, some abandoned the realist style for a more expressive one.

The artistic pursuit for truth became a stylistic choice rather than a necessity. The narrow relationship between technology and reality did not ease the artists' concern about conveying a truthful impression of the real. On the contrary, many theorists still debate on the nature of film, on its presentational or representational quality, and if cinematic realism should convey a real-life experience as we perceive it or an essential truth of life.

Is film a document of the physical reality or a representation of a constructed reality?

The Lumière brothers presented their early films as untainted documents of contemporary and social realities for the commercial purpose of selling their invention, while Méliès produced films in order to entertain his public. They all had experiences with both realistic and non-realistic representations, but today they are remembered as opposite in the realistic debate. They proved the fascination of the public for both the recorded and artificial reality and that a film can be a document as well as a representation of reality.

Since its invention cinema has continuously struggled to be recognized as a realistic form of expression like the previous art disciplines and in the end it proved to be able to tell fictional and non-fictional stories through an immersive experience. However, the discovery and use of new technologies such as the computer-generated images in liveaction films continue to challenge both the definition and impression of cinematic realism. Portraying life in cinema does not necessarily mean to duplicate the physical reality or achieve a great verisimilitude, the spectators often identify themselves with the cinematic reality because films evoke experiences and conditions close to real life. Nevertheless, an experience is realistic if it is authentic and relatable to the audience.

Many theorists have eventually agreed that in order to be realistic a film "should be in some sense truthful or tell the truth", despite the artifices implied by film technologies or necessary to the director's staging.¹⁷

¹⁷ Williams, Realism and Cinema, 79.

A film is indeed a document determined by many factors during its recording: it can be stored and shared and it is also a representation of a constructed reality that has some truthful references and links to the experiences of its audience.

1.5 Realism in film theory and history

For a long period, film theorists identified the realist tendency exclusively as a response, an opposition to formalism, a style more inclined to an expressive, personal representation of reality. The film scholar Christopher Williams stated that a segment of film theory used to oversimplify the cinematic approach to realism to a style that supported the observation of real life and was opposed to an abstract imagery, tracing that dichotomy to the Lumières and Méliès, the first cinema pioneers.¹⁸

Nowadays most of the film theorists recognize that films are often a mixture of both cinematic tendencies, even if one often prevails.

Realism became part of a larger theoretical debate only after the Thirties, mainly due to the emergence of the British documentary and later of the Italian Neorealism in the Forties.

Despite different philosophies and techniques have been improved during the years, every director that approached cinema with a realistic attitude felt compelled to produce meaning out of reality.

1.5.1 Documentary: *Nanook of the North* (US 1922, Robert J. Flaherty)

The Lumières' travelogues are nowadays regarded as the first form of video document, but since then the documentary has defined its own genre and audience.

Early pioneers, such as Dziga Vertov, John Grierson and Robert Flaherty paved the way of the documentary genre, approaching the cinematic medium to communicate aesthetic and political agendas from an objective point of view. In the twenties the Soviet filmmaker Dziga Vertov distinguished himself for his experimental film and his use of documentary material. The Scottish filmmaker John Grierson fathered the British and Canadian documentary in the Thirties, magnifying the frame as an "arbitrary rectangle" because it is able to enhance reality and reveal movement, the inherent quality of life.¹⁹

In 1922 the American filmmaker and explorer Robert Flaherty produced the first

¹⁸ Williams, Realism and Cinema, 11.

¹⁹ Williams, Realism and Cinema, 18-20.

commercially successful feature length documentary: *Nanook of the North, a story of life and love in the actual Arctic,* revolves around Nanook, an Eskimo living in the Antarctic region of Northern Ungava. Flaherty's documentary was the first of its genre to show the harsh life of the Inuit people with an intimate approach and to gain enough popularity, Nanook is still a synonym of an Eskimo and Flaherty's documentary is regarded as a classic.

Flaherty's attempt to record the struggle between Man and Nature raised questions about the realistic and untainted representations of human cultures.

Despite Nanook is regarded as the first documentary and it was praised by film theorists for its realism, Flaherty relied on cinematic techniques that recur in fiction. For example he changed Allakariallak, the original name of the protagonist, into Nanook and staged scenes such as the discovery of the gramophone for narrative purposes to display the Inuit culture untouched by the western influence and the building of the igloo for technical purposes to fit the camera in the tight space of an igloo. The film is black and white and silent, without any dialogues or voice over, each scene is only introduced by inter-titles.

Nanook of the North starts with a Robert Flaherty's written preface, in which the filmmaker explains the nature of the film and how it came to be. The preface recalls a travel journal: "In 1913 I went north with a large outfit. [...] I had no motion picture experience and naturally the results were different. But as I was undertaking another expedition I secured more negative with the idea of building up this first film."²⁰

In the first minutes the audience is given a specific context and a personal perspective led by the filmmaker's point of view. Flaherty introduces Nanook, the main protagonist, by describing his central role both in his community and in the film and informing the audience of his death, occurred few years after the shooting of the documentary.

"Less than two years later I received word that Nanook ventured into the interior hoping for deer and had starved to death. [...] more men than there are stones around the shore of Nanook's home have looked upon Nanook, the kindly, brave, simple Eskimo."²¹

²⁰ Nanook of the North, R.: Robert Flaherty, (Orig. Nanook of the North, UK 1922), 16th December 2012. Retrieved on: https://www.youtube.com/watch?v=m4kOIzMqso0, (02.01.20), (0:00:29).

²¹ Nanook of the North, R.: Robert Flaherty, (Orig. Nanook of the North, UK 1922), 16th December 2012. Retrieved on: https://www.voutube.com/watch?v=m4kOIzMgso0, (02.01.20), (0:02:03).

Flaherty offers to the audience enough information about what will happen and about Nanook's life after the making of the documentary. Flaherty conveys a realistic impression of his work, even if his preface influences the spectators beforehand and it could be regarded as non-objective. He presents the tale of his own struggles, his motivations to realize his film, meanwhile he introduces the protagonist as a "simple Eskimo". In the preface, Flaherty states that the documentary may contain the last surviving recordings of Nanook's life, reinforcing its document value as well as its realism.

Later Flaherty uses a long shot of the desolate Arctic nature and geographical maps to draw the spectators closer to the Eskimos' life.

Long takes of Nature recur throughout the whole film: they are shot either with a fixed camera or with a moving one. Nature is sometimes the only subject within the frame, on other occasions an Eskimo enters the shot, a small figure in comparison to the rest of the environment. Flaherty's emphasis on Nature as well as on men and animals conveys a realistic sense of space and builds up the believability of the picture, both camera and natural light capture Nature and men equally during the unfolding of the action.

Close shots are used to introduce Nanook and his family, friends and puppies included and also they break up the typical life of the Eskimo. Hiking, travelling by kayak and trading are displayed with just few shots, but activities that require time and patience, such as hunting, fishing or building the igloo, are shown with more than two takes and from different perspectives. The camera draws near the action and follows it with smooth movements, taking time to record the events as they happen. The cuts of the editing are few, almost imperceptible despite the inter-titles that separate each scene and break the unfolding of the longest sequences.

The eye of the camera frames the Inuit as the filmmaker's eye and the spectators unconsciously assume Flaherty's perspective during the documentary, which is realistic enough to make each viewer a witness of the action. Flaherty's *Nanook of the North* demonstrated the camera can draw us closer to the world and also unveil its hidden truths.

1.5.1.1 Williams, "Realism and Cinema": camera as the intermediary of truth

In his "Realism and the Cinema: A Reader", the film scholar Christopher Williams highlighted the role of the camera as both a recording device to document reality and an intermediary between the filmed reality and the audience.

The filmmaker offers a different approach to reality and an objective perspective by displaying real actors in real environments and offering original material rather than fictional.

Documentary realism is related to the pleasure of discovery and knowing of both filmmaker and viewer: the camera enables both to see the unknown that has to be uncovered and understand what they ignore about their reality.

The viewers confront themselves with an issue and the filmmaker's representation of the world with "the camera (on the spectator's side) and the movement-in-the-material (on the material's side)" acting as intermediaries. The filmmaker's presence within the documentary serves as a realist agent between the audience and the represented historical, social realities: it authenticates the recordings and the historical representation, facilitating their assimilation. Before and during the filming process Flaherty lived with the material, cohabited with the amateur actors and natives, shared their company and also their experiences in the natural locations.

Williams suggested that rather than forcing a pre-planned story on the material, Flaherty drew out a narrative from the footage during the editing process, stressing for a "naturalisation" of the documentary. The filmmaker employed the montage as a "realistic device" in order to convey the material as natural as possible, favouring minimal cuts and a continuity between the scenes, combining similar movements, tonal and emotional values.²⁴ Documentary realism suffices a persuasive argumentation about the world rather than a fictional story, it displays social actors in a historical representation rather than fictional characters in a fictional environment.

In the documentary genre, realism is related to the social purposes of the individual, the filmmaker is eager to document the world and collective issues, the viewers' intellectual and visual desire of confronting themselves with the represented issues. The pleasure of learning through a visual experience, like a documentary, becomes not only a social engagement towards the representation but also towards the represented reality.

1.5.2 Poetic Realism: Menschen am Sonntag (DE 1929, Siodmak and Ulmer)

In the early sound era, the poetic realism film movement emerged in France, it focused around marginal characters and their ill-fated romances. The films blended elements of

²² Williams, Realism and Cinema, 91.

²³ Bill Nichols, Representing Reality: Issues and Concepts in Documentary (Bloomington: Indiana University Press, 1991), 184-5.

²⁴ Williams, Realism and Cinema, 99.

comedy and tragedy with a pessimistic, dark view of the world. Nostalgia and disillusionment recurred as major themes, mirroring the atmosphere of France before World War II. The narrative of the poetic realist films often carried social and historical critiques about the lower-class conditions and rejected the happy ending for a darker morale. Poetic realist filmmakers adopted cinematic techniques such as the staging of lighting and shadow, a specific composition of the frame and camera angles, in order to investigate hidden truths: the eye of the camera realistically peers into the intimate lives of the characters, capturing the essence of life.

Between 1929 and 1930 the German film director Robert Siodmak and the Austrian-American film maker Edgar G. Ulmer collected an impressive quantity of footage about Berlin and its citizens, which was later edited in a film called *Menschen am Sonntag: ein Film ohne Schauspieler* (People on Sunday: a film without actors).

The first edit and the original negatives were damaged or lost, only a shorter version of the film survived. The film is black and white, has an instrumental soundtrack and its dialogues and information are concentrated in the inter-titles.

Siodmak and Ulmer were interested in making a movie with five people standing before a camera "for the first time in their lives" or at least they desired to give that impression to the audience with the main title and the inter-titles. ²⁵ The directors employed unprofessional actors with the exception of four professional performers: Kurt Gerron, Valeska Gert, Heinrich Gretler and Ernő Verebes. The film introduces Erwin, Brigitte, Wolfgang, Christl and Annie as ordinary people, busy with their ordinary lives. All the five people seem unaware of the camera and despite the statement in the introduction, they are carefully framed in their workplaces, during their free time and even in the intimacy of their homes. The city of Berlin is not a mere background for the story, but it becomes a character as well.

The narrative around the five Berliners is interlaced with views of the city of Berlin and its citizens, recalling the city symphony, a genre of avant-garde films that focused on the modernity and degradation of the urban landscape. The camera frames Berlin from different angles, sometimes dynamically from moving vehicles, mixing fictional and observational devices, such as long takes and long shots.

The film revolves around a weekend and the plot begins on Saturday. The characters look forward to the end of the working week when everyday life makes space to the

²⁵ "Diese fünf Leute standen hier zum ersten Mal in ihrem Leben vor einer Kamera.", People on Sunday, R:Robert Siodmak & Edgar G. Ulmer, (Orig. Menschen am Sonntag, GER 1929), 2nd May 2018. Retrieved on: https://www.voutube.com/watch?v=mA4IvifaTZw, (02.01.20), (0:01.32).

exceptional ordinariness of Sunday, a day in which everyone can do what they like.

In their free time the characters easily forget the daily stress and face smaller preoccupations, such as love and friendly misunderstandings.

The film does not focus on the nature or purpose of all the activities, but rather on the general carefree mood for the upcoming week. On Sunday the same city of Berlin falls in a state of sleep, the streets are almost empty and the shops are closed.

The filmmakers documented a rather simple subject, but they handled it with a realistic approach, the recordings of random Berlin citizens are framed within a fictional narrative, displaying the disparity of the social classes despite Sunday common value between the citizens.

Menschen am Sonntag is realistic for its untainted recording of an atmosphere, a state of mind that is actual to every Berliner and every citizen in the world.

1.5.2.1 Kracauer, "Theory of Film": indexical and documentary film qualities

The German writer, cultural critic and film theorist, Siegfried Kracauer described *Menschen am Sonntag* as a movie with a "palpably episodic vein" and a "marked documentary quality.²⁶ From his perspective, such episodic stories deeply rely on the camera ability to reveal the essence of life because "their uncinematic content threatens to overshadow their cinematic form".²⁷

Kracauer sustained that film could convey a faithful impression of reality only if the audience remains unaware of its deceiving nature. He presumed that cinema resulted from a scientific curiosity and that its inherent properties guarantee the recording of reality. Cinema is the only media able to reveal reality apart from photography.

Even if the two media share the same recording technology, have the same basic properties, record and reveal the physical world, cinema represents reality in a span of time because it developed its own techniques such as the editing of pictures and sounds.²⁸

As a recording of time and movement, the film conveys a deeper impression of reality than photography: Kracauer believed that through the lens of the camera the audience could perceive the recorded reality as more inclusive and realistic than reality itself. In fact the cinematic medium is able to record and also to reveal reality beyond our daily perception and knowledge.

²⁶ Kracauer, Theory of Film, 252.

²⁷ Kracauer, Theory of Film, 251.

²⁸ Kracauer, Theory of Film, 42.

The camera moves, drawing us closer to incidents that we usually ignore, inviting us to participate, so within the frame the action and the surroundings are staged to be close to reality.

In his "Theory of Film: The Redemption of Physical Reality", Kracauer defines the pursuit for an intimate, private layer of life as "the flow of life", one of the inherent affinities of cinema and photography.²⁹ During the projection of a movie the viewers experience the cinematic reality as a flow of emotions and values that pivot on real life. For example, in *Menschen am Sonntag* the shots of Berlin and its citizens have a documentary quality, but even convey a subtle political commentary by highlighting the social and economic disparities between the classes during the twenties.

Through the eye of the camera we experience the unseen, "we literally redeem this world from his dormant state", but most of all we can investigate closer the "psychophysical correspondences" of the material world that constitute our life.³⁰

The viewers easily confront themselves with the staged reality because it recalls theirs and they assimilate the cinematic representation as part of their own experience, because it addresses their memory.

1.5.2.2 Arnheim, "Film as Art": partial illusion, the constancy of size and form

The German author and film theorist, Rudolf Arnheim based his film theory on two principles: the former stated that cinema has the creative ability of revealing the unknown through the techniques of "transpositions" and the latter that the cinematic reality is only "partial". Since the representation of reality is incomplete, both filmmakers and audience collaborate on completing the illusion. While the filmmakers actively employ cinematic and realistic devices in order to create an impression of reality, the spectators participate with their own experience of the real. The impression of real life remains quite strong despite the delimited frame, the absences of sound and colour deprive the moving picture from its realism. During the cinematic experience, the audience has a natural tendency to correct the visual deceptions and discrepancies to fulfil the illusion and also to perceive real "simple patterns of light on the projection screen".³²

Examining the audience perception in front of a cinematic projection, Arnheim

²⁹ Kracauer, Theory of Film, 60-71.

³⁰ Kracauer, Theory of Film, 300.

³¹ Rudolf Arnheim, Film as Art (Berkley: University California Press, 1993), 154-156.

³² Arnheim, Film as Art, 29.

suggested that "the effect of film is neither absolutely two-dimensional nor absolutely three-dimensional, but something between".³³ Figures and places that appear proportioned to the human eye are distorted and exaggerated in front of the camera, yet on the screen they seem almost real.

The illusion is just partial, the human eye unconsciously compensates the constancy of size and form in a projected film, nourishing the deception: "film gives simultaneously the effect of an actual happening and of a picture", while the viewer corrects the limits of the cinematic art such as the different perception of the human eye and of the camera.³⁴ This correction happens on a visual as well as on a content level.

Our daily experience of reality is only partial and limited, but the details are often enough to comprehend the whole. Arnheim argued that if we judge real life by its essentials, the filmmaker needs to satisfy them in order to produce a believable cinematic reality.

The actors, the fictional characters, but also the inanimate and imaginary objects can be perceived as real and living, if they "behave like human beings and have human experiences" in their fictional reality, the audience does not question their physical existence and consider them "real enough as they are". The codes of verisimilitude and naturalism must be observed in order to enhance the illusion and this concerns the behaviour of the characters. An identification between the viewer and the content must occur along with the transposition. For example, despite its fictional narrative and characters, *Menschen am Sonntag* relates to an universal experience, such as enjoying a Sunday, despite the contemporary social and political struggles.

The viewers relate to the context and the feelings of the characters even if they do not live in Berlin or take part in the same Sunday activities of the Berliners. *Menschen am Sonntag* conveys a realistic impression although the narrative is fictional and its documentation of the urban reality is only partial.

1.5.3 Neorealism: Germania Anno Zero (IT 1948, Roberto Rossellini)

The French poetic realism influenced the Italian neorealism, a film movement that emerged in Italy during and after the Second World War. Mainly, neorealist filmmakers favoured narratives about the working class and they focused on the social and political atmosphere at the end of the war: poverty, political frustrations, loss of identity and

³³ Arnheim, Film as Art, 13.

³⁴ Arnheim, Film as Art, 27.

³⁵ Arnheim, Film as Art, 29.

hope for a better tomorrow.

The films were usually staged in open locations and amateur actors, even children, were employed in order to faithfully represent historical and social realities. Immobility is a recurrent theme and feeling in the neorealist films: the characters are stuck in daily loops of responsibilities and their conditions do not seem to change. Neorealists were often inspired by real events and were criticized because of the social, political and religious problems that they displayed, most of all related to the Italian policy. The neorealist filmmaker, Roberto Rossellini filmed *Germania Anno Zero* (Germany Year Zero) in Berlin between 1947 and 1948, adopting the wreckage of World War II as an open stage, the plot revolves around Edmund, a twelve-year-old boy that struggles to survive with his remaining relatives in the allied-occupied Berlin. *Germania Anno Zero* is a dystopic portrayal of the German capital, nevertheless the director's goal was not to make a documentary about Berlin after the war, rather a film about the broken spirit of its surviving citizens, so the miserable conditions of the Berliners are the main focus of Rossellini's realistic portrait.

The city of Berlin is introduced, from the first scene, as the background of a dystopian fable, shifting from a macro to a micro perspective, the camera presents the young Edmund, moving the rubble in order to earn something like other people. The camera follows the boy dynamically, framing the child in the ruined city, sometimes at the boy's height or from above.

Edmund is torn between helping his family and living as a child in the harsh conditions after the war. Despite his good will, nobody considers his efforts, nobody listens to him, excluding him from grown ups talks. The ruins of Berlin are both a dangerous place and a playground for the boy, who cannot rely on any authority. The characters slowly lose hope and their own identities, which are constantly redefined by the political and social conditions in which they live. Edmund's father is ill and lies in bed all day, Edmund's older brother hides from the police afraid of being prosecuted for his past and his old teacher takes advantage of him, involving the boy into an illegal bargain.

The characters of *Germania Anno Zero* often contradict themselves, they speak about a change but they do not take action or are friendly exclusively for personal reasons: everyone distrusts the other, either friend or foe, except Edmund.

Rossellini's camera closely peers into this miserable reality showing all the unhealthy, immoral ways that are used by people to survive. The filmmaker's statement gets even

more urgent by telling the story from the perspective of Edmund, who lives in a limbo: he can be neither a child nor a man in these living conditions.

Edmund's teacher criticizes his cry for help, accusing him of being selfish: "Stop this now. You can't change things. Everything isn't about you and your selfishness." ³⁶

The audience is deeply aware that the boy is the only selfless and powerless character.

Gemania Anno Zero is indeed about Edmund's struggles and all the personal and social tragedies will eventually contribute to his tragic end.

The audience, as well as Edmund, accept the harsh 'reality' of the ruined Berlin. It is evident that new gruesome episodes challenge the universal morality of the film, among these, the neighbours debating about the belongings of Edmund's father around his warm corpse.

Rossellini did not dramatize this kind of scenes through the camera movement or the editing, but rather handled them with the same care that he reserved to other sequences, leaving the judgement to the audience. On one hand he framed the scenes within an observational distance, depriving them of their cruelty, on the other hand he reinforced the dramatic impression of an everyday life in which unmoral behaviours are accepted as ordinary.

Despite his realist approach, Rossellini filmed most of the scenes in a studio, where he could use rear projection screens in order to stage Berlin in the background. Nowadays *Germania Anno Zero* is considered a classic in the neorealist genre, but at the time of its release it was harshly criticized for its controversial staging and plot. The French film critic and theorist, André Bazin defined the film as an incomplete work and the first sign of the filmmaker's neorealist aesthetic "regression" due to the film appeal to a moral approach rather than to a social realist one.³⁷

1.5.3.1 Rossellini: real events and truthful stories

Neorealism resulted from a moral necessity, from a responsibility towards truth rather than from a question of style. Roberto Rossellini sustained that "realism is simply the artistic form of truth", because it is both capable of questioning and investigating the world.³⁸ It means to show dreadful realities, human struggles and even to display small, invisible happenings that are often underestimated in the universal experience.

³⁶ "Hör auf damit! Daran ist nichts zu ändern. Es geht doch nicht um dich und deinem Egoismus", Germany Year Zero, R: Roberto Rossellini, (Orig. Germania Anno Zero, ITA 1948), 24th January 2018. Retrieved on: https://www.youtube.com/watch?v=pZ0xr4svk3c, (02.01.20), (0:45:08).

³⁷ Bazin, What is Cinema Vol.2, 96-98.

^{38 (}Rossellini, 1952) Williams, Realism and Cinema, 32.

Neorealist filmmakers tried to present reality objectively by staging real protagonists in real locations, and they addressed to the audience's awareness by investigating unpleasant, understated existences.

Rossellini suggested that "the camera works more like an eye", thus it is possible to conceive a cinematic experience that needs the viewer's "constant direct participation".³⁹ Neorealist films often encourage to question any reality by offering points of reflection about the projected realities on the screen.

In their attempt to make the truth visible, the neorealist filmmakers consciously chose to direct the viewers' eyes on specific realities as Rossellini did representing the moral and economic misery after the war in *Germania Anno Zero*.

"Germania Anno Zero is as cold as a sheet of glass. It is a reportage of the arid and desperate reality of post-war Germany including the hunger, the perversions and the crimes. Of course its purpose is not entertainment, but it could not have been made differently."

On one hand, Rossellini felt the urgency to convey the impression of truth (postwar Germany) to the audience, on the other hand, he was not concerned with delivering an entertaining film.

The neorealist filmmakers felt a strong sense of responsibility when they had to find a balance between an improvised script, a documentary style of observation, the right amount of artifice and imagination to tell a truthful story, because the cinematic medium equally has the power and humility to show wealth and misery.

Acting was not completely rejected by the neorealist movement, but it was conversely accepted, even welcomed, when it was useful to unveil crucial points of the narrative structure. By employing amateur and local actors the filmmakers favoured improvised dialogues, authentic gestures and the familiarity between the performers and the open surroundings.⁴¹ Neorealist filmmakers had no desire in copying reality or in conveying a perceptual realistic illusion, rather they aimed to stage a "mode of being or a certain

³⁹ (Rossellini 1979) Williams, Realism and Cinema, 216.

⁴⁰ [Roberto Rossellini, 12 March 1949, "Germania anno zero è un film freddo come una lastra di vetro. Documentazione cronachistica di una certa realtà, quella arida disperata del dopoguerra tedesco, con la sua fame, le sue perversioni, i suoi delitti. Certo, non è uno spettacolo, a vederlo non ci si diverte, ma non si poteva fare diversamente"] Callisto Cosulich, "Il cinema secondo Cosulich", *Giornale di Trieste* (1948-1953), (Gorizia: Transmedia, Gorizia, 2005), 32.

⁴¹ Monaco, How to Read a Film, 301-303.

way of life": the absorptive acting seems truer to life and to the fictional life within the film ⁴²

A similarity between the absorption displayed by the actors in the neorealist films and the one represented in the paintings of the nineteenth century has been observed, in fact both the performers and the painted figures are caught in a moment of intimate reflexion and engaged in such an intense and emotional state to be unconcerned with everything else.⁴³

In *Germania Anno Zero* Rossellini conveys the reality of postwar Germany through the portrayal of the survivors and the small, ordinary happenings that affect them. The actors display a mild expressivity that reinforces the impression of immobility throughout the whole film. When the characters are overwhelmed by their accumulated and unexpressed emotions, the acting changes abruptly, assuming a melodramatic tone. In the harsh reality of *Germania Anno Zero*, where everything seems uncertain and unaffected by the character's actions, the uneven acting balance seems authentic.

1.5.3.2 Bazin, "What is Cinema": essence of human reality, mise-en-scène

The film critic André Bazin distinguished between reality and realism, suggesting that life per se is without meaning, and only Art, therefore cinema, can create meaning from it, being "cinema the art of reality".⁴⁴

He recognized that, contrary to classical films, some of the aesthetic and technical aspects of the neorealist films could better render episodes of the human existence: they evoked "life time" with undramatic stretched scenes, focusing on almost insignificant details of a daily routine.⁴⁵ In these particular scenes, the characters, as well the actors, are absorbed in the action to the extent that their performances become transparent and authentic.

Bazin thought that cinema could better express its potential through realism and defined Italian neorealism not only as the most extreme form of realism, but as an ontological movement rather than an aesthetic one. Neorealism aspired to achieve more than a social critique or an historical representation of the real, it dealt with existential questions of being, tackling the ambiguity of reality.⁴⁶ The indoctrination of children,

⁴² Rushton, The Reality of Film, 73-75.

⁴³ Rushton, The Reality of Film, 73-75.

⁴⁴ André Bazin & Hugh Gray, "The Ontology of the Photographic Image", *Film Quarterly* 13, no. 4 (Summer 1960) (Berkley: University of California Press), 4-9.

⁴⁵ Rushton, The Reality of Film, 70-72.

⁴⁶ Bazin, What is Cinema Vol.2, 63-66.

the differences between the social classes, the unreliability of the authorities are not solved by the characters, but remain unanswered.

Bazin described Rossellini's style as a "way of seeing", a staging of realistic images, carefully planned for the viewer to approach with "an unbridgeable, ontological distance". 47

In order to represent reality in its ambiguity, the staging of *Germania Anno Zero* remarked "man's inability to communicate" and the limits of human knowledge before the gruesome reality of postwar Germany: the characters wander aimlessly through the ruins of society, questioning the damaged identities of the nation and of the individual.⁴⁸

Bazin sustained that cinema can bring the spectators closer to the recorded reality than to theirs, offering a full experience of the real. Instead of refusing all the cinematic artifices, Bazin thought that a degree of manipulation is necessary to represent reality without hindering the truth and experience of that reality. For example, a sharp focus and the continuity within the frame rather than between frames are more realistic, it is more similar to how we naturally perceive the unfolding of events. An experience of time ,similar to the real one, can be conveyed by registering an event as it occurs, without hindering or interrupting its time frame. According to Bazin, cinematic techniques such as "the occurring of actions in the same shot, but on different planes", the depth of focus and the continuity in the recording achieve a faithful impression of life. 49 Neorealist filmmakers often aimed to convey a neutral point of view for the audience by staging multiple events in the same frame, equally showing foreground, middle ground and background in focus and avoiding cuts in the montage.⁵⁰ In Germania Anno Zero Rossellini rejected the melodramatic effects of editing to preserve the mysterious, ambiguous quality of reality and let the audience have their personal reflection. The camera is always focused on Edmund, the child protagonist, it does not break all his actions and consequent emotions in multiple takes or close ups, but rather it captures a superficial impression of his doings.⁵¹

⁴⁷ Bazin, Bazin, What is Cinema Vol.2, 63-66.

⁴⁸ Bazin, What is Cinema Vol.2, 63-66.

⁴⁹ André Bazin & Bert Cardullo, Bazin at Work: Major Essays and Reviews From the Forties and Fifties, (London: Roudledge, 2014), 8.

⁵⁰ Williams, Realism and Cinema, 42-44.

⁵¹ Bazin, What is Cinema Vol.2, 37.

1.5.4 Classical Hollywood

The American film theorist and historian, David Bordwell coined the term "classical Hollywood" to define the cinematic style with a specific set of rules that Hollywood filmmakers observed between 1917 and 1960.⁵²

"We could start with a description of the Hollywood style derived from Hollywood's own discourse [...] We would find that the Hollywood cinema sees itself as bound by rules that set stringent limits on individual innovation [...]Reiterated tirelessly for at least seventy years, such precepts suggest that Hollywood practitioners recognized themselves as creating a distinct approach to film form and technique that we can justly label 'classical'." ⁵³

The realist approach of classical Hollywood cinema is limited to the staging of a reality that is believable and fits the fictional story, which is the primary concern. The classic Hollywood films are realistic in "both an Aristotelian sense (truth to be probable) and a naturalistic one (truth or historical fact)".⁵⁴

Characterised by a recurring narrative, a three act structure(the introduction of a problem, its solution and the restoration of the initial state), the films are comprehensible, but also predictable, every detail is justified by a narrative purpose and in the end all the initial questions are satisfied.⁵⁵ The classical Hollywood films are conceived in a way that makes them "comprehensible and unambiguous" and with " a fundamental emotional appeal that transcends class and nation".⁵⁶

The viewers assume the role of omniscient and invisible witnesses, they peer into the fictional lives of the characters, seeing and knowing what the characters ignore or what will happen.

Hollywood built a star system to convey the fictional narratives, relying on professional, recognizable actors that appealed to the audience, contrary to the documentarists and neorealist filmmakers who favoured the casting of amateur actors for realistic purposes.

⁵² Bordwell, The Classical Hollywood Cinema, (New York: Columbia University Press, 1985), 23.

⁵³ Bordwell, The Classical Hollywood Cinema, 3.

⁵⁴ Bordwell, The Classical Hollywood Cinema, 3.

⁵⁵ Kristin Thompson, Storytelling in the New Hollywood: Understanding Classical Narrative Technique (Harvard: Harvard University Press, 1999), 22.

⁵⁶ Bordwell, The Classical Hollywood Cinema, 3.

The classical Hollywood cinematic precepts are still used in the mainstream genres and they are often observed in the animated productions.

1.5.4.1 Bordwell, "Film Art": authenticity and continuity

Bordwell argued that in some cases cinematic realism has been mistaken for evaluation criteria rather than a style or a tendency intrinsic in the medium: a film is often judged positively if it is faithful to reality to a certain degree, although this kind of judgement remains subjective.⁵⁷

He stressed also that "telling a story is the basic formal concern" of classical Hollywood cinema, therefore classical Hollywood films pursue realism exclusively to create a believable illusion for the audience.⁵⁸ The films often conveyed a feeling of authenticity that reinforced the credibility of the story by constructing probable events or referring to historical facts.

Classical Hollywood cinema is inclined towards realism not as aesthetic or as a tool to investigate our own reality, but rather as an agent for the fictional story.

Everything that could distract from the narrative or be an obstacle to the spectator must be avoided or hidden. Despite the fictional context or the filming in a closed studio, the staging of the classical Hollywood films favours a natural lighting rather than a dramatic one that could mislead the audience, suggesting a symbolic value or an additional layer of meaning.

The classical Hollywood directors employed the cinematic techniques of continuity, in both narrative and montage, to make the storytelling invisible and therefore more captivating.

According to the classic Hollywood formula the editing has to be invisible and the camera movement limited, possibly following the gaze of the actors and capturing the natural movement of the performers in the sequences of actions.

Since the directors favour a continuity in the editing, the movements in space and time have to match the real ones in order to be realistic as well as less distracting as possible. This continuity supports the realistic unfolding of the narrative: the action proceeds in a linear time progression without being interrupted by unnecessary shots of superficial details. The only exception is the flashback, which has a colour filter that distinguishes itself and it is usually introduced and concluded through fade in and fade out effects.

⁵⁷ David Bordwell, Film Art: An Introduction (New York City: McGraw-Hill Education, 2010), 58.

⁵⁸ Bordwell, The Classical Hollywood Cinema, 3.

Moreover, the classical Hollywood filmmakers use camera lenses that do not distort the image and rather capture a clear image in order to achieve a realistic depth of focus. This classical formula of filmmaking suppresses the voice of the filmmaker, who operates as an invisible agent throughout the filming and editing process to deliver a realistic, captivating story.

The authenticity experienced by the spectators results from a careful balance and planning of almost invisible technical and aesthetic choices that make the cinematic experience familiar to the daily, uninterrupted experience of life.

1.6 Codes of realism in live-action

Live-action films generally conform to a precise view of reality, related to the time frame and place of their making. Realism has often been defined as a system, a set of conventions at the basis of the cinematic image, which has a close relationship with reality and therefore is able to convey a realistic impression.

These codes of realism have changed over the years because of the progress of technology and the continuous experimentation of filmmakers.⁵⁹ Many theorists and directors believed that cinematic realism was an inherent quality of the recording technology of cinema and challenged themselves in finding a combination of techniques that could achieve a realistic representation and a balance between the artifice and the real.

On considering the previous achievements of the representative arts, film theorists and filmmakers defined some of the codes of realism achieved by the cinematic apparatus: a true and intimate subject, an invisible montage, an illusion of presence and time, an authentic staging and acting, a neutral point of view, emotional cues and relatable experiences.

A filmmaker does not need to satisfy all these codes in order to evoke realism, sometimes he only needs some.

There are many visual and narrative ways to make a film authentic, even by staging fictional characters and events, but mainly the cinematic reality has to be believable for its audience in order to be realistic. Both the cinematic apparatus and the spectators partake in the creation of a realistic experience, where realism results from a delicate counterbalance of aesthetic choices.

The codes of realism evoke a truthful impression of reality and establish a balance

⁵⁹ Williams, Realism and Cinema, 68-69.

between the contradictions inherent in the film production: this balance weighs the infinite possibilities offered by the cinematic medium against the limits of the cinematic experience.

1.6.1 Mise-en-scène: authenticity

The mise-en-scène plays a fundamental role in determining to which degree a production is realistic. Every detail within the frame influences the realism of the picture because the cinematic mise-en-scène regards the arrangement of everything that happens in front of the camera.

Film critics and theorists often measure the realism of a production depending on the authenticity of its mise-en-scène, filmmakers convey a realistic feeling of the filmed space as well as of the fictional reality by designing a whole reality within the camera frame.

The realistic standards of the cinematic staging have often varied in different countries. While the British documentary and the Italian neorealist directors preferred open-air locations because they regarded real environments as more authentic, French poetic realist filmmakers favoured the staging on close sets, finding easier to manipulate the degree of realism of the picture.

Concerning historical film productions, the realism of the mise-en-scène is defined by carefully planned details, the props, the costumes and the settings evoke a specific time period, therefore they have to be historically accurate to be believable and authentic for the audience.⁶⁰

Because the composition inside the frame is essential, the mise-en-scène has to offer the spectators all the necessary elements to fill the visual and narrative gaps outside the frame.

The staging suggests a temporal context that is reinforced throughout the film, it must justify the presence and absence of certain elements because even a small incoherence could break the illusion of authenticity.

The mise-en-scène is carefully constructed as the fictional reality as well as the space where the action of the performers unfolds. The staged movement within the frame reinforces the credibility of the fiction, the actors state their presence and the authenticity of the staging being familiar or unfamiliar to the space, interacting with objects or simply living there.

30

⁶⁰ Bordwell, Film Art, 176-177.

Cinema must continuously suggest and remark the presence of the actors and the physicality of the space, contrary to the theatre in which they are obvious. Filmmakers have integrated theatrical techniques of mise-en-scène in their production, but it is the arrangement of both actors and props in front of the camera to determine the realism of the staging.

If the performers' movements and interactions within the frame are realistic enough for the audience, the mise-en-scène evokes the theatrical physical presence that the cinematic art lacks.

Some theorists suggested that the display of multiple events in the same shot is closer to the perception of life as an uninterrupted flow, but it does not simply mean that a simultaneous mise-en-scène can be realistic.

There are many ways to evoke realism within the mise-en-scène because it is *per se* the complex combination of multiple elements: natural lighting, natural acting, credible costumes and settings. The viewers are privileged witnesses of the characters' actions in the cinematic reality, therefore the film has to convey a convincing impression of the life within the film through the interactions of the actors with the space.

1.6.2 Acting: mimic

Acting is strictly related to the mise-en-scène and as previously suggested, it is crucial to reinforce the realism of the film and the impression of presence. In front of the camera, actors must overcome two absences: their absence from the movie theatre during the projection of the film and the absence of an audience before their performances.

Consequently, the cinematic acting differs from the theatrical one about the physical presence of the actors, achieving a different kind of realism: the theatre welcomes an exaggerated expressivity, the cinema favours a subtle, natural acting.

The camera is able to capture the micro expressions of the performers, which are disproportionately enlarged on the screen. Acting has to be impeccable, actors give life and credibility to fiction characters conveying relatable emotions: a balance must be found between performance and life without revealing the artifice. Both an exaggerated and a dull performance could easily trigger a distraction, breaking the realistic illusion of the cinematic experience.

The spectators relate to characters when the actors are convincing and above all when their emotional display is credible, coherent with the unfolding of events.

The performers convey an authentic image of life and suffice the realism by simply existing within the mise-en-scène, even if the presence of the actor is not enough *per se* when it is disconnected from the narrative, on the contrary, it has to be justified and be continuously confirmed through the performance.

The credibility of the acting as well as of the film depends on how realistically the actors can remark their presence in the mise-en-scène and subsequently in the fictional reality. Actors reinforce the realistic illusion of the fictional world by experiencing it with naturalism.

1.6.3 Photography and montage: continuity editing

Despite the realistic limits of a bidimensional projection of moving images, the cinema can convey an immersive experience, by involving the hearing and the sight of the spectators. After the darkness fills the movie theatre and the cinematic projection begins, the spectator is easily led by the eye of the camera and its movements.

Many directors tried to exploit the immersive nature of cinema in order to deliver a visual experience closer to human perception. In order to achieve a higher degree of realism unnatural cuts, impossible camera movements and angles, over- and desaturated images were avoided because they were regarded less realistic and distracting. Even if the camera peers into intimate realities, its movements must be credible and justified by the context or through the editing, avoiding any unnecessary dramatic effects that could disrupt the realistic experience.

Continuity was favoured in both recording and editing because it seemed to be closer to the natural perception of life. The uninterrupted unfolding of events is more familiar than a segmented experience with jump cuts and a stretched experience of time is closer to everyday life when the duration of the recording matches the duration of the action.

If the camera handles space and time with verisimilitude the audience is more attentive and less distracted by the limits of the cinematic experience.

Films were often regarded as more realistic when the manipulation of the artifice as well as the director's bias were almost absent. As a consequence the theoretical debate about realism concerned the filmmaker's degree of control over the raw material during both the filming and editing process.

On one hand, cinematic techniques, such as camera effects and editing, have been employed to construct a realistic simulation close to human perception, on the other hand the manipulation, enabled by the same cinematic devices, has been refused to convey a realistic impression of reality.

The filmmakers were able to exploit new tendencies to face the audience learning about the cinematic language of montage. The cinematic experience can be immersive as well as realistic, when filmmakers suggest continuity through a coherent sequence of scenes and achieve a cohesive tone and style throughout the film.

1.6.4 Character development: human experience

The audience remains the only judge to test the realistic degree of a production despite the techniques and codes that filmmakers adopt to achieve realism. The identification, which usually occurs between the cinematic content and the spectators, relates to the range of emotions experienced in the cinematic reality and not simply to the physical perception and knowledge of their reality.

Characters act as intermediaries between the spectator and the represented world, not only their fictional emotions have to be relatable, but also their fictional experiences.

It is essential to underline that characters' natural or fictional essence is not fundamental for realism, characters do not need a human form or face to be relatable: characters must only live human experiences in order to be credible.

Despite being fictional, a realistic narrative is shaped on the human struggles and conquests of its characters. Imaginary characters and inanimate objects can evoke the complexity of life when they are confronted with social and moral pressures, facing oppression or even overcoming their fears.

In the fictional journey, viewers are captivated by characters' psychological conflicts as well as by their decision-making, they witness and share characters' experiences, they recognize and easily empathize with small and big achievements.

Thus, in the participation with the characters' life and development, there is an identification with the characters' humanity and relatable experiences.

Realism can be achieved and reinforced through the psychological realism between the spectators and the characters when the characters' inner conflicts, coherent and human reactions are relatable

1.6.5 Fictional context: social realism

The social and political context of the cinematic reality is deeply close and related to the human experience of the characters.

The characters often question the negative and positive nature of their world, deciding

whether to be passive or active, demanding some changes. The fictional society in the films recalls either partially or cunningly the actual society, based and defined on social and political structures, the credibility of this society greatly influences the realism of the cinematic reality.

As the characters, the political and social environment can be imaginary and fantastic on the surface, but it partly has to reflect our society in order to be realistic and even comprehensible. The process of identification and participation, connected to the characters, do not occur if the viewers do not understand the characters' social and political struggles.

The viewers often question the characters' actions as if they were theirs and pondering their personal decisions, they acknowledge both characters and fictional reality. Through the unconscious interplay between the fictional and actual reality, the audience eventually judges the represented social communities that could exist in their own past, present and prominent future.

The spectators evaluate the characters' decisions as well as the social and political structures of the fiction with the same realistic parameters that they use to judge their own reality, therefore they involuntary reinforce the realism of the film.

Some theorists and filmmakers suggested that cinema is able to unveil aspects of our society and to invite us to question our own political and social reality. While documentary realism addresses aspects of the world directly with a persuasive argumentation, cinematic realism addresses them indirectly, exploiting the fictional narrative to raise the viewers' awareness.

Through a credible representation of political and social struggles, an identification is triggered, reinforcing the realism of the fiction and stimulating a reflection that goes beyond the cinematic reality.

These codes of realism do not emulate reality but rather a realistic experience, the filmmakers are able to convey an authentic and relatable impression of reality by staging the familiar conditions of everyday life through the cinematic medium. A cinematic representation cannot fully represent reality, but only suggests it. Adopting the documentary techniques, the filmmakers try to convey a realistic representation, even if the experience of reality remains limited and subjective.

The same codes of realism may apply to a similar, yet different practice: animation. The main technological difference that separates the live-action genre from animation is the absence of photographic reference in the latter, animation is capable of building

immersive and fictional realities as well. Drawing a comparison between the codes of realism that apply to live-action and the ones that may apply to animation, I will investigate why animators firstly seek realism and which techniques they employ in order to create realistic animations.

CHAPTER 2: REALISM IN ANIMATION

2.1 Defining animation

When we talk about animation, we usually think about the cartoons, the animated series and the films that target a young audience, indeed cartoons are a popular form of animation, but only a small category of a broader genre.

Animation is an ancient art, older than live-action cinema and as the latter, it deeply changed both in form and in content with the progress of technology. Despite their similarities, for a long time animation was often underestimated and disregarded as a "second art", related to fantasy and comedy rather than to realism and live-action. ⁶¹

Kracauer argued that animation "inherent affinity" is not the photographic reproduction of reality, thus animators should concern themselves with the unreal. 62

"What holds true of the photographic film does of course not apply to animated cartoons. Unlike the former, they are called upon to picture the unreal – that which never happens. In the light of this assumption, Walt Disney's increasing attempts to express fantasy in realistic terms are aesthetically questionable precisely because they comply with the cinematic approach [...] they are not so much 'drawings brought to life' as life reproduced in drawings [...]" ⁶³

Kracauer dismissed the realistic approach of Walt Disney's animations, which became popular for their singular quality, as a reproduction of life with no photographic references. Moreover, he reinforced the idea that the purpose of the animated practice is picturing the unreal. Therefore, animation has indeed the power of bringing unreal characters and realities to life, either drawn or digitally animated, nonetheless many animators challenged themselves and the medium in order to achieve realism in their work. Today many still feel the necessity to test the limits of the medium, as the early pioneers did, in order to understand its full potential.

What fascinates the most about animation is its "enigmatic aliveness", the fact that it conveys both a realistic illusion and an immersive experience, similar to those achieved by the cinematic medium, despite its artificial nature.⁶⁴

⁶¹ Paul Wells, Understanding Animation (Oxford: Routledge, 1998), 3-5.

⁶² Kracauer, Theory of Film, 12.

⁶³ Kracauer, Theory of Film, 90.

⁶⁴ Wells, Understanding Animation, 224.

2.1.1 Dictionary definition (Merriam-Webster's Dictionary)

The noun 'animation' and the verb 'to animate' derive from the Latin verb *animare*, which can be translated in 'to give life to'. The Latin root suggests an active effort, a practice in which a medium puts in motion or gives life to an inanimate object.

According to Merriam-Webster's Dictionary, 'animation' is defined as:

- "the act of animating: the state of being animate or animated"
- "animated cartoon"
- "the preparation of animated cartoon".65

Animation refers to the animating process (the preparation of the animated cartoon), its result (the animated cartoon), and also to the impression of aliveness that both convey (the state of being animate or animated).

The craft of animation is strictly related to movement, like in live-action, the illusion of aliveness is given through movement, specifically through the rapid succession of frames, hand or digitally made.

The adjective 'animated' can be used to describe what is characterized by vigour and spirit but also what appears to be alive and moving.⁶⁶ Animation has been *per se* crucial in understanding how close life and movement are, especially in visual experiences such as animated and live-action movies.

The Scottish animator and director, Norman McLaren described the animating process as the "art of movement", stressing that the true potential of animation is not the single frames, but what happens between them.⁶⁷ Animation is highly concerned with the "inbetweening", in order to achieve a smooth sequence, the animators carefully craft "inbetweens", intermediate frames between the most important, the key frames. However, as McLaren suggested, it is the movement that connects the frames in a smooth action that makes animation an art.⁶⁸

It seems quite reductive to define animation only as animated cartoons. Nowadays the cartoons are just an animated sub-genre that targets both adult and young audiences and animation has gained its artistic value between the visual arts.

⁶⁵ Animation .(o.d.). In *Merriam-Webster's online dictionary*. Retrieved on: https://www.merriam-webster.com/dictionary/animation, (02.01.20).

⁶⁶ Animated .(o.d.). In *Merriam-Webster's online dictionary*. Retrieved on: https://www.merriam-webster.com/dictionary/animated, (02.01.20).

⁶⁷ Charles Solomon, The Art of the Animated Image: An Anthology, (Los Angeles: American Film Institute, 1987), 11.

⁶⁸ In-Betweening .(o.d.). In *Merriam-Webster's online dictionary*. Retrieved on: https://www.techopedia.com/definition/104/in-betweening-tweening, (02.01.20).

2.1.2 "Drawings and not living beings" (Sergei Eisenstein)

Even if many theorists tried to unveil the unique craft of animation, its enigmatic aliveness still remains difficult to explain. The Soviet director and film critic, Sergei Eisenstein questioned the conflict between perception and conscience that troubles every viewer of an animated film.

"We know that they are... drawings, and not living beings. We *know* that they are projections of drawings on a screen. We know that they are... 'miracles' and tricks of technology, that such beings don't really exist. But at the same time: we *sense* them as alive, as moving, as existing and even thinking."⁶⁹

Eisenstein explicated a contradiction that seems inherent in the animated medium: despite its sometimes evident artificiality, the animated image tricks us to believe that it is somehow 'alive'.

As suggested before, the illusion of movement, achieved through the rapid succession of frames, evokes this aliveness, however being animation closely related to live-action cinema, which is nonetheless the projection of moving images, Eisenstein pointed out that an animate film is a "projection of drawings on a screen" and the audience is well aware of that. 70 Perceiving an in-animated subject as living can easily trigger wonder in the viewer, making this inexplicable experience intimidating as well as entertaining. The animated aliveness could be justified as the consequence of a visual trick - that is indeed how animations and films work- but the audience prefers to believe that the animating process is somehow magical as the content of the animated film.

By repeating the subject 'we' ("we know", "we sense"), Eisenstein remarked the involvement as well the active participation of the viewers during the animated experience.⁷¹

The magical aliveness of animation is ultimately achieved through us, the audience. The animated characters seem to be alive also because we want to believe they are, at least for the duration of the animation. The animated films are certainly crafted in a way to trick our perception and entertain us, but we always look forward to witnessing some kind of magic and being involved by it.

We sense the animated drawings as alive because we let them to.

⁶⁹ Sergei Eisenstein, Eisenstein on Disney, ed. by Jay Leyda (Calcutta: Seagull Books, 1986), 55.

⁷⁰ Eisenstein, Eisenstein on Disney, 55.

⁷¹ Eisenstein, Eisenstein on Disney, 55.

Therefore, one could say that the animators bring to life in-animated characters and also that the audience keeps them alive, accepting their fictional existence in the animated reality even briefly.

2.2 Animation techniques

Many believe that the first animation was a "trick in photography", the accidental jam in the Méliès's camera which caused the French director to record a substitution, a rapid exchange of subject from one frame to the next on film.⁷²

However, the earliest attempts to animate were prior to the invention of the photocamera.

The first sequence of drawings that tried to capture the motion can be traced back to the Palaeolithic cave paintings and to the Egyptian murals, but the first projection of moving figures was achieved through the shadow play, an ancient practice in which shadows can be projected on a surface by holding a shape in front of a direct source of light. From its early and primitive form, the shadow play was perfected through technology, modern light devices, and the use of puppets or silhouettes. The projection of moving images was later achieved through the magic lantern, invented by Christiaan Huygens in 1659, by projecting a light through hand-painted glass slides, the lantern gave motion to a sequence of simple drawings.

It is also important to mention some popular optical devices that worked on a similar principle: the *phènakitiscope*, which functioned with the substitution of sequential pictures around a disc, the *zoetrope*, a cylindrical variation of the latter that worked with a strip of sequenced pictures, the Muybridge's *zoopraxiscope*, which combined an early projector with drawn or photographed silhouettes on a disc and the flip book, a small book that contained sequential pictures which could easily be animated by scrolling all the pages with the thumbs.

The invention of the camera affected the trending of these optical devices because it enabled the recording and projection of images without the use of analog devices, only of a projector.

The progress in technology stimulated the invention of new animated techniques and also challenged the animators in perfecting the old ones. The traditional forms of animation have been surpassed with the discovery of computer-generated imagery, CGI. If the photo-camera enabled the animators to record and later project their

⁷² Wells, Understanding Animation, 4-6.

physical creations, its absence in the CGI practice enabled the animators to shape their creation directly on a metaphysical plane.

I will explain the main techniques of animation by dividing them in three branches: traditional and stop animation, which rely on the photographic and cinematic apparatus, and computer animation.

2.2.1 Traditional animation

Using the term traditional animation, film theorists usually refer to hand-drawn animation: the animator has to draw each frame, tracing the environment and every movement of the character on transparent acetate sheets, called cels, which are later photographed or scanned in sequence.

The cels enable the animator to draw separated aspects of the animation on different sheets. In this way recurring, fixed elements, such as the background, do not need to be re-traced in every frame.

Sometimes traditional animators use live-action footage as reference and trace it in order to study the natural movement of things: rotoscope is "the process of filming in live-action, tracing it frame by frame, and using the tracings as the basis for an animation sequence".⁷³ Rotoscope animation is cheaper to produce, but it is not smooth and appealing as the traditional one.

In 1937 Walt Disney, the founder of the Walt Disney Studios, introduced the multi plane camera, an invention of William Garity, in the process of cel-animations, a camera was placed vertically on a structure of shelves in order to achieve a sense of depth and record multiple layers of an animation in the same frame.

Today traditional animation refers also to animated techniques such as paint on glass and to all those animations in which every frame is realized singularly, drawn or painted, and then recorded. Even if it is a time consuming process and seems outdated in comparison to the modern alternatives, some animators still prefer this technique for the handcraft quality of its final result.

Animation studios like Walt Disney Animation Studios and Warner Bros. Animation, founded in California respectively in 1923 and in 1980, and also the Studio Ghibli, founded in Tokyo in 1984, are well-known for their use of traditional animation techniques and for delivering full length animated films capable of entertaining different age groups and several generations of viewers.

⁷³ Tony White, Animation from Pencils to Pixels, (Abingdon: Taylor & Francis, 2006), 390.

2.2.2 Stop motion animation

Stop motion is an animated film technique that consists in recording the progressive manipulation of one or more subjects in front of the camera. The motion is rendered through the sequential reproduction of keyframes, the recorded positions of the subject. It can be realized with dolls (puppet animation) or with plasticine (claymation) and even with people (pixilation). Stop motion regards also techniques such as cut-out and sand animations, in which paper or sand are manipulated and photographed frame-by-frame in a sequence.

Contrary to the traditional animation in which everything is bidimensional and has to be drawn, the stop motion animation works with the three-dimensions like live-action, therefore the animator has to stage every element that appears within the camera frame. Characters, stage and lights must be crafted and planned accurately because every small change affects the final result.

In order to facilitate the animation process, except in the case of pixilation, everything is built on a small scale, thus a team of animators and a high degree of artisanship are required. Puppet animation appeals to the childish fantasy of animating toys, by giving them a voce and fictional adventures to live.

Stop motion is also a painstaking and time consuming process, the most complicated stop motion animations require the careful planning of every movement of each element in the picture.

Nowadays there are animation studios, like Laika, specialized in the production of stop motion feature films and film directors, like Wes Anderson, which challenge themselves in producing and directing stop motion animations.

2.2.3 Computer animation (2D, 3D)

CGI, computer-generated imagery, defines both static and dynamic images that are created and rendered exclusively with computer graphics and without the use of a photo camera or of physical references. Instead computer animation only encompasses the moving images, obtained with two-dimensional models, 2D, or with three-dimensional models, 3D.

While 2D-animation can be considered an evolution of the traditional animation technique, the 3D developed from the art of stop motion: 2D works with digitally drawn frames, while the 3D relies on the keyframe positions that the digital model assumes in each frame.

The advent of new software simplified the animation practice, substituting the handmade with a digital craft, made of pixels. Instead of relying on the physical reality, computer animators commit themselves to a computer-generated one. Computer animations are infinitely manipulable because everything is created on a metaphysical plane, from the characters to the camera movements. Sometimes the surface accuracy of the animated design is more captivating than the story itself and the animation so complex that it is difficult to understand how it was firstly realized.

Companies like the American Industrial Light & Magic (ILM) refined the use of computer graphics for special effects, while American Studios like Pixar and DreamWorks perfected the techniques of computer animation for feature length animations

2.3 Different forms of animation

In order to distinguish the creative approaches that exist in animation, I will rely on the distinction defined by British film and animation scholar Paul Wells in his "Understanding Animation": experimental, orthodox and developmental animation.⁷⁴ While the aspects of *experimental* and *orthodox* animations seem at two opposite, yet related, extremes, the aspects of developmental animation exist in-between, drawing from both animated forms. Orthodox animators usually favour traditional techniques and CGI, while experimental and developmental animators work with stop motion, but there are even exceptions.

2.3.1 Orthodox animation

Wells uses the adjective *orthodox* to define the approach of most animated cartoons as conventional.

"Most cartoons featured 'figures', i.e. Identifiable people or animals who corresponded to what audiences would understand as an orthodox human being or creature despite whatever colourful or eccentric design concept was related to it "75

Animated cartoons like Walt Disney's and of Warner Bros.' share a repetitive but

⁷⁴ Wells, Understanding Animation, 35-46.

⁷⁵ Wells, Understanding Animation, 35.

comprehensible formula despite their stylistic differences: *orthodox* animations have a coherent story and rely on recognizable 'figures', either creatures or human-like.

The *orthodox* narrative often emulates the simplicity of the three-act structure of classical Hollywood films, by introducing the tasks and struggles of the character as clear as possible not only for narrative purposes, but also to involve the audience emotionally. The logical continuity of the animation is supported and reinforced by all the visual and narrative aspects, so that even the dialogues, iconic and often self referent, support the plot either by explaining the characters' motivations or introducing new elements in the context.

In contrast to abstract animations which are concerned with being expressive through style, *orthodox* animations prioritize content over form, the style and aesthetic "cartoonness" are secondary, almost invisible to the eye of the viewer, and they do not overshadow the development of the story. 76 *Orthodox* animators are concerned with the expressive movement of the animated figures, always in relation to the narrative, therefore the animated characters remain recognizable despite their eccentric designs and exaggerated stretching.

Orthodox animations, both 2D and 3D, favour a continuity of style that distracts as little as possible from the content, often imitating cinematic techniques, such as camera movements and shots, which are already familiar to the audience from live-action movies. These animated techniques do not disrupt the unity of style even if the animations try to stray away from cinematic realism through exaggerated morphing and expressivity.

Orthodox animators always conform to the main style of the animation and they do not digress from the central narrative. Moreover, in the bigger productions that involve a team of animators, the individual contribution of each artist is not discernible from the collective work.

2.3.2 Experimental animation

It can be regarded as the purest and most difficult form of animation because it is focused on the basis of animation: rhythm and movement. Paul Wells defines the approach of *experimental* animation as opposite to the *orthodox* animation. Not only does it refuse realism, favouring abstraction, but it also refuses narration for a suggestive poetry.

⁷⁶ Wells, Understanding Animation, 35-37.

"This kind of animation tends to resist configuration in the way audiences most often see it. [...] Experimental animation either redefines 'the body' or resist using it as an illustrative image."

Experimental animation continuously defines its own genre with new styles and techniques by rejecting traditional animation techniques. In fact *experimental* animators mostly concern themselves with the movement of abstract shapes rather than with the animation of creatures or human-like characters.

The main focus of *experimental* animation is aesthetic: the materiality and the changes of the medium convey original experiences of abstraction in motion, recalling the optical illusions of a dream state.

Experimental animations avoid the logical continuity that characterizes *orthodox* animations, but exploit the continuity as a pattern to build rhythm. The music influences the animation and vice versa, so that even silence can be used as a statement in the animated composition.

The creative voice of the artist plays a major role in the final result, the *experimental* practice offers to the animators a way to express their individuality through the creative freedom of the medium.

Since it rejects the conventional aspects of *orthodox* animation, *experimental* animation is always evolving and defining new techniques in order to achieve unexpected results.

2.3.3 Developmental animation

Wells defines *developmental* animation as a hybrid form, a practice between *orthodox* and *experimental* animation. Indeed the animations that do not fully satisfy the key aspects of the two main approaches can be regarded as *developmental*.

"Developmental animation operates as a mode of expression combining or selecting elements of both approaches, representing the aesthetic and philosophic tension between the two apparent extremes."⁷⁸

Developmental animations mix different styles and characteristics of both practices, they can be structured around a narrative and yet exploit the materiality of techniques

⁷⁸ Wells, Understanding Animation, 35.

⁷⁷ Wells, Understanding Animation, 43.

such as clay and cut-out animation or they can have recognizable characters without a coherent narrative, exploring a dreamlike atmosphere through movement and rhythm. The multi-faced nature of this hybrid form enables the animators to exploit freely aspects of *orthodox* and *experimental* animation, depending on the statement or the result that they want to achieve. Even an impossible dialogue and interaction between the animators, the viewers, and the animated characters become possible. Sometimes the characters are well aware of their animated conditions and they seem able to modify the structure of the animation actively in order to address the audience or rebel against their authors.

Therefore, *developmental* animation often has a poetic tone and is self-referential, exploiting the ability of the animated medium to challenge its limit of representation as well as the perception of the viewer about animation.

2.4 Questions about realistic representation:

The purpose of animation

Siegfried Kracauer praised the animated practice for its ability to portray the unreal, Norman McLaren for its artistic quality and Sergei Eisenstein for its enigmatic aliveness, however animation has always been outmatched by the cinematic medium in the portrayal of the real.

Kracauer dismissed the realist approach of *orthodox* Disney's animations because technically they have no photographic basis in the reality and mainly, animation inherent quality is not to achieve realism like live-action.⁷⁹

While filmmakers rely on the physical world to tell a story, animators always build a world anew.

Moreover animations can be imperfect, sketchy and abstract and yet convey relatable emotions and subversive messages. The cartoonish style, the caricature quality of animation enable the animators to break taboos that would have been censored or highly criticized in a cinematic production.

Animation is able to picture the unreal as well as to tackle immoral and delicate subjects. Despite the freedom of expression that the animated art has to offer, engineers and animators have tested the limits of the medium when portraying the real, on one hand a scientific curiosity motivated the engineers to achieve a realistic simulation for

46

⁷⁹ Kracauer, Theory of Film, 12.

educational purposes, on the other the appropriation of cinematic techniques eventually forced animators to tackle questions of realism.⁸⁰

The technological progresses and creative achievements of both engineers and animators contributed in shaping the software that nowadays computer animation uses. Narrowing the gap between animation and live-action, the animators combined the qualities of the two media to achieve a new kind of realism, that has no photographic basis in the reality and yet it is verisimilitude. Animated realism should not be diminished to an aesthetic choice, because it reinforces the believability of the fictional reality as well as of the narrative.

Orthodox and sometimes developmental animations seek realism not for a question of style but rather to exploit the balance between unreal and real, through the interplay of fantasy and reality, animations fascinate the viewers with a unique mode of representation and challenge their perception. Animators never pursue a high degree of realism, favouring exaggeration and the disruption of the realistic illusion for narrative and comedy purposes.

Different kind of realism?

Despite the technological evolution of animation, it could be argued that even the most realistic computer animation is not realistic at all according to cinematic standards.

I would argue that animation cannot achieve the same realism of cinema, nor does it try to. The animated practice has defined a different kind of realism that does not emulate reality, but rather cinematic realism.

Exploiting the cinematic techniques of live-action, film animation gained a realistic quality, but its realism remains fundamentally different, it is similar because it draws from the same cinematic codes of realism, but it relies on animated techniques to convey a realistic impression.

Since animated realism is technically dissociated from any photographic references in reality, its conventions could even confirm or unveil new codes of cinematic realism.

Japanese animator and film director, Hayao Miyazaki, who specialized in the production of *orthodox* feature animations with a traditional style, suggested that the animated realism is not on the surface, but rather in the core of the animation.

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⁸⁰ Andrew Darley, Visual Digital Culture (London: Routledge, 2002), 17.

"Anime may depict fictional worlds, but I nonetheless believe that at its core it must have a certain realism. Even if the world depicted is a lie, the trick is to make it seem as real as possible. Stated another way, the animator must fabricate a lie that seems so real, viewers will think the world depicted might possible exist."

According to Miyazaki, the animator fabricates lies that the viewer assimilates as truths, despite their fantastic nature, the animated, fictional worlds are depicted in a way that the spectator believes in their existence.

The animators' goal is not to recreate the world as we know, as live-action often tried, but to open a door to new, impossible worlds that yet become real before our eyes. Through the building of immersive worlds, detailed portrayal of life stories and experiences, the animators often achieve the illusion of a realistic world, bound to the law of physics, only to break it later, triggering disbelief in the audience. Contrary to cinematic realism, animated realism challenges the belief of the viewer without hiding the deceiving nature of the medium.

2.5 Realism in animation theory

The realistic approaches in animation have varied with the progress of technology and from an animated technique to the other, producing different results, however all forms of animated realism posed questions about simulation and emulation. In the case of computer animation, a simulation regards the creation of 2D or 3D models, analog to original references, in a bidimensional or three-dimensional space. The simulation does not imply a direct copy of the source, rather the conquer of the original reference to produce something new.

In order to achieve a realistic impression and exploit the viewer's familiarity with the cinematic medium, animators often emulate codes of cinematic representation.

However, the outcome of the same techniques is always different, being the conditions of the animated practice different from the live-action one.

Despite the animated practice continues to evolve thanks to the continuous experimentation of the animators and the advent of new technologies, animation theory has recognised a pattern in the animated practice. The recurring emulation of cinematic codes of realism and the simulation of cinematic modes of representation have affected

⁸¹ Hayao Miyazaki, Starting Point (San Francisco: Viz, 2014), 12.

both the animated realism as well as the viewer's perception of animation. Because my analysis in Chapter 3 will revolve around a computer animated film, I will consider those theories that apply to *orthodox* and computer animation.

2.5.1 Hyperrealism (Eco) and Ultra Realism (Wells)

The term "hyperreality" was first adopted by the French sociologist and cultural theorist Jean Baudrillard to distinguish between reality and a simulation of reality; being a simulation generated "by models of a real without origin or reality" it complicated further the distinction "between 'true' and 'false" and "between 'real' and 'imaginary".⁸²

The Italian author and philosopher, Umberto Eco expanded Baudrillard's concept of hyperreality, applying his theory to the immersive experience enabled by technologies, such as live-action and animation, which can greatly affect our perception of the real.

In his "Travels in Hyperreality" Eco defines Disney's approach to realism as hyperrealistic, Disney's animations and entertainment parks do not reproduce reality, but produce a fake reality, a "super imitation".⁸³ The hyperreality is polished, coherent and magical while reality is often incoherent and chaotic. The fantastic worlds created by Disney are fascinating because they overcome the imperfections of reality.

In order to achieve realism, but also to facilitate the work of the animators, the Disney Studio often used live-action references, filming performing actors in the role and costumes of the fictional characters. Hyperrealistic animations convey a realistic impression of a fictional reality, combining references of the real world (physics, spatial and temporal verisimilitude, diegetic sounds and realistic human features) with codes of naturalism from live-action films (camera movements and shots, the design of the characters, of the environment and the action) and with codes of animation (exaggeration, anticipation and timing). Indeed Hyperrealism is unambiguous and familiar because it emulates both the real world and the cinematic conventions of representation.

The realistic quality of hyperrealistic animation is achieved only partially by simulation. Wells suggested that the amount of details in an animation, from the "overdetermined" movements of its characters to the accurate planning of their timing, goes beyond any *orthodox* reference.

83 Umberto Eco, Travels in Hyperreality (London: Picador, 1987), 40-43.

⁸² Jean Baudrillard, Simulations (Semiotext(e): Los Angeles, 1983), 5.

Then animated realism could be defined as "ultra-realism" because it conveys a greater impression of reality by exaggerating it.⁸⁴

The over-detailed realities of Disney's animations are not characterized by *orthodox* aspects of reality, through the exaggeration of gestures, expressions and movements of the characters, the animators give the characters a personality and create anticipation, shaping the viewers' expectations during the unfolding of the story.

Therefore, the final result of the simulation is so exaggerated that it distances itself from any original reference even if the animators rely on live-action references, or on cinematic codes for realism. Human movements and behaviours are magnified in such a way that they are realistic and consistent only within their reality. As Eco suggested in his analysis of Disneyland's fake reality, only through a complete immersion, either visual (animation) or physical (entertainment park), hyperreality can be enjoyed for its perfection.

"Once the 'total fake' is admitted, in order to be enjoyed it must seem totally real."85

When imitation surpasses reality and technology surpasses nature, the audience embraces the illusion gladly. The overdetermined quality of the fictional reality is crucial to reinforce its consistency as well as to maintain the viewers captivated and entertained.

Hyperrealistic and ultra-realistic animations may offer neither *orthodox* representations of the world, nor accurate emulations of cinematic realism, but provide exaggerated and over-detailed realities that are both fake and sophisticatedly realistic.

2.5.2 Second Order Realism (Darley)

Following Eco's and Wells's theories, the British media theorist Andrew Darley highlighted also a tendency in animation to emulate the cinematic codes of realism. Using as example Pixar's feature animation *Toy Story*, Darley described the realistic approach of the 1995 computer animation as an alternative form of simulation of a different kind of reality, a "second order simulation".⁸⁶

The realism of *Toy Story* has no precedents, no references in real life or in the cinematic reality, it has a different value because it transcends both.

⁸⁴ Wells, Understanding Animation, 27.

⁸⁵ Eco, Travels in Hyperreality, 43.

⁸⁶ Darley, Visual Digital Culture, 59-62.

Darley describes the *second order realism* as "an attempt to produce old ways of seeing or representing by other means". ⁸⁷ Animation employs modes of representation from other media and applies them to achieve different results. In fact animation cannot directly copy other media, on the contrary, emulating them it produces something new: combining live-action references and cinematic conventions with animated techniques of representation, animation produces a realistic impression that goes beyond the *orthodox* realism of cinema, photography and painting.

"The simulation does not involve direct copying, rather the production of a copy without original."88

Analog to the artistic movement of photorealism, in which artists painted over photography emulating its verisimilitude, the goal of the *second order realism* is to create a representation through references without copying, the animated result is neither a faithful reproduction of life nor of a live-action, but it is a new kind of imagery.

The intent of the *second order realism* is not to simulate, but to produce an "unprecedented text".⁸⁹

In particular, the resolution and accuracy of the CGI exceeds every reference in the case of computer animation which continuously evolves with the discovery and perfection of new software capable of better processing and animating digital models.

The animated practice does not seek transparency and it does not hide its artificialness, like cinematic realism does, because it would be impossible and also unnecessary even for realistic purposes. In the case of the *second order realism* there is even a "certain kind of display".⁹⁰

Exaggerated movements and overdetermined designs expose the virtuosity of the animators as well as the expressive, almost unlimited potential of the animated medium in comparison to other forms of art.

Even if the animated realism resulted from a synthesis of precedent modes of realistic representation, it achieves a secondary form of realism unbound to the previous.

⁸⁷ Darley, Visual Digital Culture, 59-62.

⁸⁸ Darley, Visual Digital Culture, 61.

⁸⁹ Darley, Visual Digital Culture, 50-60.

⁹⁰ Darley, Visual Digital Culture, 50-60.

2.5.3 Perceptual Realism (Prince)

The American film critic and historian Stephen Prince used "perceptual realism", a term neglected by film theory, to refer to realism not only as "a matter of reference" but also as "a matter of perception". Despite the photographic and indexical quality of a film, the viewers' perception and knowledge play a fundamental role during the visual experience. According to Prince, perception does not only regard the five senses but rather the understanding and interpretation of reality, based on personal experiences.

The audience often evaluates real life and fictional realities with the same "moral constructs, interpersonal cues and percepts", therefore perceptual correspondences between the image and the audience favour a higher degree of realism in both films and animations.⁹²

It seems quite contradictory to define 'realistic' something that is made of pixels and is completely built on a metaphysical plane like 3D and 2D animations, anyway the use of perceptual cues such as lighting, texture and movement can make an artificial reality realistic.

"Perceptual realism designates a relationship between image or film and spectator, and it encompasses both unreal images and those which are referentially realistic. Because of this, unreal image may be referentially fictional but perceptually realistic." ⁹³

Computer-generated images rely on cues and associations to the real world in order to evoke the viewers' experience of three-dimensional environments and solid objects, even if these correspondences may also be false or only partially realistic: a creature can have a fantastic design and yet be familiar because it moves like an *orthodox* animal.

Moreover, the amount of details and the care for the laws of physics in computer-generated images, either in special effects or in animation, reinforces the perceptual cues and therefore the realistic impression. A film or an animation can be referentially fictional but perceptually realistic by reflecting reality and human experiences, but they always remain self-referential, "real in their own terms".⁹⁴

⁹¹ Stephen Prince, "True Lies: Perceptual Realism, Digital Images and Film Theory", Film Quarterly 49, no. 3 (Spring 1996): 28.

⁹² Prince, "True Lies", 28.

⁹³ Prince, "True Lies", 32.

⁹⁴ Williams, Realism and Cinema, 9.

2.6 Codes of realism in computer-generated orthodox animation

In animation the codes of realism rely on cinematic realistic conventions as well as on the twelve principles of animation that are observed in *orthodox* and *developmental* animations.

In "The Illusion of Life: Disney Animation", animators Ollie Johnston and Frank Thomas introduced the twelve principles:

- The *squash and stretch* principle consists in the elastic alteration of a shape when exposed to gravity and inertia.
- The *anticipation* principle concerns the introduction to an action before it begins.
- The *staging* principle refers to the composition of the image to direct the viewer's gaze.
- The *straight ahead* and *pose to pose* principles consist in two techniques of animating: on one hand the frames of an action are drawn in sequence, on the other the first and last frames are drawn at the beginning, then the middle frame and later the in-betweens.
- The *follow through* and the *overlapping of action* principles concern the animation of the secondary elements, following the primary element during or after the action, and the crossing or simultaneous happening of actions.
- The ease in and ease out principle refers to the additional frames at the beginning and at the end of an action to slow it down and make it more realistic.
- The *arcs* principle consists in smoothing the movements in circular paths, instead of in straight, stiff lines.
- The *secondary action* principle concerns all the gestures that support the primary action.
- The *timing* principle refers to the position of the frames in the timeline.
- The *exaggeration* principle consists in exaggerating the feature and actions of the character for major expressivity, comedy and drama.
- The *solid drawing* principle concerns the design of a character like a three-dimensional object in space.
- The *appeal* principle refers to the charismatic aspect of the characters. 95

⁹⁵ Frank Thomas & Ollie Johnson, The Illusion of Life: Disney Animation (Disney Editions: Glendale, 1997), 47-71.

I will narrow the scope of my analysis to the realistic codes that apply to the *orthodox* computer animation because it has become a popular, beloved genre and I will remark that the combination of the *orthodox* form with computer-generated imagery can achieve a higher degree of realism.

2.6.1 Realism of Motion (illusion of physics)

Motion is the basic principle of animation and a fundamental key to realism, it characterizes every aspect of an animation from the characters' personalities to the physics of the fictional reality, but it is also the main force that pushes forward the narrative. In order to achieve realistic motion, animation often relies on real life references, emulating the physical world and its logic. Observing the law of physics, or better giving the illusion of gravity, the animators can give a sense of weight and mass to their creations in the fictional reality.

The density of volume conveyed through the animated principle of *squash and stretch* makes the animated characters and the fictional world believable and also familiar because they both evoke an impression of the physics of the real world.

However, animation observes the laws of physics only to a certain degree, often bending the fictional reality to unnatural rules, favouring exaggeration over verisimilitude. The excessive realism of motion could result in a loss of the characters' personality as well as in a loss of the viewers' interest. The motion drives the unfolding of the story, moving the characters towards a goal and animating them with motivation. From the movement of the characters the viewers are able to guess their intentions and also anticipate their reactions. The animated principles of *anticipation*, of *overlapping of actions* and of *ease in ease out* reinforce the realism of the fictional world without unnaturally breaking the motion and the viewer's attention.

Motion conveys an impression of life, making an environment more alive and realistic and it is also useful to communicate aspects of the characters' personalities: a smooth walk, a specific timing in the reaction, an uneven balance of the character's body parts can tell a believable story beyond the main narrative.

On one hand the emulation of physics within the animated world makes it visually familiar, on the other the abundance or the absence of motion make it realistic, depending on the kind of environment. Therefore motion reinforces the realism of an animation in multiple ways, it is a narrative device, a crucial aspect of the character design, of the world building and it makes the physics of the fictional reality believable.

2.6.2 Logical continuity (of the characters)

As suggested before, the design, motion and style of the character is fundamental to convey an impression of its personality. Animators overcome the absence of performing actors by planning the performances of each character accurately.

There are also special situations in which professional actors are employed for voice and live-action references and the characters' design is still charmful and comprehensible.

Every detail of the character counts and influences the viewers' perception of the whole animation.

The character design does not properly need to emulate *orthodox* human and animal bodies to be realistic, it must only fit the fictional reality and the general style of the animation to be believable. In order to be realistic a character has to be consistent throughout the whole film in terms of personality and texture, without distracting or confusing the viewer.

A realistic depth is given to the characters by a comprehensible backstory, clear motivations and relatable human flaws, which are possibly confronted or conquered during the plot.

The animated principle of *ease in and ease out* encourages animators to add extra frames at the beginning or at the end of an action to give a realistic impression of life. Small gestures, like tapping the shoe on the ground before walking, and micro expressions, like a prolonged look of dissatisfaction, may seem unnecessary to the primary action, but add depth and realism to the character. Moreover, it suggests a realistic diversity or analogy between the personalities if the same behaviour recurs between the characters, with or without any small changes.

The animated characters are never flawless, they are fascinating and realistic because of their imperfections, the viewers relate to the characters' weakness, following their journey of growth within the narrative.

Even if animators use references from real life to achieve realistic human and animal like movements, the characters' behaviours ultimately derive their meaning and logic from the fictive reality. A consistent character design (style, personality, goals and imperfect nature) reinforces the realism of the narrative as well as of the fictional world.

2.6.3 Realism of Space (mise-en-scène, world building)

Contrary to live-action, in computer-generated animations the staging relies on a metaphysical plane, therefore the characters' design and motion within the two-dimensional or three-dimensional space contribute to the realism of the digital stage.

Animations do not represent realistic worlds, but rather create believable reality that exist separately from the physical one. In order to convey a realistic impression of the fictional world, animators concern themselves with the complex aesthetics of the fictional environments and with the effects of motion and light within the three-dimensional space.

In order to make the computer-generated space believable, the same laws of nature that apply to the physical reality must be observed: gravity and spatial density are suggested through motion, the effects of light and darkness are rendered with softwares that emulate natural light.

In physical reality the rays of the sun bounce off all objects, casting a shadow on the ground, but in animation the artificial sources of light interact with the texture of three-and two-dimensional models, casting a shadow on a computer-generated space. The rendering of light and shadow makes the space as well as the mass of the objects realistic.

The design of the space, its details and composition, is both determined by stylistic choices and by the narrative. The environment frames the action and directs the viewers' attention onto the significant aspects of the fictional world, so that the more detailed the fictional reality is, the more realistic it seems. As already mentioned, the motion – in particular the 'physical' interactions between the characters and the settings – reinforces the realism of the space and suggests a sense of depth. It gives the impression of spatial distance and of a more detailed world whether the motion occurs in the foreground or in the background. The *overlapping of action*, of both primary and secondary happenings, adds a realistic layer to the story and to the world building. The fictional world seems to extend beyond the main plot, its connection with more or less relevant stories and beyond the frame of the screen.

Through the richness of details the animators convey the impression that the immersive worlds of animation do not end with the close narrative, but continue to exist. Witnessing the actions of secondary characters in the background, the audience can believe that there is even more to discover about the fictional world.

2.6.4 Consistent style (image and sound)

The visual design of computer animations is always fascinating and audacious.

Not only have the techniques and software been perfected over the years, but also the animators continue to thrive for innovations and fresh styles that can exceed the previous animated creations.

The animations, which are consistent to their style, are able to convey a higher degree of realism, supporting the immersive quality of the viewers' visual experience. I mean that animated realism does not depend on the faithful emulation of real life references such as imagery or sound, but rather on the consistency of style within the animation.

Live-action often favours a specific style for certain genres of movies and filmmakers adopt the stylistic approach that better fits the story: the visual, acoustical and camera choices remain consistent throughout the whole production to support the atmosphere of the film. It is the same in the animated practice, in which the animators convey the impression of a consistent world, both using and reinforcing a distinctive style that fits the narrative tone of the entire animation in every aspect.

The design of sound in *orthodox* animation makes the animated space believable and provides a continuity of narrative. Sound effects, ambient and vocal sounds reinforce the realism of the animation supporting the story, despite they are sometimes exaggerated for a comical effect.

The original sources of the sound may be very different from the source of the sound in the animation, but the sound effects seem coherent, almost natural when they fit the action and the context.

Orthodox animations also rely on real references to convey a realistic impression of the animated characters and reality, but, following the principles of exaggeration and appeal, their final design is so exaggerated and fantastic that it barely evokes any realistic references.

The realistic quality of the immersive world relies on the consistency of its design despite its eccentricity. Animators do not copy real life or cinematic modes of representation, but mainly emulate their stylistic consistency.

2.6.5 Realism of Narrative (unfolding of main and secondary stories)

It is hard to consider every narrative within animations realistic, because both narratives and characters are often fanciful. *Orthodox* animations are planned on a casual plot, which is usually interlaced with minor narratives in order to give an

impression of a fictional, many-sided world that continues to exist even after the end of the story.

Contrary to live-action, where the filmmakers often stretch the time of recording to match the time of the action in order to capture a sensorial experience, animators represent life as it emotionally affects us.

External and internal conflicts, existential and moral issues, desires and prohibitions influence the characters in a believable and realistic way, so that the viewers can relate to the fictional struggles despite the unreal circumstances in which they take place.

The determination of the main character justifies the unfolding of events, so if the emotional journey is relatable and believable to the viewer, even a fantastic and surreal narrative can be realistic in the animated context.

The conditions that affect the characters' motivations and fears may recall personal, social and political realities of the real world, but they do not need to copy real life problems faithfully to be believable in the fictional reality. The characters' sense of powerlessness may be relatable even if it is not caused by analog circumstances in the reality. Animation can implicitly tackle subversive topics, suggesting meaningful correlations between the animated reality and the real world, it is not necessary to understand the references to follow the main story. Conceptual references to contemporary realities add several meanings to the animation that can stimulate the viewers to think about their own personal experiences and about the society in which they live.

CHAPTER 3: FILM ANALYSIS

3.1. Analysis criteria

In this chapter I will examine which kind of realism is achieved by orthodox computer

animations. In chapter 2.5 I narrowed the scope of my analysis to the realistic codes

that apply to *orthodox* computer animation because the theory highlighted that feature-

length animations achieve a higher degree of realism when they combine orthodox

techniques of representation with CGI technology.

Analysing the live-action and animated representations of the same fictional reality and

narrowing the codes of realism to a system that applies to both media, I will illustrate

that neither of them aspire to faithfully represent the physical reality, but rather to

present a genuine reality.

3.1.1 Comparison of the cinematic and animated codes of realism

As Christopher Williams stressed, the problem of realism is the very definition of

reality, which continues to change over time and assumes a different meaning for each

medium. 96 Despite the realistic codes of computer animation and live-action achieve a

different kind of realism, all of them support their respective fictional reality.

3.1.1.1 Summary of the codes of realism in live-action

As already suggested in section 1.6, live-action realism emulates the documentary

techniques of representation favouring transparency and naturalism to portray the 'flow

of life'.

Live-action films achieve realism establishing physical and psychological correlations

between the actual reality and the fictional one. The viewers' perceptual experience of

the real is emulated through a transparent editing and the use of photographic referents,

such as real actors and locations. The viewers' psychological experience of the real is

engaged through a naturalistic performance and a genuine representation of social

struggles.

⁹⁶ Williams, Realism and Cinema, 1.

59

The continuity in the editing and an authentic mise-en-scène reinforce the perceptual realism of the live-action film. On the other hand, the natural acting, the characters' development and the social realism support its psychological realism.

Through the documentary techniques of representation live-action realism arouses the individual and collective knowledge of reality to mediate an authentic representation of life in a fictional reality.

3.1.1.2 Summary of the codes of realism in computer animation

As already suggested in section 2.6, animation realism emulates live-action realistic conventions to convey a believable story of a verisimilar reality.

Computer animations achieve realism by appealing to the viewers' familiarity with the cinematic techniques of representation. Despite their final and fanciful concepts, the world building and the character design are always conceived from original references to the actual reality.

A cohesive style, realism of motion and space make the animated reality physically familiar and consistent, while the logical continuity of the characters and the realistic narrative reinforce the psychological realism.

Animation realism evokes the viewers' familiarity with the realistic codes of representation in live-action films to communicate a genuine, believable story in a fictional reality.

3.1.2 Codes of the Analysis

After having reviewed some of the live-action and animation theories about realism, I have identified a common thread in the realistic codes of both media that I will use to define my codes of analysis.

The codes of realism in live-action and computer animation demonstrate that both media are technically limited when portraying the actual, physical reality, but aesthetically advanced and deceitful when portraying a fictional reality.

Emulating documentary, live-action tries to overcome the degree of manipulation inherent in the cinematic medium and emulating live-action, computer animation tries

to overcome the absence of photographic referents in the metaphysical plane.

Photographic references are not fundamental to achieve realism because live-action and animation do not attempt to reproduce the actual reality, but rather an authentic impression of a reality.

Addressing to the viewers' experience of their own reality, the codes of realism appeal to the essential physical and psychological correspondences that characterise life, the interactions and the motivations that move the individual and the community.

I have narrowed the system of realistic conventions that apply to both live-action and computer animation to two essential codes: the realism of space and the realism of action.

3.1.2.1 Realism of space

The realism of space relies on the viewers' knowledge and their experience of the physical reality: it regards the outer sphere, the space of action, the realism on the surface, everything that moves and the physical motion in space. The interactions between the elements that constitute the fictional world reinforce their realism and state their presence in that reality. Echoing the laws of physics, partially bending them, the represented characters and objects look solid. The three key features of realism of space are the four-dimensional space, the physical motion and the space of action.

- The four-dimensional space: the laws of physics that the fictional space adheres to. The viewers acknowledge the solidity of the fictional reality when the characters are physically affected by it.
- The physical motion: the physical presence of objects and characters within the fictional space. The viewers acknowledge the consistency of the fictional reality and of its constitutive elements through the characters' physical interactions.
- The space of action: the physical consequences of the characters' interaction within the fictional space. The viewers acknowledge the caducity of the fictional reality by witnessing the character's actions and their physical effects.

3.1.2.2 Realism of action

The realism of action relies on the viewers' knowledge and their experience of the psychological reality. It regards the inner sphere, the impulse to action, the realism at the core, what moves the elements in space and the psychological motion that animates the reality.

It is the motivation that anticipates and justifies the interactions, the characters' impulses, but also the backstories and the personalities. The three key features of realism of space are the inner-dimensional space, the psychological motion, the impulse to action.

- The inner-dimensional space: the characters' backgrounds and social roles within the fictional space. The viewers acknowledge the social and political structures of the fictional reality that affect the characters' lives and experiences.
- The psychological motion: the emotional connections of objects and characters within the fictional space. The viewers acknowledge the interrelationships that constitute the fictional reality through the characters' social interactions.
- The impulse to action: the characters' psychological reactions to the events that occur within the fictional space. The viewers acknowledge the influence and consequences of the fictional reality on the characters' motivations.

The realism of space and action continuously influence each other, reinforcing the realistic impression of a lively reality. They both appeal to the viewers' physical and psychological experiences of the real to portray a genuine experience of a fictional reality. The primary and secondary characters work as agents of realism. However, the characters' experience must not fully imitate the viewers' experience to be realistic, but only emulate it. Both live-action and animation often tend to exaggerate and bend the realism for narrative and comedy purposes. The more exaggerated the characters' interactions and motivation are, the less realistic the representation is.

Therefore, the degree of realism of live-action and animation is defined by the extent to which they can faithfully represent the physical and psychological experience of the fictional reality.

3.2 Object of the Analysis

In my analysis I have considered a live-action and an animated adaptation of the same content, the Marvel comic book character and superhero Spider-Man. Nowadays the superhero movie genre has become quite popular and comic book stories often inspire new television series and Hollywood movies. First in the comics and successively in the live-action movies, the genre has smartly combined fantastic elements with realistic ones in order to capture the interest of the contemporary audience. Most of the comic book superheroes are torn between an ordinary identity and a secret one, connecting with their existence two kind of realities, a realistic and a fantastic one. Many film directors of the superhero genre consciously appeal to the viewers' perception of reality, applying cinematic methods of realistic representations to unrealistic content in order to represent the characters' duality.

Thus, live-action and animation features about comic books tackle questions of realistic representation by rooting the narratives and the backgrounds of the fictional characters in real cities and within real historical time frames.

3.2.1 Why Spider-Man cinematic and animated adaptations?

Spider-Man is the most rebooted comic book character and is arguably the most relatable superhero.

In 1962 Spider-Man made its first appearance in the comic book anthology series "Amazing Fantasy" published by the American publishing company Marvel Comics.

Written by the American writer Stan Lee and drawn by the American illustrator Steve Ditko, Spider-Man was the first teenage hero character not to be a mere sidekick of a mature vigilante, but the protagonist of his own stories. Peter Parker is a brilliant, unpopular teenager who lost his parents at a very young age and lives with his aunt and uncle. During a school trip he is accidentally bitten by a radioactive spider and gains super strength, speed and an enhanced sense of danger that he calls 'Spider-Sense'. At the beginning Peter exploits his powers to earn some money as a television star, but after the tragic loss of his uncle, for which he feels directly responsible, he decides to invest his power in the noble cause of fighting crime. Peter creates his own vigilante costume and thanks to his scientific knowledge he invents gadgets such as the wrist-web-shooters that enable him to swing around New York City. When Peter patrols the

streets, he often refers to himself as 'the friendly neighbourhood Spider-Man', displaying a cheerful attitude and a sense of humour especially when fighting criminals. Interviewed at the CBC's 90 Minutes Live in 1977, Spider-Man's creator Stan Lee explained that despite the adventurous life of his alter ego, Peter Parker is deeply affected by the problems of his human identity. He does not have enough money to pay the bills, he cares for his aunt's health conditions, he collects failed romances, keeps up with the university exams and is dissatisfied with his job as a reporter at the Daily Bugle.

"The more realistic we make our characters, the more the college kids who read them think that it's satire which has taught me a very great lesson: the world is so crazy that if you present things the way they really are it comes across as broad satire."97

The readers enjoyed the comic book stories of Spider-Man because they easily identified themselves with the character. While Spider-Man is a down-to-earth hero, a symbol for righteousness and justice, Peter Parker is a fragile and insecure everyman. Because of his humble origins and personality, everyone can easily identify oneself with Peter Parker and can aspire to be a hero like Spider-Man. The thin line between the human-identity and the super-identity of the character has been explored by both live-action and animation with realistic expedients, achieving a similar yet different portrait of Spider-Man and his reality.

Both Sam Raimi's Spider-Man trilogy and Persichetti, Ramsey & Rothman's Spider-Man: Into the Spider-Verse approached the character with a dramatic seriousness, offering a new insight on the philosophy as well as adding a realistic layer to the comic book stories.

3.2.2 Raimi's *Spider-Man* trilogy

In 1999 the Sony Pictures Entertainment, an American Entertainment Company, acquired Spider-Man's copyrights and planned a franchise under Sam Raimi's direction,

⁹⁷ "Stan Lee explains why Spider-Man is just a regular guy" (CBC's 90 Minutes Live, 1977), 13th November 2018, Retrieved on: https://www.youtube.com/watch?v=A9-A GDsiyw, (02.01.20), (02:30).

releasing Spider-Man in 2002, Spider-Man 2 in 2004 and Spider-Man 3 in 2007.98

Raimi's Spider-Man trilogy paved the way for the superhero movie genre with a sincere, realistic approach to the comic book characters.

The live-action trilogy even influenced the successive cinematic adaptations of Spider-Man, such as Spider-Man: Into the Spider-Verse which refers to some of Raimi's trilogy iconic scenes.

Raimi's realistic approach to Peter Parker

Sam Raimi's directing career started with the direction and production of low budget, horror movies, the director became known for his capability of balancing elements of absurd comedy and horror in the same picture and also for rooting fantastic elements in the reality.99

Raimi's adaptations recall the original 1960s comics, capturing the humour and the

nostalgic sentimentalism of Stan Lee's and Steve Ditko's stories while contextualizing the character's origin story realistically in the twenty-first century. Raimi's trilogy begins with Peter Parker, a High School student struggling to find his place, and ends with a mature, humble Spider-Man Figure 1. Still from Raimi, Spider-Man 2002, DVD, that embraces his human limits.



Sony Pictures Home Entertainment, (Culver City, California, 2004), (00:04:08).

"I tried to always be true to the character Peter Parker and deal with him honestly like in any dramatic motion pictures. Sometimes in the comic book movies they take a step back from reality even when dealing with the characters, but I decided to take a different approach and make it as real as possible so that the audience could believe in this hero, in this man."100

⁹⁸ Crow, David "Sam Raimi: A Retrospective", 11 March 2013. Retrieved on: https://www.denofgeek.com/us/movies/sam-raimi/76599/sam-raimi-a-retrospective, (02.01.20). 99 Crow, David "Sam Raimi: A Retrospective", 11 March 2013. Retrieved on: https://www.denofgeek.com/us/movies/sam-raimi/76599/sam-raimi-a-retrospective, (02.01.20).

^{100 &}quot;Interview Sam Raimi 'Spider-Man'" (Niko Chainopoulos' Interview with Sam Raimi, 2002), 21st August 2009. Retrieved on: https://www.youtube.com/watch?v=eT6Xt6FgZYk, (02.01.20), (0:01:38).



Figure 2. Still from Raimi, Spider-Man 2 2004, DVD, Sony Pictures Home Entertainment, (Culver City, California, 2007), (02:02:18).

The Spider-Man trilogy is centred around the journey of growth and the emotional experiences of its good and evil characters.

Raimi often dramatizes the characters' physical and psychological perception to engage the viewers in the action, assuming the characters' point of view with the camera and breaking the

continuity of action. Raimi's Peter Parker struggles to do the right thing even when facing daily problems, often wondering what he is supposed to do. Peter's narrative voice enables the viewers to share his "frame of references on the world" and his existential questions. 101 Raimi combined the realistic tone of the narrative with realistic staging, filming on physical settings and blending mechanical effects with CGI.

"I felt that the most important thing to do was to create a real world. There are parts of New York which are magical so what we decided to do is just create a whole city out of those realistic magical parts of New York."102

Raimi staged Spider-Man in a "real world rather than in a stylized one", creating a set

based on the symbolic parts of New York City. 103 The combination of live performances, physical sets and CGI, and most of all the balance of humour and drama in Raimi's trilogy conveyed a sincere portrait of the comic book character in a contemporary setting, which was difficult to recreate in the Figure 3. Still from Raimi, Spider-Man 2002, DVD, Sony successive adaptations.



Pictures Home Entertainment, (Culver City, California. 2004), (01:04:21).

^{101 &}quot;Interview Sam Raimi 'Spider-Man'" (Niko Chainopoulos' Interview with Sam Raimi, 2002), 21st August 2009. Retrieved on: https://www.youtube.com/watch?v=eT6Xt6FgZYk, (02.01.20), (0:01:38). ¹⁰² "Behind The Scenes - The Making Of Spider-Man" (Sam Raimi, 2002), 29th September 2013. Retrieved on: https://www.youtube.com/watch?v=GJFGXYyKvns, (02.01.20), (0:17:43). ¹⁰³ "Behind The Scenes - The Making Of Spider-Man" (Sam Raimi, 2002), 29th September 2013. Retrieved on: https://www.youtube.com/watch?v=GJFGXYyKvns, (02.01.20), (0:17:10).

3.2.3 Persichetti, Ramsey & Rothman's Spider-Man: Into the Spider-Verse

In 2014 the Sony Pictures Animation, the animation studios owned by Sony Pictures Entertainment, began the production of an animation about Spider-Man's Miles Morales, a modern and more recent version of the Marvel comic book character.

The project involved three directors (Bob Persichetti, Peter Ramsey and Rodney Rothman) and two screenplay writers (Phil Lord and Rodney Rothman), it lasted four years and in 2019 it was awarded with the Academy Award for Best Animated Feature. The 2018 animation *Spider-Man: Into the Spider-Verse* quotes Raimi's trilogy, recreating some of the live-action scenes with an innovative animation style that pays homage to the comic book character as well as to the art of comic.

Persichetti, Ramsey & Rothman's modern approach to Miles Morales

The American film directors Bob Persichetti and Peter Ramsey had previous experiences in the animation field, working as directors and as storyboard artists for animated and live-action films, while the American writer Rodney Rothman distinguished himself as a screenwriter for both dramatic and comedy features. Presenting the teenager Miles Morales, an African-American and Puerto Rican descent, as an alternative version of Peter Parker, *Spider-Man: Into the Spider-Verse* renewed

the comic book character while reinforcing the philosophy behind it: anyone can wear the mask and be a hero.¹⁰⁴

The American writer and director, Phil Lord explained that being the persona of Miles Morales more modern and contemporary than Peter Parker's, the character could add some realistic depth to the message behind the comic book.



modern and contemporary than Peter Figure 4. Still from Persichetti, Ramsey & Rothman, Spider-Man: Into the Spider-Verse 2018, DVD, Sony Parker's, the character could add some Pictures Home Entertainment, (Culver City, California, 2019), (00:03:17).

¹⁰⁴ "Spider-Man: Into the Spider-Verse Filmmakers Q&A (Exclusive)" (Perri Nemiroff's interview with Phil Lord, Chris Miller Bob Persichetti, Peter Ramsey, Rodney Rothman, 2018), 12th December 2018. Retrieved on: https://www.youtube.com/watch?v=IOgiyGiVRBw, (02.01.20), (0:12:45).

"The original idea that Stan Lee and Steve Ditko had was this: he's a superhero who is like all of us, he's vulnerable, he's not sure if he's any good at this and he's not like an handsome dude from outer space. It democratizes the idea of a superhero. We immediately thought that Miles's story was the modern equivalent of Peter's." ¹⁰⁵

Miles gains his powers by accident like Peter Parker and he is afraid of disappointing the expectations of his parents as well as Spider-Man. He struggles to define his identity, being a talented graffiti artist overwhelmed by High School exams, and to find a role model.

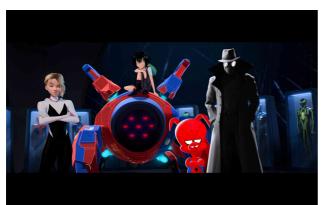


Figure 5. Still from Persichetti, Ramsey & Rothman, Spider-Man: Into the Spider-Verse 2018, DVD, Sony Pictures Home Entertainment, (Culver City, California, 2019), (01:04:13).

The opening of the 'Multiverses', caused by the villain Kingpin, results in Miles's confrontation with the alternative versions of Spider-Man: Spider Gwen aka Gwen Stacey, Spider-Man aka Peter Benjamin Parker, Spider-Man Noir aka Peter Parker from the 1930s, SP//dr aka Peni Parker and Spider-Ham aka Peter Porker.

The diversity of the Spider-Man versions mirrors the diversity of our world and it is visually accomplished by blending different animation styles in the same frame. The visual differences of the characters convey their personality and reinforce the impression that they do not belong to Miles's universe. All the Spider-Man versions had different world experiences and have conflicting points of view, but they all share the same trauma, the death of a loving person, and the same existential dilemma, the responsibilities that come with the powers and the mask.

Spider-Man: Into the Spider-Verse uses the comic book as a cinematic language, favouring the Ben-Day dots, half tone, colour shifts and outlines, while it rejects those cinematic effects that are more realistic such as motion blur and camera focus. Miles's universe is colourful and stylized as his graffiti. New York is portrayed in a bright

¹⁰⁵ "Spider-Man: Into the Spider-Verse Filmmakers Q&A (Exclusive)" (Perri Nemiroff's interview with Phil Lord, Chris Miller Bob Persichetti, Peter Ramsey, Rodney Rothman, 2018), 12th December 2018. Retrieved on: https://www.youtube.com/watch?v=IOgiyGiVRBw, (02.01.20), (0:01:00).

palette with over detailed environments and abstract backgrounds. Rodney Rothman stressed that the animated medium enabled a portrayal of New York from a sentimental point of view rather than from an objective perspective.

"One of the coolest things about animation is that it doesn't have to look real. It has just to feel real. So especially with New York, the goal is to capture what it feels like walking on the streets of New York, not what it looks like." 106

Spider-Man: Into the Spider-Verse handles New York as a character with the same

details and narrative depth of its protagonists. Because of his cultural background and his passions, Miles has a meaningful connection with the city, home of hip-hop, graffiti and crossing of different cultures. Despite its fantastic visual style, the reality represented in *Spider-Man: Into the*



Figure 6. Still from Persichetti, Ramsey & Rothman, Spider-Verse it is real for Miles and Spider-Man: Into the Spider-Verse 2018, DVD, Sony Pictures Home Entertainment, (Culver City, California, true to the Spider-Man comic book 2019), (01:24:20).

3.3 Film Analysis

universe.

The directors of the *Spider-Man* trilogy and of *Spider-Man*: *Into the Spider-Verse* approached the fantastic genre of superhero action films with distinct media. The two adaptations share some similarities even if their visual styles are very different. The films are stories of empowerment and moral growth, pivoting on the origin of a Spider-Man, on one hand Peter Parker, on the other Miles Morales. Both adaptations take place in New York and refer to existing places, historical figures as well as to pop culture references.

They both exaggerate realistic conventions to blend real and fantastic elements in the

¹⁰⁶ "Spider-Man: Into the Spider-Verse Filmmakers Q&A (Exclusive)" (Perri Nemiroff's interview with Phil Lord, Chris Miller Bob Persichetti, Peter Ramsey, Rodney Rothman, 2018), 12th December 2018. Retrieved on: https://www.youtube.com/watch?v=IOgivGiVRBw, (02.01.20), (0:20:10).

unfolding narrative and they both rely on codes of realistic representation to convey an appealing and believable story. Applying the codes of analysis that I defined in subchapter 3.1.2 to the *Spider-Man* trilogy and *Spider-Man*: *Into the Spider-Verse*, I will illustrate how live-action and *orthodox* computer animation can achieve a similar realism despite their stylistic differences.

3.3.1 *Spider-Man* trilogy (US 2002 – 2007, Sam Raimi)

3.3.1.1 Sam Raimi's cinematic approach

The *Spider-Man* trilogy is a combination of live-action and photorealistic CGI.

The cast included popular and emerging actors. Some of them reprised their roles in all the three movies: Tobey Maguire as Peter Parker/Spider-Man, Kristen Dunst as Mary Jane Watson, James Franco as Harry Osborn, Rosemary Harris as May Parker, J.K.Simmons as J.Jonah Jameson.

Inspired by Ditko's and Lee's Spider-Man stories, Raimi approaches the origin story of the superhero as a dramatic screenplay, conveying an emotional and sincere representation of the characters through elements of visual storytelling such as a simple screenplay, an evocative design, an expressive colour palette and a choreographed camera.

The screenplays of the trilogy, written by David Koepp (*Spider-Man*) and Alvin Sargent (*Spider-Man 2* and *Spider-Man 3*), have a three-act structure, common in Classical Hollywood movies. The first film focuses on Spider-Man's and Green Goblin's origins, while the second film pivots around Peter abandoning Spider-Man identity and facing the threat of Doctor Octopus. The third film revolves around Peter facing his inner demons and fighting an ensemble of villains: a rival reporter named Eddie Brock, an alien 'symbiote' called Venom, his best friend Harry Osborn and Flint Marko aka Sandman, a fugitive criminal.

Despite his live-action approach to Spider-Man, Raimi was also inspired by the graphic style of the comic books. He adopted visual storytelling expedients such as comic panels in a web-grid to summarize the events of the previous chapter and transition effects between the scenes that recall the turning of a comic book page to evoke Spider-Man comic distinctive design.

3.3.1.2 Realism in the live-action films

Realism of space:

The four-dimensional space

In order to convey a realistic impression of the space, the *Spider-Man* trilogy emulates the natural laws of physics and favours the continuity of perception. The realistic impression of gravity, weight, mass and time in the live-action sequences is extended to the scenes that display CGI elements through a subtle composition of the frame and continuity in the montage.

In his adaptations Raimi conveys a realistic impression of Spider-Man fictional universe by addressing the perceptual and emotional principles that the viewers use to judge the essentials of their reality.

The fictional New York City, in which the *Spider-Man* trilogy takes place, is realistically affected by the laws of physics in both ordinary and extraordinary sequences. Even the CGI representation of unrealistic happenings such as Spider-Man swinging with his webs between the skyscrapers, Green Goblin's flying glider, Doctor Octopus's mechanical tentacles and the moving sand which composes Sandman are credibly affected by laws of physics verisimilar to ours. The viewers regard as realistic both live-action and CGI elements because they apply the same "moral constructs, interpersonal cues and percepts" to the fictional reality as well as to their own reality. ¹⁰⁷ Moreover, the fantastic nature and CGI aesthetic of certain elements are supported by self-referential narrative cues that justify their existence within the fictional reality. ¹⁰⁸ Behind the incredible abilities of certain characters there is often a scientific explanation: a radioactive spider developed for medical research, a super strength serum invented for military use and a 'democularization' process.

The limits of the powers are often tested to clarify the viewers what super-characters are able to do, while dialogues, monologues and visual details reiterate the super-characters' nature in the fictional reality.

As suggested before, the trilogy is based on the three-act-structure of Classical Hollywood films and relies also on realistic representation techniques of the genre: a linear time progression, physical settings and natural light and most of all continuity in the editing.

¹⁰⁷ Prince, "True Lies", 32.

¹⁰⁸ Williams, Realism and Cinema, 9.



Figure 7. Still from Raimi, Spider-Man 2 2004, DVD, Sony Pictures Home Entertainment, (Culver City, California, 2007), (00:29:28).

The trilogy is characterised by stretched dialogues which emulate real time conversations and convey a natural sense of time. Raimi favoured the use of physical sets, props and natural light for most of the scenes about Peter Parker's ordinary life in the city. In Raimi's trilogy the camera movements and the montage match

the actors' real movements in space and time, supporting an impression of continuity in the unfolding of the narrative as well as in the viewers' perception. ¹⁰⁹ Raimi adopted a cable-mounted camera, a 'Spider-Cam' which captured a choreography of ascents and descents between the buildings and successively added a CGI Spider-Man to the photographic recordings in order to realize the action shots of Spider-Man swinging through New York's buildings.

Whenever the camera dynamically follows Spider-Man in jeopardy, the viewers can experience vertigo, dizziness and even share the fear, the threat of physical dangers and injuries.

Through Peter Parker/Spider-Man's point of view the camera conveys a realistic impression of the character's perception and reality.

Raimi's trilogy generally observes the natural laws of physics and time, applying them even to unrealistic action scenes and when it exaggerates some of the natural, scientific principles on which our reality is grounded there is always a motivation, a narrative or an emotional choice to justify.

The physical motion

The *Spider-Man* trilogy relies on an authentic mise-en-scène and on the natural performance of professional actors to reiterate the characters' presence and physicality within the fictional reality.

The sets of Raimi's trilogy were crafted as they were lived by the characters and the staging of small, ordinary episodes supported this impression: everyday habits such as

¹⁰⁹ Bordwell, The Classical Hollywood Cinema, 3.

Aunt May's folding napkins on a kitchen table or Peter's struggling with the broken door of his apartment every time he enters, evoke the "life time" of the fictional reality.110

Despite the futuristic, comic style of certain aspects of the mise-en-scène, Raimi's characters interact with both real and CGI props in a credible, familiar way, so that the actors' performances appear to be authentic. Both fortuitous and expected interactions between the characters and the elements that constitute the fictional reality support its realism. Spider-Man reiterates his presence as well as other people's existence in the same fictional world when he crosses civilians, criminals, police officers and firemen who are both surprised and familiar with his actions.

The actors' performances reinforce the photorealistic quality of the CGI elements and convey an impression of tangibility, anticipating an action or exaggerating its outcome. The combination of live-action and CGI is almost transparent due to the continuity in the editing. An action that involves CGI always begins or ends with a live-action performance so that, even if the interactions are referentially fictional, the result is perceptually realistic.¹¹¹

Raimi carefully blended computer graphic and live-action by editing in sequence the scenes with the real actors and props with the scenes with their CGI double.

For example, in Spider-Man 2 when Doctor Octopus surprises Harry Osborn on his balcony, Harry/James Franco drops the physical glass he is holding, in the next shot a CGI mechanical arm of Doctor Octopus catches the CGI glass of Harry and in the last shot Doctor Octopus/Alfred Molina drinks from a physical glass, held by the physical prop of his mechanical arm.

However, in Raimi's trilogy the presence of a CGI element is not necessarily supported only by a physical interaction, sometimes an emotional reaction is enough: a screaming crowd looking at a flying CGI Green Goblin, Doctor Octavius talking to his floating CGI mechanical Figure 8. Still from Raimi, Spider-Man 2 2004, DVD,



Sony Pictures Home Entertainment, (Culver City, arms, passers-by gazing in wonder at California, 2007), (01:15:34).

¹¹⁰ Rushton, The Reality of Film, 70-72.

¹¹¹ Prince, "True Lies", 32.

Spider-Man during his web-swinging root the intangible elements in the same fictional reality of live-action.

The combination of physical and emotional acknowledgements is even stronger: through processes of identification and transposition with the characters' perception, the viewers are able to sustain the cinematic illusion even if it is partial. The spectators cannot completely relate to the extraordinary happenings within Spider-Man's reality, but they associate its more realistic and ordinary aspects to their own experience.

The space of action

Through the actors' natural performance, a realistic narrative and world building, Raimi's trilogy depicts a fictional reality that the characters can realistically affect, sometimes irreversibly.

Raimi's New York is a "super imitation" of the American city, it emulates its real appearance and also its previous fictional representations. It often overcomes any references, offering a new insight on the metropolis and its perception. When Spider-Man's actions become public affecting the New Yorkers, the Press and the media, the viewers' perception of the fictional New York City strays away from their personal knowledge. Not only do Spider-Man's actions inspire songs, merchandise, a parade in his honour, but also trigger harsh criticism between the New Yorkers. The consistency of the hyperrealistic city is supported by its citizens' overdetermined reactions to the fictional context.



Figure 9. Still from Raimi, Spider-Man 2002, DVD, Sony Pictures Home Entertainment, (Culver City, California, 2004), (01:49:13).

The extraordinary happenings and consequences such as the number of casualties and the extent of the city damages are often remarked by the dialogues of primary and secondary characters.

The physical solidity of New York and the mortality of the characters are continuously tested during the con-

¹¹² Arnheim, Film as Art, 154-156.

¹¹³ Eco, Travels in Hyperreality, 40-43.

¹¹⁴ Wells, Understanding Animation, 27.

frontation of Spider-Man with his super-enemies and even by casual incidents, such as the building on fire in *Spider-Man* and *Spider-Man* 2 or the crane malfunction in *Spider-Man* 3.

The fighting scenes are characterised by rips in the clothing, wounds, blood and realistic structural damages to public infrastructures.

Raimi presents the fictional characters as human beings, showing how easily they can be harmed or die and the deep consequences of their death and past deeds. Uncle Ben's and Norman Osborn's deaths deeply shape Peter Parker's moral compass as well as Aunt May's and Harry Osborn's life and their perception of Spider-Man.

The characters' human behaviours and experiences in Raimi's trilogy make them relatable and their reality credible. Despite his super-abilities Peter Parker is ordinary as the New Yorkers and the viewers, because he shows human frailty, flaws and empathy when he faces life and his own mortality. Raimi's trilogy displays a reality that is tangible, fragile because it is inhabited by flawed human beings.

Realism of action:

The inner-dimensional space

The Spider-Man trilogy presents a lively and varied fictional society.

The multitude of characters with different backgrounds and experiences are affected by the same fictional reality, a world in which the presence of Spider-Man directly or indirectly influences their lives.

The characters display a "mode of being or a certain way of life" that reiterates their familiarity with the nature and structure of the fictional reality. ¹¹⁶ Showing positive and unpleasant aspects of Spider-Man universe, Raimi conveyed a realistic impression of both characters and space. From the first film of the trilogy, it is clear how differently the characters are affected by the same reality. Peter Parker, his aunt May, his uncle Benjamin and Mary Jane Watson live in the same neighbourhood and suffer economic difficulties, even if they continuously try to change their condition. On the contrary, Harry Osborn and his father are surrounded by luxury, because both benefit by the profits of the Oscorp, Norman's multinational corporation. Each character's life shows

¹¹⁵ Arnheim, Film as Art, 29.

¹¹⁶ Rushton, The Reality of Film, 73-75.

the viewers a different aspect of the fictional reality: Peter's student life in High School and at university, Peter's jobs as a photo-reporter at the Daily Bugle and as a pizza delivery man, Mary Jane's jobs as a waitress and a broadway actress, Norman's and Octavius's life as scientists, Flint Marko's criminal life as a fugitive.

Even if the audience does not relate to all the fictional experiences, it can better understand the scope of the fictional reality through the diversity of its primary and secondary characters. Capturing the flow of emotions and values that constitute the characters' existence, Raimi addresses the viewers' empathy and experience of life. The trilogy pivots on the depth of each character's story in a more realistic setting, a New York City characterised by the constant motion of its busy citizens. Staging multiple happenings in the same frame, Raimi conveys a realistic impression of the city life as well as of Spider-Man universe. The same frame is all the fictional experiences, it can better understand the scope of the first primary and secondary characters.

The trilogy realistically explores the life of its characters, but it only tackles the aspects of the fictional reality that directly concern them avoiding all the others, such as the political system and the government. Despite Raimi's films offer a reductive, superficial impression of the fictional reality, they handle the characters' perspectives with sincere credibility.

The psychological motion

In order to convey a realistic impression of Spider-Man's fictional reality, Raimi's trilogy relies on the interrelationships between relatable, credible and consistent characters.

The intimate and public social relationships of the fictional characters support their backgrounds, actions and development within the reality. Meaningful scenes and dialogues are useful to clarify the nature of the characters' relationships, but also to reiterate their role in relation to the others.

In an iconic scene of *Spider-Man 2*, an unconscious Spider-Man is carried by the people that he has just saved by a train crash. One of the citizens looks at Spider-Man without his mask and comments: "He's just a kid, no older than my son." ¹¹⁹

The secondary characters acknowledge Peter/Spider-Man firstly by touching him and

¹¹⁸ Bazin, Bazin at Work, (London: Roudledge, 2014), 8.

¹¹⁷ Kracauer, Theory of Film, 60-71.

¹¹⁹ Spider-Man 2, R.: Sam Raimi, (Orig. Spider-Man 2, US 2004), (1:40:42).

secondly associating him with their own backstory.

In an analog way, the viewers easily identify with the secondary characters and understand the fictional context better because they relate to their human behaviour. Both processes of transposition and identification between the viewers' experience and the fictional content reinforce the realistic illusion of the films. ¹²⁰ The psychological realism and the consistent design of the characters support both unrealistic and realistic aspects of the narrative.

Even the villains, who personify everything the hero stands against, are an expedient to solidify Spider-Man's character and his world. Spider-Man's enemies underline aspects of the status quo and the main protagonist's moral compass by challenging both. Moreover, in Raimi's trilogy, even if Spider-Man fights the villains physically, the nature of the conflicts are always rooted in the emotions not in the physicality.

The interrelationships between every primary or secondary element of the reality reiterate their human nature in a fictional, but complex world.

Naturalising the perception of the recordings through the editing, Raimi presents the characters in such a way that the viewers can empathise and partake in both drama and action. Not only does the camera assume the characters' point of view and follows them from a close distance, imitating their physical movements, but also montage favours a realistic continuity between the scenes and their emotional value.¹²¹

The composition of long, middle and close shots engages the viewers' perception by conveying the characters' perspective as natural as possible. For example, when in *Spider-Man* Peter approaches Mary-Jane in the backyard, the camera conveys both the physical and emotional distance of the characters: a long shot introduces Mary Jane walking towards Peter who appears in the corner of the frame, a medium long shot shows Peter standing and talking while Mary Jane enters the frame, the conversation continues in an alternation of medium shots of each character until they draw closer and become more intimate in a series of close shots.

Relating to the characters' emotional and perceptual cues, the audience can easily connect with the dynamics that affect Spider-Man fictional world.

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¹²⁰ Arnheim, Film as Art, 29.

¹²¹ Williams, Realism and Cinema, 99.

The impulse to action

The trilogy illustrates a fictional world that forces the characters to challenge their reality, either by changing it or by changing themselves. The characters are neither completely evil nor good, they all struggle with their own duality: Peter Parker wants to be a better person, even if his friends continuously accuse him of being self-centred, he desires to be a better superhero, even if the public opinion often accuses him of being a criminal. The humanity of the characters makes their motivations more relatable and their evolutions more realistic. Questioning the ambiguity of their reality, the characters address existential concerns regarding their morality and their own perception of the real.¹²²

In the trilogy Raimi presents a reality in which anyone can sin and anyone can also redeem. In *Spider-Man 3* Peter forgives Flint Marko, Sandman, who is responsible for the murder of his uncle, relieving both from their past regrets, in *Spider-Man 2* Doctor Octavius saves New York City from his own evil plan because he does not want to die as a monster, in *Spider-Man* Norman Osborn, the Green Goblin, asks Peter to spare his son Harry from the truth about his evil deeds and in the whole trilogy, Mary Jane offers Peter a chance to fix his mistakes and apologise.

In his three films, Raimi stages similar situations to compare the characters' different reactions and also to show the characters' development throughout the trilogy. In *Spider-Man* and *Spider-Man* 2, Peter rushes into a building on fire to save the people trapped there and while in the first incident he is able to save all, in the second a person dies. That experience deeply affects Peter because he feels responsible and staring out of the window, he wonders: "Am I not supposed to have what I want? What I need? What am I supposed to do?" 123

The absorptive performance of Tobey Maguire is true to Peter Parker's character as well as to the viewers' universal experience. 124

Spider-Man universe is characterised by the human struggles and fears of its characters.

When Spider-Man runs into action, the lives of the New Yorkers are really at stake and he cannot always save all despite his efforts. The closer the camera draws near to the characters' risks, the more the audience partakes to the positive restoration of the

¹²² Bazin, What is Cinema Vol.2, 63-66.

¹²³ Spider-Man 2, R.: Sam Raimi, (Orig. Spider-Man 2, US 2004), (1:19:50).

¹²⁴ Rushton, The Reality of Film, 73-75.

fictional reality.¹²⁵ The fictional characters realistically grow and change their perspective about their own reality, affected by their world and by their own decisions, leading the audience to a personal, deeper reflection.

3.3.2 Spider-Man: Into the Spider-Verse(US 2018, Persichetti, Ramsey & Rothman)

3.3.2.1 Persichetti, Ramsey & Rothman's animated approach

Spider-Man: Into the Spider-Verse is a combination of 3D computer graphic and 2D hand-drawn animation techniques. A cast of popular actors was early involved in the animated project for the recording of the characters' voices: Shameik Moore as Miles Morales/Spider-Man, Jake Johnson as Peter B.Parker/Spider-Man, Hailee Steinfeld as Gwen Stacey/Spider-Gwen, John Mulaney as Peter Porker/Spider-Ham, Kimiko Glenn as Peni Parker/ SP//dr, Nicholas Cage as Peter Parker/Spider-Man Noir, Mahershala Ali as Aaron Davis/Prowler, Liev Schreiber as Wilson Fisk/Kingpin. The characters' animation was based on the recordings of the actors' voice performances. According to the analysis of the multimedia designer Griselda Gabriele, Phil Lord and Rodney Rothman's screenplay has a three-act-structure, common in most commercial animated features. The story focuses on the origin of Miles Morales as the new Spider-Man after the opening of the 'Multiverses' by the villain Kingpin who threatens to destroy the alternative realities of every Spider-Man.

The visual style and technique of the animation were inspired by the graphic of comics and realized in such a way that every frame can be seen as an illustration or a panel straight from a comic book. Every element of the animation was first hand-drawn, digitally dimensionalized, rendered flat and re-traced by hand. Drawing from traditional animation techniques, the animators realized the movie on one's and on two's, using a new drawing every first or second frame to convey more expression to the movements, but also to emphasize the characters' evolution throughout the film.¹²⁷

Spider-Man: Into the Spider-Verse integrates different aesthetics: Pop-art, anime, Robby Rodriguez's Spider-Gwen comics and Warner Bros.' Looney Toons cartoons. The use of different animation styles and character designs enable the animators to

^{125 (}Rossellini 1979) Williams, Realism and Cinema, 216.

¹²⁶ Gabriele, Griselda, "Make it Matter: Spider-Verse (Animator's perspective)", 15th February 2019. Retrieved on: https://medium.com/kontinentalist/make-it-matter-spider-verse-animators-perspective-c2477eed0c45, (02.01.20).

¹²⁷ Solomon, Charles, "How the 'Spider-Verse' animators created that trippy look", 25th December 2018. Retrieved on: https://www.nytimes.com/2018/12/25/movies/spider-man-into-the-spider-verse-animation.html, (02.01.20).

visually highlight the difference between the Spider-Man personalities and their realities. Because of their distinctive styles, characters such as Spider-Man Noir rendered completely black and white, Peni Parker animated like a manga character and Spider-Ham designed with a Looney Toons aesthetic stand out and at the same time they blend in the main graphic of the animation. The texture of the animation imitates the Ben-Day dots, an old and cheap printing process which consists in overlapped, closely and widely spaced dots that create the optical illusion of a colour shade. 128

The same animators digitally rendered the Kirby Krackle, a graphic technique that American Illustrator Jack Kirby used to represent lighting or cosmic energy by drawing black dots around the energy negative space.¹²⁹

Motion blur and depth of focus were avoided using colour aberrations and a visual effect that recalls a misprinted comic to distinguish between the elements in the fore-, middle- and back-ground of the frame. Onomatopoeic sounds, comic panels, outlines and action lines were integrated to the 3D computer animated models. The comic book style was also used as a montage and narrative expedient: a summary of events in a web-grid of comic panels, a transition between scenes like the turning of a comic book page, the caption boxes with Miles's inner thoughts, the 'Spider-Sense' rendered with flashing lights and lines.

3.3.2.2 Realism in the animation film

Realism of space:

The four-dimensional space

Spider-Man: Into the Spider-Verse conveys a realistic impression of Spider-Man's fictional reality by emulating the natural laws of physics and staging ordinary happenings. The animated reality is a "second order simulation", a copy without original.¹³⁰ It overcomes any precedent adaptations despite it draws from live-action references and cinematic codes of representation to convey a believable story.

The overdetermined design of the animation and the exaggerated movements of its

¹³⁰ Darley, Visual Digital Culture, 50-60.

¹²⁸ Benday .(o.d.). In Merriam-Webster's online dictionary. Retrieved on: https://www.merriam-webster.com/dictionary/benday, (02.01.20).

¹²⁹ Mendryk, Harry "Evolution of Kirby Krackle", 3rd September 2011. Retrieved on: https://kirbymuseum.org/blogs/simonandkirby/archives/3997, (02.01.20).

character support the consistent style of the fictional reality. Even unrealistic graphic elements such as motion lines and onomatopoeic sounds underline the effects of gravity and the density of the characters and objects.

The animation observes the laws of physics in the scenes of ordinary life and it often exaggerates them for comedy or narrative purposes and even for the character design. For example, all the different versions of Spider-Man are affected by the physics of Miles's universe, but they can also do things that are not physically possible in that reality because they belong a different universe: Spider-Ham can float in mid-air and carries a series of giant objects in the tiny pockets of his costume, Peni Parker has a choreographic fighting style common in anime that defies gravity.

The animation introduces Miles while he draws in his own bedroom, an intimate and realistic context. Excluding Spider-Man's influential presence in New York City, Miles's world remains ordinary until he is bitten by the radioactive spider. He inhabits the space, his house as well as his neighbourhood, with confidence, running, jumping and stumbling around.

Spider-Man: Into the Spider-Verse emulates the continuity of recording of live-action films by showing events as they would occur in real time: most of the dialogues between the characters as well as the action scenes unfold at a steady pace, conveying a realistic "sense of time". 131

The fighting scenes are overwhelming compositions of multiple events that occur on the fore-, middle- and background at the same time. It is evident when Miles regroups with the alternative versions of Spider-Man at aunt May's house: they simultaneously

fight Doctor Octopus, Prowler, Tombstone and Scorpion in the same room. The eleven characters are all in focus and viewers can freely "concentrate their attention" on a particular character. 132

New York is portrayed as a crowded and lively city through the motion of Figure 10. Still from Persichetti, Ramsey & Rothman, its citizens, even when the New



Spider-Man: Into the Spider-Verse 2018, DVD, Sony Pictures Home Entertainment, (Culver City, California, 2019), (01:11:56).

¹³¹ Williams, Realism and Cinema, 99.

¹³² Williams, Realism and Cinema, 42-44.

Yorkers are simple, abstract, colourful shapes in the background, they constantly interact with one another and their space.

Moreover, the multitude of secondary characters moving and interacting on different planes not only conveys a sense of depth, but also reinforce the impression of life in the animated universe. The fictional reality in *Spider-Man: Into the Spider-Verse* recalls the physical one by imitating the laws of physics and referring to existing places. Its realism is supported by narrative and visual aspects of the animation that evoke life essentials.

The physical motion

The animated characters inhabit an "ultra-realistic" New York City with familiar confidence, supported by their caricatured body language. 133

The character design of *Spider-Man: Into the Spider-Verse* consists of recognizable human-like figures like in many mainstream animations. Despite their cartoonish style and movement the characters are perceived as "orthodox human beings", the characters' magnified movements and behaviours overcome any real, *orthodox* references, but are realistic and consistent in the fictional reality. Spider-Man can swing around the city, stop a flying car with a single punch, lift two buses full of citizens with his web and despite the extraordinary nature of his actions, the accurate timing and the smoothness of the animation support the character's consistency in the fictional reality. Even if the expressive movements of the animated figures stray away from the cinematic realism of live-action films, the behaviours that animate the characters are human and relatable, in particular when they deal with one another or the space: they move and interact in a familiar way.

The viewers can partake to an "uninterrupted life experience" within the fictional reality through the characters' habits and ordinary actions.¹³⁵

Moreover the "dynamic movements of the camera" convey the characters' perception by emulating their motion in the metaphysical space, the viewers can share the characters' perspective as well as their perceptual experiences through the animated camera. ¹³⁶

¹³³ Wells, Understanding Animation, 27.

¹³⁴ Wells, Understanding Animation, 35.

¹³⁵ Thompson, Storytelling in the New Hollywood, 22.

¹³⁶ Williams, Realism and Cinema, 99.

The detailed design of the locations is deeply connected to the realism of the characters: the Morales' house, the streets of Brooklyn, the Visions Academy and the other settings are authentic, characterised by impressive details that suggest backstories and secondary narratives in Miles's universe. The design of Aaron's apartment offers a first impression of the character, the way in which he moves around the place and the objects that surround him convey his backstory.

When Miles visits his uncle Aaron, he surprises him from the fire escape stairs and that seems a recurrent joke from Aaron's friendly reaction.

Despite the exaggerated style of the animation, *Spider-Man: Into the Spider-Verse* conveys an authentic impression of life in the fictional reality, to which the characters belong aesthetically, physically and existentially.

The space of action

In *Spider-Man: Into the Spider-Verse* the characters' physical actions affect the reality in which they live and both the characters and the space remain consistent even if their actions are sometimes extraordinary and exaggerated. Miles's universe is visually complex and hyperrealistic: the "overdetermined quality" of the animation supports the consistency of the fictional reality even when it strays away from the natural laws of physics.¹³⁷

When a glass surface is shattered or a wall is destroyed, the resulting damage is more graphic than real. Despite the physicality of the fights, the characters suffer injuries, bruises and scratches, and damages to the clothing but the animation does not contain any representation of blood.

Spider-Man: Into the Spider-Verse exploits the references and the natural principles that constitute reality, however it does not simulate or copy the real world. Even if the physical consequences are not visually realistic, the damages still have authentic repercussions in the fictional reality. The animation represents harmful



repercussions in the fictional reality. Figure 11. Still from Persichetti, Ramsey & Rothman, Spider-Man: Into the Spider-Verse 2018, DVD, Sony

The animation represents harmful Pictures Home Entertainment, (Culver City, California, 2019), (00:38:07).

¹³⁷ Eco, Travels in Hyperreality, 43.

threats that have references in the real world, but also imaginary dangers that influence the characters' existence and choices. After accessing Miles's reality through Kingpin's portal, the alternative versions of Spider-Man suffer from a 'glitching effect', a painful symptom caused by their physical misplacement in a different universe. The physical suffering of the alternative Spider-Man is caused by Miles's reality and rendered through a fragmented composition of the character's key-positions, bright colours and a glitch effect.

Representing sensorial experiences like physical sufferings in a fictional context, the animated reality is "referentially fictional, but perceptually realistic". 138

Moreover every fictional reference is justified either by the narrative or by the overdetermined visual quality of the animation. The reality of *Spider-Man: Into the Spider-Verse* is consistent and authentic, because the animation is accurate to its own realistic terms.

Realism of action:

The inner-dimensional space

Spider-Man: Into the Spider-Verse relies on the characters' backstories and personalities to convey an impression of the social and political structures of the animated reality. Through the main protagonist the viewers explore the ordinary life in the animated New York City and learn Spider-Man's influential role in the fictional reality. In the first part of the animation, a discussion between Miles and his dad reveals the divided opinion about the vigilante's public actions. As a young teenager Miles admires Spider-Man, on the contrary, as a police officer Miles's dad disapproves Spider-Man's methods, sharing the same opinion of his colleagues.

Recurring references in thoughts and dialogues suggest that Spider-Man is a popular character among young and old generations. His popularity is also reinforced by the divulgation of Spider-Man's products such as comics, songs, cereals and animated series. When the news of Peter Parker/Spider-Man's death is spread by the media, a big, mixed crowd of New Yorkers gathers in mourning, reiterating Spider-Man's central role in Miles's universe.

Spider-Man: Into the Spider-Verse only conveys the essential aspects that constitute the

¹³⁸ Prince, "True Lies", 32.

animated reality, particularly focusing on those variables that shape and influence the main protagonist. Miles's student life offers the viewers an insight on the education system, he would rather attend his old public school with his friends because he can neither integrate properly in the private school nor deal with the pressure of his teachers' and parents' expectations.

The conflictual relationship between Miles's father and uncle illustrates a moral duality that affects both the Morales and the society: on one side Miles's father cannot accept any kind of vandalism or crime, on the other Miles's uncle is morally flexible since he is secretly engaged in criminal activities.

Even if the viewers' experience of Miles's reality is "only partial", the details are sufficient to grasp the main dynamics that animate the fictional world. 139 A recurring theme of the animation is also the cultural diversity, represented both by the main characters and the New Yorkers.

The Spider-Man alternative versions share similar experiences but have different backgrounds and cultural origins: Miles is African-American and Puerto Rican descendant, Peter B. Parker is American-Jewish, Peni Parker is Japanese-American. The audience can easily relate to a reality that is culturally different, but most of all it can easily associate the fictional multicultural community of New Yorkers to the real one or to its previous representation by other media. Despite its limited representation, the fictional society is complex enough to affect the characters' actions and the viewers' perception of the animated reality.

The psychological motion

In *Spider-Man: Into the Spider-Verse* the characters' diversity is also a realistic expedient related to the characters' development throughout the animation. Comparing their experiences and connecting with one another, the characters reveal aspects of their own personality and existence.

The same process occurs between the viewers and the represented characters: relating to the human behaviours of the fictional characters, the spectators can identify themselves with the characters' emotional struggles without questioning their "physical existence". The social relationships are self-referential and root the characters'

¹³⁹ Arnheim, Film as Art, 154-156.

¹⁴⁰ Arnheim, Film as Art, 29.



Figure 12. Still from Persichetti, Ramsey & Rothman, Spider-Man: Into the Spider-Verse 2018, DVD, Sony Pictures Home Entertainment, (Culver City, California, 2019), (01:02:25).

backstories and narratives in the same reality, for example, Miles's relationship with his family is essential to understand Miles's psyche as well as his reality. Miles's interactions with his father, mother and uncle as well as with the Spider-Man alternative versions highlight his fears, ambitions and desires so that they seem authentic and justified by his human nature.

Despite their differences all the Spider-Man characters relate with one another and understand Miles's situation because they had the same experience: every Spider-Man was equally affected by the death of a loved one and by the accidental acquisition of powers.

Peter B. Parker comforts Miles by sharing his own story with him: "We've all been there. You know, for me it was my Uncle Ben." ¹⁴¹

The tragic origin story connects them and reinforce their existence and roles within the Spider-Man universe.

It addresses the viewers that are already acquainted with Spider-Man comics and with Raimi's trilogy in which Peter Parker is also deeply affected by Uncle Ben's death. The animation conveys a realistic impression of the animated reality, combining fictional references and perceptual cues like the spectators' knowledge about the character's previous adaptations.

The realism of *Spider-Man: Into the Spider-Verse* relies on the processes of identification (the ensemble of relatable characters) and of transposition (a familiarity with the previous Spider-Man adaptations) between the viewers' authentic experience and the fictional content.

The impulse to action

The interrelationships that constitute Spider-Man: Into the Spider-Verse influence and

¹⁴¹ Spider-Man: Into the Spider-Verse, R.: Bob Persichetti, Peter Ramsey and Rodney Rothman, (Orig. Spider-Man: Into the Spider-Verse, US 2018), (01:17:04).

justify the characters to act in a way that is credible and comprehensible to the viewers. Despite the acquisition of super-powers, Miles's journey of growth is relatable because it mirrors the doubts and fears of an average teenager, a human being.

The animation introduces Miles as a teenager that struggles against his own identity and his parents' expectations. After gaining his extraordinary abilities he is even more confused and scared. When Miles meets Peter Parker/Spider-Man and connects to him through the Spider-Sense, Peter exclaims: "I thought I was the only one. You're like me." Miles sincerely states: "I don't wanna be." 142

The exchange between Peter and Miles sets the tone for the rest of the animation, Miles desires to fulfill people's expectations, on the contrary he constantly faces his human flaws and failures when he compares himself to the others.

The opening of the 'Multiverses' and the consequent gathering of multiple versions of Spider-Man in Miles's universe influence the characters to change their perspective on their identity and reality: Peter B. Parker regrets his divorce from Mary Jane, Gwen Stacey faces her personal fear of losing friends and Miles gains confidence by embracing both his flaws and strengths.

The "absorptive performance" rendered by the animated characters and by the voice actors is authentic and true to the human experience. 143

The characters' body language, the facial and vocal expressivity communicate a human emotional depth and introspection.

Moreover, *Spider-Man: Into the Spider-Verse* exploits the frame rate of the animation to visually convey Miles's growth throughout the narrative. Miles is clumsy and emotional when he is animated on two's and out of sync with Spider-Man other versions, Miles is confident enough of his abilities when he is animated on one's.¹⁴⁴

The difference between the frame rates is subtle and renders Miles's imperfect movements so that the viewers can share his perception and enjoy his evolution. *Spider-Man: Into the Spider-Verse* naturalises its fictional content, exploiting the animation ability to represent the human perception of life both emotionally and physically.

¹⁴² Spider-Man: Into the Spider-Verse, R.: Bob Persichetti, Peter Ramsey and Rodney Rothman, (Orig. Spider-Man: Into the Spider-Verse, US 2018), (0:22:12).

¹⁴³ Rushton, The Reality of Film, 73-75.

¹⁴⁴ Solomon, Charles, "How the 'Spider-Verse' animators created that trippy look", 25th December 2018. Retrieved on: https://www.nytimes.com/2018/12/25/movies/spider-man-into-the-spider-verse-animation.html, (02.01.20).

3.3.3 Scenes comparison

In order to highlight in detail how the live-action and animated adaptations achieve realism I have selected two scenes that are analogous in the films, but have some variations. I will break down and analyse specific scenes from each adaptation by observing the similar conventions of representation.

The first scene consists in the introduction of the main character, the second scene regards the protagonist testing his super-powers. Not only are the two scenes fundamental to understand the main characters, but also the nature of their realities. On one hand, Peter and Miles are in a familiar, ordinary situation, on the other they investigate their physical limits, crossing the border between ordinariness and extraordinariness.

3.3.3.1 Spider-Man introduction: an ordinary day

Spider-Man trilogy

Raimi's *Spider-Man* introduces Peter while he is running after the school bus. On the bus everyone is laughing at his desperate attempt, but Mary Jane makes the driver stop. When Peter gets on the school bus, he is mocked and avoided by the other students. In the next scene Peter and his schoolmates wait outside the Columbia university to visit its laboratory, meanwhile Norman Osborn takes his son Harry to the school meeting point and meets his son's best friend, Peter.¹⁴⁵

Realism of space:

The four-dimensional space

The laws of physics, which the fictional reality adheres to, are conveyed through the camera movements and the montage of the actors' physical interactions with the space. Raimi framed the fictional characters in New York City's authentic setting, recording the actors on-location.

The actors performed on physical sets (in the street, on the school bus, in the Rolls Royce and in front of the Columbia university) as if they were part of their surroundings, as if they belonged to the fictional space.

The camera position, height and movement place the viewers' perspective inside the fictional reality, close to the characters' perception: during the bus scene the camera

¹⁴⁵ Spider-Man, R.: Sam Raimi, (Orig. Spider-Man, US 2002), (0:03:20 – 0:06:28).

shakes like the vehicle, it frames Peter running along the bus from the driver's point of view in the rear-view mirror and Peter badly landing on the bus floor from a ground view. In the editing, the anticipation and continuity support the realistic outcome of the characters' physical interaction, so that



characters' physical interaction, so that Figure 13. Still from Raimi, Spider-Man 2002, DVD, Sony Pictures Home Entertainment, (Culver City, the viewers have the impression of the California, 2004), (00:03:51).

laws of physics within the fictional reality verisimilar to theirs.

According to Bordwell, the classical Hollywood films achieve a realistic impression by matching the actors' and camera movements in space and in time as they would occur in real life. The *Spider-Man* trilogy often favours continuity in the recording and in the editing to realistically convey the time-span of the action.

The sequence of scenes unfolds in a realistic and linear time progression: Peter takes the school bus and waits with his class outside the Columbia University, Harry arrives and introduces his father to Peter. The continuity renders an uninterrupted experience of the space within the fictional reality.

When the class gathers in front of the Columbia University the camera follows Peter walking towards his classmates and shifts its focus onto the black Rolls Royce in the background, introducing Harry and Norman Osborn talking inside the car in the next shot. The dialogue between the two characters is initially staged with an uninterrupted recording, matching the real time of their conversation, then it unfolds with an alternation of close-ups of each character's reactions.

Moreover, the continuity conveys a sense of distance in space, combined with the composition of the frame. When Peter is introduced to Norman, both characters step closer to the camera conveying the impression of narrowing the physical distance between each other even if they are framed in distinct shots.

The sound is also important to reinforce the realism of the environment. The confused noises in the background suggest a lively, public environment while the actors' lower and distant voices convey the spatial extent of the location as well as the physical distance between the characters in the fictional space.

¹⁴⁶ Bordwell, The Classical Hollywood Cinema, 42.

The physical motion

The physical presence of objects and characters is conveyed through an authentic miseen-scène, the actors' natural performance and the continuity in both recording and editing.

As already suggested, the settings are existing places in New York: the school bus goes along the 44th Avenue in Queens and the school trip takes place in the Columbia University in the 116th Street in Manhattan.¹⁴⁷ However, the real locations are characterised by fictional details such as fake advertisements and workplaces that define and refer to the live-action film reality.

The yellow school bus is designed with elements that either refer to the fictional reality or to real references: the writing on one side of the bus says "Go Wildcats", referring to the fictional Peter's school football team, while there is a holy picture and a list of actual behavioural rules near the school bus driver's seat.

The hyperrealistic design of details, but most of all, the combination of realistic references and unrealistic elements reinforce the space realism by further confusing the boundary between real and imaginary.¹⁴⁸

The characters' dialogues remark inner references to the fictional reality, supporting its existence beyond the scene or the frame. Before entering the university Peter's teacher reprehends his students, telling them to behave well because he does not want to face the latest bad experience at the planetarium. Norman reminds Harry that he attends a public school because he was dismissed from every private school he had been sent. he characters' explicit references not only broaden the characters' background, but also the viewers' perspective of the fictional reality, a universe that extends beyond Peter's narrative and beyond what they can see through the eye of the camera. Bazin argued that the depth of focus and the constant motion in the background through the staging of primary and secondary characters evoke a genuine impression of life. The *Spider-Man* trilogy equally addresses the viewers' perception of reality, relying on their perceptual memory of everyday life. The actors' naturalistic performances suggest an impression of familiarity between the characters and the space: on the school bus students chat, laugh, eat and play, in front of the Columbia University the passers-by

¹⁴⁷ "Spider-Man (2002) Filming locations", The Movie District, 10th October 2019. Retrieved on: http://www.themoviedistrict.com/spider-man/, (02.01.20).

¹⁴⁸ Eco, Travels in Hyperreality (London: Picador, 1987), 40-43.

¹⁴⁹ Spider-Man, R.: Sam Raimi, (Orig. Spider-Man, US 2002), (0:04:40 – 0:04:58).

¹⁵⁰ Spider-Man, R.: Sam Raimi, (Orig. Spider-Man, US 2002), (0:05:13 – 0:05:30).

¹⁵¹ Bazin & Cardullo, Bazin at Work, 8.

and the people in the background are busy in ordinary activities, common in public environments. As I suggested, the continuity, achieved either by an uninterrupted recording or by a sequence of related subjects, facilitates the processes of transposition and identification between the viewers and the fictional content. Guiding the viewers' focus on a character or a detail of the mise-en-scène, the camera and the montage achieve continuity through a visual link that connects each shot and scene. A realistic, immersive experience that constantly reiterates the characters' presence in the fictional reality is given by the combination of these expedients: an authentic mise-en-scène, the actors' natural performance and the continuity in both recording and editing.

The space of action

The realistic outcome of the characters' interactions with the reality is rendered by the actors' natural performance, the characters' human nature and the overdetermined world building.

Since this particular scene introduces an ordinary day of Peter Parker's life, it contains fewer physical conflicts than emotional ones. Moreover, it is evident that Peter is being tested rather than the physical consistency of his reality.

As I suggested in the sub-chapter of the four-dimensional space, the continuity in the editing supports the realistic outcome of the characters' physical interaction with the space. When Peter stumbles in his schoolmate's leg, his physical impact with the ground is conveyed through the camera position and the montage. The outcome of the fall is also reinforced by Peter's glasses falling, by his schoolmates' laughters and by his expression of pain and humiliation.

Peter's emotional reaction is subtle and unnoticed by the other characters, but visible and comprehensible to the viewers. According to Arnheim, a sincere, emotional display by the actors/characters does not only address the spectators' empathy, but also their personal experiences, favouring processes of transposition and identification between the real and the fictional content.¹⁵²

The same processes occur in the representation of New York City, the metropolis is the stage of Peter Parker's ordinary misadventures.

In this scene the city is above all a place of harmful relationships and emotional 152 Arnheim, Film as Art, 29.



Figure 14. Still from Raimi, Spider-Man 2002, DVD, Sony Pictures Home Entertainment, (Culver City, California, 2004), (00:03:29).

conflicts. Peter, Mary Jane and Harry are mostly concerned with their growing pains.

They want to be accepted by their own peers, to be loved and be able to face family and social authority. Eco suggested that an hyperrealistic simulation can affect the viewers' perception of the real, in particular

when it emulates both the real world and the cinematic representations of the latter.¹⁵³

In Raimi's trilogy, New York City is quite ordinary on the surface, so that it is challenging for the viewers to distinguish between the simulation and their memory of the actual city.

In this particular scene the physical outcome of the characters' interaction with the space is not in focus as in the rest of the movie, but Peter's fall on the bus and his emotional reaction represent and underline the human, relatable nature of the characters that inhabit the fictional New York City.

Realism of action:

The inner-dimensional space

The social and political structure of the fictional reality is conveyed through the characters' design. In Raimi's trilogy the characters' backgrounds and personalities are suggested by their external appearance, by their social interactions and most of all by their physical presence in the space.

As already suggested in the sub-chapter "The physical motion", the characters' presence is reiterated by a combination of an authentic mise-en-scène, the actors' natural performance and by the continuity in both recording and editing. The scene introduces Peter Parker as a New Yorker (the skyline of the Empire Building in the background, the recognizable facade of the Columbia University), as a student (on the school bus and during a school trip), as an unpopular kid (ignored and bullied by the other schoolmates) and as a brilliant person (praised by Norman Osborn for knowing Oscorp research on nanotechnology).

¹⁵³ Eco, Travels in Hyperreality, 40-43.

Moreover, the contrast between two or more characters' personalities reinforce the impression of a realistic diversity within the fictional reality and unveils social dynamics that are human and relatable. Peter's unpopularity contrasts with Mary Jane's popularity: Peter stands alone in most of the scenes, while Mary Jane is always in group, surrounded by her friends.

Harry's privileged status is opposed to his schoolmates' economical situation: Harry gets to the Columbia University in a luxury car while his schoolmates arrive there on the public school bus. Harry's uneasiness is opposed to his father's firm attitude: Harry is uncomfortable in a Rolls Royce, while Norman is proud of showing his economical success. The emotional conflicts in this scene convey the impression of a society shaped by values and emotions verisimilar to ours. Besides, the characters' social dynamics are contextualized in a fictional reality where the primary and secondary characters are always in motion in the fore-, middle- and background. According to Kracauer, the viewers judge the cinematic reality as authentic when it conveys a flow of emotions and values verisimilar to the one they experience in everyday life. 154

Therefore, despite offering a superficial impression of the social and political structure in the fictional reality, the ensemble of characters in the scene embodies a human society to which the viewers can relate.

The psychological motion

The characters' interactions are fundamental to convey an impression of the political and social structures of the fictional reality and they mostly illustrate the interrelationship on which it is based.

The viewers experience the fictional reality as a flow of happenings which unveil the emotional and physical correspondences that constitute life. Mary Jane, Harry and Norman Osborn would not fit in a universe without Peter at the core and at the same time Peter Parker would not be the same character if he were not emotionally affected by their presences.

The scene conveys a credible impression of the characters' social network through the characters' relatable behaviours and an emotional continuity in the editing. As I have already suggested, Peter's behaviour is relatable because of his human experiences and because of the actor's naturalistic performance. The editing and the

¹⁵⁴ Kracauer, Theory of Film, 60-71.

camera genuinely guide the viewers' gaze in the fictional space and near the action by matching the actors' movements.

Alternating close-ups of Peter and Mary Jane, the montage enables the viewers to share Peter's perspective, so that when Peter misinterprets Mary Jane's glance, the spectators do the same.

As stated by Williams, a realistic montage with limited camera movements, cuts and an emotional continuity between the scenes conveys the material more naturally.¹⁵⁵

When Harry and Norman are introduced in the car, the first shot frames them talking next to each other, while the following close-ups of each character support the emotional value of the scene. Moreover, the feelings of attraction and repulsion expressed by the actors seem authentic because they emulate human experiences that are justified by the characters' narrative arch.

The impulse to action

As I suggested in the sub-chapter "the space of action", the scene contains conflicts that are more emotional than physical. The actors' absorptive performances and the characters' depth are fundamental to convey the characters' psychological reactions. While the actors are responsible for conveying a credible introspection of the characters' emotions, the depth of the characters is rendered by staging them in similar situations, but displaying different behaviours. According to Bazin, the cinematic realism can reveal the ontological dilemma of existence. ¹⁵⁶ In this scene it is evident that the characters question themselves and the ambiguity of their lives by discreetly tackling their unchangeable situations.

Mary Jane stands up, convincing the bus driver to stop, but avoids Peter's glance when everyone is mocking him. Peter smiles and tries to fit it, but after his shameful fall, he lies on the ground, blinking sorrowfully.

Even Harry's first conversation with Norman suggests that he is very afflicted and thinks that his father would not understand his point of view. Harry replies to his father's reproach: "I'm not ashamed of who I am, just.." ¹⁵⁷

His hesitation is true to life and to the character's fictional existence.

¹⁵⁶ Bazin, What is Cinema Vol.2, 63-66.

¹⁵⁵ Williams, Realism and Cinema, 99.

¹⁵⁷ Spider-Man, R.: Sam Raimi, (Orig. Spider-Man, US 2002), (0:05:35).

Later, speaking to Peter, Norman praises Peter's knowledge of nanotechnology and behind them, Harry looks away with a melancholic expression, unnoticed by the two. Peter's, Mary Jane's and Harry's introspective looks do not convey a distinct emotion per se, but they are

fictional context.



distinct emotion per se, but they are Figure 15. Still from Raimi, Spider-Man 2002, DVD, Sony Pictures Home Entertainment, (Culver City, interpretable and even relatable in the California, 2004), (00:06:14).

Despite their differences the three characters feel immobilized and display a similar reaction in three different situations. The characters' emotional engagement is genuine, justified by the fictional context as well as by the characters' human frailty.

Raimi's camera peers into the characters' intimate conversation (father-son conversation inside the car) and unfortunate realities (Peter being bullied), but it also captures the characters' friendly interactions (Peter with Harry and Peter with Norman) and fortunate realities (Mary Jane's social life, Norman's economical status). Tackling meaningful, ordinary life moments, Raimi evokes the inner conflicts of human beings when they are confronted with their life ambiguities.

Spider-Man: Into the Spider-Verse

Spider-Man: Into the Spider-Verse introduces Miles while he is drawing in his bedroom. After saying goodbye to his parents, Miles walks, sticking some of his drawings on his way to school, and meets some friends in the neighbourhood. His father insists on driving him to the Visions Academy in his patrol car. At school Miles runs from one class to the other and receives different tasks.¹⁵⁸

Realism of space:

The four-dimensional space

The character's interaction with the space and the animated simulation of continuity in

¹⁵⁸ Spider-Man: Into the Spider-Verse, R.: Bob Persichetti, Peter Ramsey and Rodney Rothman, (Orig. Spider-Man: Into the Spider-Verse, US 2018), (0:02:34 – 0:07:20).

the recording convey the laws of physics on which Miles's reality.

The scene concerns Miles's ordinary activities which are displayed in a linear time progression: Miles leaves his parents' house, puts his stickers around, talks with some friends in the neighbourhood, goes to the Visions Academy and attends different classes.

In addition a sense of time is expressed through the gradual change of the natural light in the outdoors and through the uninterrupted sequences of the characters' actions in the foreground and background. By emulating the live-action film camera movements, the animation camera sometimes follows the characters' action in a realistic span of time in order to convey an uninterrupted experience of life.

For example, when Miles looks for his computer, he goes into the living room and into the kitchen in the same scene, while his parents move around the space and interact with him. Also when Miles walks near his old public school, he interacts with his old schoolmates in an uninterrupted scene while the other kids are busy in the background. Both scenes are staged with different camera movements and angles and like a continuous live-action film shot, reinforcing the realistic impression of time and space. The continuity in the recording and the multiple actions happening on different planes offer a sense of depth as well as of the life in the metropolis.

Miles's New York City is a colourful, graphic and overdetermined simulation that gets over any references to the actual American city and to its previous media representations. According to Darley, a "second order simulation" is not only an alternative way of copying, but also a different reality altogether. 159

The multitude of details and ambience sounds reinforce both the impression of a complex and lively reality and the impression of a space built and lived by the characters.

In this scene both primary and secondary characters are affected by laws of physics that are verisimilar to ours. For instance, the viewers get an impression of Miles's suitcase weight by the way he carries it and they get an impression of gravity watching falling items, such as basketballs outside the public school and Miles's stumbling in the middle of the street. The physical interactions between the characters and between the characters and the space reiterate their existence and solidity on the metaphysical plane. Furthermore, motion lines and sound effects remark the physical impacts and their

¹⁵⁹ Darley, Visual Digital Culture, 59-62.

outcome.

The additional white lines around Miles's gestures (passing a basketball and hand shaking with a friend) and the relative sound effects consistently support the physical interaction as well as their realism.

The physical motion

The characters' presence in the fictional world is reiterated by their familiarity with the space. The viewers relate to the character's experience of the fictional reality, depending on how naturalistic the characters' motion and emotional display are. Not only do Miles's movements and behaviours demonstrate he has a prior knowledge of each location, but also that he has meaningful connections with each space.

He is familiar and confident in all the locations: his parents' house, his neighbourhood, his father's patrol car and the Visions Academy.

Miles turns his parents' living-room upside down, plays basketball in the street and jumps around suggesting his own habits, based on knowledge and experiences prior to the main narrative. Despite its chaotic and lively representation, Miles's New York City is ultra-realistic, characterised by a multitude of exaggerated details that overcome any real references. Wells stated that the over detailed quality of the representation supports the consistency of the fiction reality even if it strays away from the actual reality.¹⁶⁰

The overdetermined quality of the fictional locations reasserts the characters' existence in the fictional universe regardless of their physical presence. Details such as the artworks in Miles's room, the family photos in the Morales' house, the private school

informative posters convey secondary stories and backstories that the animation does not necessarily elaborate. The viewers experience Miles's reality by observing him in his ordinary routine: small details and undramatic events of his routine evoke the everyday life in the fictional New York City.

According to Rushton, the "life time" 2019), (00:02:45).

Figure 16. Still from Persichetti, Ramsey & Rothman, Spider-Man: Into the Spider-Verse 2018, DVD, Sony Pictures Home Entertainment, (Culver City, California, 2019) (00:02:45)

¹⁶⁰ Wells, Understanding Animation, 27.

can be evoked through the representation of episodes that are stretched in time and lack dramatic force.¹⁶¹

The viewers perceive Miles's sense of time and space through the simulation of continuity in the recording and the animated camera perspectives and movements. For instance, when the animation assumes Miles's point of view from the police car backseat, the viewers see Miles's father in the rear-view mirror or behind the steel grid that divides the car front and its back. As a consequence, the viewers get both physical and emotional distances between the two characters.

All the characters have the design of *orthodox* human beings, but some of their features are exaggerated for major expressivity. Dimensional expression lines were mapped on the characters' CGI faces to convey a more clear, graphic emotional display.¹⁶²

Even if the characters have comic-like expressivity and exaggerated movements, they are consistent with their human behaviours, the design and physical proprieties of the fictional reality. The viewers can better relate with the characters' experiences because of their transparent emotional display.

As I suggested in the sub-chapter "the four-dimensional space" motion lines and sound effects further remark the physical impact and the solidity of both the characters and the space.

The use of real sound references support the realistic qualities of the visual design: when Miles jumps on the grating side walk floor or puts a sticker on the newspaper box, the materiality and density of the objects are reiterated by the sound effects. According to Wells, even if the sound is always non diegetic in animation, it authenticates the action, so that real sound effects enhance the realistic representation of a fictional environment. 163

The space of action

The physical outcome of the characters' space interactions is rendered by the characters' human behaviour and the hyperrealistic quality of the fictional reality.

In this scene neither Miles nor New York are threatened by extraordinary and harmful

16

¹⁶¹ Rushton, The Reality of Film, 70-72.

¹⁶² "Spider-Man: Into the Spider-Verse – Embracing Imperfection", Sony Pictures Entertainment, 16th February 2019, Retrieved on: https://www.youtube.com/watch?v=vDjvhwgbsP8, (02.01.20), (01:00). ¹⁶³ Wells, Understanding Animation, 101.

events, so the characters' space interactions and their action outcome are credible because of their ordinary nature: Miles's actions have emotional rather than physical repercussions.

As I suggested in the sub-chapter "the four-dimensional space", both primary and secondary characters are affected by laws of physics that are verisimilar to ours and the characters' physical interactions reiterate their presence and solidity in the fictional world.

In this scene Miles's undramatic interactions with the characters and the space are comprehensible and authentic because they are part of an average student's daily life. Consequently, the laws of physics are not particularly exaggerated and credibly affect the outcome of his interactions. Miles relates to his reality elements as an ordinary human being, Miles is smart and agile, but sometimes clumsy and messy.

When Miles looks for his laptop in his parents' house he scatters the pillow off the sofa and accidentally goes against the phone in the kitchen. When he sticks his artworks along the way to school, Miles hits few street signs, shuts a newspaper box and clumsily falls to the ground.

Every physical impact is conveyed through the character's body language, motion lines and sound effects which reiterate both the characters' presence and actions within the metaphysical space.

Expedients such as the anticipation and continuity in the montage highlight the outcome of the characters' action in a hyperrealistic way. When Miles tries to put a sticker on a street sign, his action is divided into six shots: in the first shot, Miles jumps upwards, in the second, in mid-air he lifts his hand, in the third, he puts the sticker onto the street sign, in the fourth he stumbles, in the fifth he falls and in the sixth he hits the

ground.

Miles's choreographic stumbling over his shoelaces and his landing in front of his father's police car are visually pleasant and credible despite forced for comedy and narrative purposes.

The viewers relate to Miles's emotional Figure 17. Still from Persichetti, Ramsey & Rothman,



affliction when he is caught by his Spider-Man: Into the Spider-Verse 2018, DVD, Sony Pictures Home Entertainment, (Culver City, California, 2019), (00:04:08).

father, even if they do not relate to Miles's clumsiness. In this scene Miles is not affected by physical, external and extraordinary dangers but rather by the New Yorkers' everyday life risks.

Realism of action:

The inner-dimensional space

The characters' backstories and personalities communicate the social and political structure of the fictional world. This scene is mostly focused on Miles, but his interactions with secondary characters and their presences in the background highlight additional aspects of their society.

Miles Morales is introduced as a graffiti artist, as an American Puerto Rican teenager, as a New Yorker from the Queens and as a good private school student. The personalities and backgrounds are suggested through the characters' behaviours and also through the character and space designs: the viewers recognize Miles's parents from the family pictures and they learn that Miles's mother is a nurse and his father is a policeman from their uniforms.

The ethnical peculiarity presented in the Morales' family is reiterated through the friends and passers-by that Miles meets on his way to school. The animation addresses the viewers' experience, such as their prior knowledge of New York City as melting pot, establishing associations between their physical reality and the animated one. The dialogues emphasize the characters' aspects and the social issues of which the viewers are unaware.

The conversation between Miles and his father tackles moral problems when they talk about Spider-Man as well as about Aaron, Miles's uncle. On one side, Miles considers Aaron a "good guy", on the other Miles's father suggests that Aaron made wrong choices and wasted his opportunities. Miles's father uses his brother as a negative example, thus inexplicitly showing himself as a positive role model. Besides Miles's father criticizes Spider-Man's wearing a mask, saying that cops must not hide their faces when dealing with criminals.

Talking about Aaron and Spider-Man, the characters not only state and reiterate Aaron's and Spider-Man's roles in the animated reality, but unveil the nature of personal and public interrelationships on which their reality is based. Miles and his

father are affected by Aaron's past as family members, and they are well acquainted with Spider-Man's presence in the metropolis as New Yorkers. The fictional society and subsequently the citizens are so used to the masked superhero that they are barely impressed by his heroic actions.

The recurrence of hints and details about the same event or character supports the fictional society as well as its realism. Williams argued that self-references expand the complexity of the fictional reality, conveying the impression of a self-sustaining community similar to ours.¹⁶⁴

Even small talks, which sound unrelated to the main narrative, reinforce the impression of a community that shares a history and an everyday life outside the frame. When Miles walks through the neighbourhood, a friend addresses him by asking: "Yo, Miles! You feel that earthquake last night?" Later Miles reads the latest news on a public screen: "Earthquakes rock tri-state area Spider-Man saves dozens". 166

The psychological motion

The characters' interrelationships suggest the structure of the fictional society, above all they connect the characters to the animated reality. The scene relies on the viewers' human experiences and knowledge to give a relatable, realistic impression of the fictional content.

The characters reiterate their personal connections, their presence and their human behaviour by emotionally acknowledging the elements that constitute their world. Miles's introduction scene begins with an intimate moment in his bedroom, then the focus shifts to Miles's family in the Morales' household and subsequently to Miles in public spaces such as the public school entrance and the Visions Academy classes.

Miles's positive and negative confrontations suggest a new aspect of his character, of his personal life and reality.

The viewers understand that Miles only spends his weekends at his parents' house from Miles's brief exchange with his mother before he goes to school.

The spectators understand that Miles is talking with his old schoolmates and he is

¹⁶⁴ Williams, Realism and Cinema, 9-10.

¹⁶⁵ Spider-Man: Into the Spider-Verse, R.: Bob Persichetti, Peter Ramsey and Rodney Rothman, (Orig. Spider-Man: Into the Spider-Verse, US 2018), (0:03:50).

¹⁶⁶ Spider-Man: Into the Spider-Verse, R.: Bob Persichetti, Peter Ramsey and Rodney Rothman, (Orig. Spider-Man: Into the Spider-Verse, US 2018), (0:04:48).



Figure 18. Still from Persichetti, Ramsey & Rothman, Spider-Man: Into the Spider-Verse 2018, DVD, Sony Pictures Home Entertainment, (Culver City, California, 2019), (00:04:01).

attending a new, different school from Miles's conversation with few secondary characters in front of the public school. Moreover, the viewers learn from Miles's dialogue with his father that Miles started attending a private school two weeks before and he regrets leaving his old, public school.

The audience can easily empathize with

Miles's behaviour and even identify with some of his everyday experiences and emotional connections with the characters.

Without seeing Aaron, the viewers get a first impression of his character and of his relationships with his nephew only from Miles's dialogue with his own father. Miles's and his father's word exchange escalation is authentic because it is relatable. Both Miles and his father are human and emotional, despite they have contrasting opinions.

As a policeman, Miles's father overcriticizes Spider-Man, misquoting the popular saying in the Spider-Man comics and live-action adaptations: "With great ability comes great accountability." ¹⁶⁷

This false reference addresses the viewers's knowledge about the character of Spider-Man prior to the animation despite the comedy expedient of the misquoting. According to Prince, by referring to the viewers' "audiovisual experiences" the representation roots the fictional reality through perceptual cues. The viewers identify themselves with the characters' personal issues and transpose their familiarity of Spider-Man previous adaptations to the content of the animation.

The impulse to action

The characters' reaction to the events within the fictional reality further reiterates the consistency of the elements that constitute the animation. In this scene Miles is an average teenager experiencing insecurity and inner doubts in a new context like his

Prince, "True Lies", 32.

¹⁶⁷ Spider-Man: Into the Spider-Verse, R.: Bob Persichetti, Peter Ramsey and Rodney Rothman, (Orig. Spider-Man: Into the Spider-Verse, US 2018), (0:05:04).

new, private school.

In contrast to the secondary characters in the background, Miles is very expressive in the way that he moves in the space: he is excited, overdramatic and visually afflicted and inclined to introspection as an average teenager.

Miles displays a variable mood, a human lack of confidence, differently reacting to similar situations: he is friendly and confident when he meets his old schoolmates in front of the public school, but he looks nervous and uneasy when he is at the Visions Academy.

The characters' motivations are even more authentic when they are conveyed through an emotional display and an absorptive performance. Miles's first opinion of the Visions Academy is suggested by his rapid change of expression in front of the school and later explicated in the conversation with his father. The character's expressivity and the actor's voice render the character human and relatable.

Not only do the viewers comprehend Miles's issues and motivations, but also they identify with the character's emotional display. When Miles explains to his father that he would prefer to attend a public school, saying that he "would prefer to be at a normal school among the people" his father points to the Visions Academy students and replies that they are Miles's peers. 169

The two contrasting opinions highlight Miles's internal conflicts and feelings: his troubles are the same as most teenagers. Moreover, the moment of silence shared between the two characters and their afflicted expressions reiterate the emotional outcome of their conversation.

The viewers can easily empathize with Miles's struggles at school and his desire of making his parents proud after Miles's verbal exchange with his father.

In this particular scene the characters' behaviours are motivated by their backgrounds and influenced by their interrelationships rather than by extraordinary events that trouble their ordinary life.

103

¹⁶⁹ Spider-Man: Into the Spider-Verse, R.: Bob Persichetti, Peter Ramsey and Rodney Rothman, (Orig. Spider-Man: Into the Spider-Verse, US 2018), (0:05:40).

3.3.3.2 Spider-Man's abilities: power testing

Spider-Man trilogy

In an alley, Peter hides to check the spider bite mark on his hand. He crawls on a wall and then he jumps from one rooftop to the next. On top of one building he tries to shoot webs out of his wrist, until he manages to hook himself to a crane on the opposite side of the street. He jumps off the building and swings with the web to the other side, but he crashes against an advertisement billboard.¹⁷⁰

Realism of space:

The four-dimensional space

The scene unfolds in a linear time progression, in a climax that stretches from ordinary to extraordinary happenings: Peter runs in the middle of a crossing, hides in an alley, crawls on a wall, runs and jumps on the top of buildings and swings, using with his web. As explained by Bordwell, the staging on physical sets with natural light conveys an "aesthetically pleasing image and an illusion of greater depth". ¹⁷¹

Raimi filmed existing places and added the CGI animation to the recordings in the post-production. He also alternated the footage with the CGI double to the material with Tobey Maguire, the physical actor.¹⁷² Lateral and aerial tracking shots of CGI Peter running on the rooftop are edited in-between low angle shots of Tobey Maguire leaping in mid-air. The realistic illusion conveyed through the actor performance is extended to



Figure 19. Still from Raimi, Spider-Man 2002, DVD, Sony Pictures Home Entertainment, (Culver City, California, 2004), (00:26:21).

the sequences with his CGI double on physical sets. According to Prince, digital imaging enables filmmakers to "extend principles of perceptual realism to unreal images" and thereby making unrealistic, synthetic elements credible.¹⁷³ Despite the extraordinary nature of Peter's actions, the laws of

¹⁷⁰ Spider-Man, R.: Sam Raimi, (Orig. Spider-Man, US 2002), (0:25:12 – 0:27:56)

¹⁷¹ Bordwell, The Classical Hollywood Cinema, 321.

¹⁷² "Behind The Scenes - The Making Of Spider-Man", 29th September 2013. Retrieved on: https://www.youtube.com/watch?v=GJFGXYyKvns, (02.01.20), (0:19:30).

¹⁷³ Prince, "True Lies", 34.

physics that affect Peter are conveyed through the same expedients used in ordinary scenes: the camera movements and the montage of the characters' physical interactions with the space. The camera even reinforces this impression by assuming Peter's perspective and motion. A low-angle Figure 20. Still from Raimi, Spider-Man 2002, DVD, shot shows Tobey Maguire jumping in California, 2004), (00:25:31).



Sony Pictures Home Entertainment, (Culver City,

mid-air, the blue sky as background, an aerial tracking shot conveys Peter's leap over the rooftop from the character's point of view, then a lateral tracking shot frames CGI Peter landing and running on an actual rooftop with the New York City's skyline in the background. This sequence of shots is repeated with slight variations of the camera angles, but it begins and ends with Tobey Maguire performance.

The depth of focus and the continuity in the editing enable the viewers to share Peter's perception of his reality. The camera dynamically frames Peter's climbing on the wall in an uninterrupted recording: filming him from above, the camera slowly descends to his eye level and then from a low angle shot the camera comes closer to Peter while he is looking down. Despite the audacious movement of the camera, the sequence conveys an impression of the space in the alley, framing details of the mise-en-scène that reinforce its authenticity such as the emergency fire escape stairs, trash cans and garbage bags. Visual details such as the bite-mark on Peter's hand, the spiderweb in the alley, the CGI extreme close-up of his gripping fingers are enough to convey Peter's inner thoughts and to visually justify Peter's extraordinary nature. Prince argued that unreal images are perceived as realistic when they address the viewers' understanding of daily phenomenas in real life. 174

The viewers judge Peter's powers as perceptually realistic, even if they are referentially fictional, by associating Peter's abilities to the natural properties of a spider. Despite Peter's jumps and leaps are exaggerated, the character is still affected by gravity.

This impression is reinforced also by the sound effects of Peter's body hitting the ground and the billboard, recurrent in the scenes with Tobey Maguire as well as with his CGI stunt double.

¹⁷⁴ Prince, "True Lies", 32.

The physical motion

The presence and consistency of both physical and CGI elements are reiterated through an authentic mise-en-scène, the actors' natural performance and the continuity in both recording and editing.

The scene is staged in some existing locations of New York City: Peter runs across Austin Street and Ascan Avenue in Queens, and swings above Locust Street and the 43rd Avenue in Queens. The setting is characterised by real references and fictional details such as fake advertisements and brands that only exist in Spider-Man's universe.

The realistic impression of the urban context is rendered by the essentials, common in most of the American cities: the pigeons flying off the rooftops, the laundry hanging from clotheslines between the buildings, the children playing in the courtyard, the people and the cars moving in the streets. Raimi consciously plays with the viewers' prior knowledge of New York City (in real life and in previous media adaptations) and adds fictional aspects that are self-referent and sustain the realistic complexity of the fictional reality.

According to Williams, the realistic films "reshuffle" the viewers' human experience through the manipulation of self-references, producing something familiar, but different from the original data.¹⁷⁶

The viewers acknowledge the space and even CGI elements through Peter's perspective, rendered by the camera, and Peter's physicality, both conveyed through Tobey Maguire's performance and the continuity in the editing. When Peter tries swinging over the opposite building, the physical and CGI web-props are carefully



Figure 21. Still from Raimi Spider-Man 2002, DVD, Sony Pictures Home Entertainment, (Culver City, California, 2004),(00:26:32).

wrist shooting the CGI web and when Peter finally gets a hold of the crane with the web, this is a physical prop that Tobey Maguire firmly holds.

blended in the montage: a middle high

shot shows a surprised Peter spinning a

CGI web out of his wrist, then a shot

from Peter's perspective frames his

¹⁷⁵ "Spider-Man (2002) Filming locations", The Movie District, 10th October 2019. Retrieved on: http://www.themoviedistrict.com/spider-man/2, (02.01.20).

¹⁷⁶ Williams, Realism and Cinema, 9-10.

Tobey Maguire's emotional display and Peter's situation are human and relatable despite the fantastic nature of the character's abilities. The viewers can easily identify with the character's desire of testing his own limits and with his euphoric reaction once he is able to master his abilities. The viewers' transposition between the real experience and the fictional content and their identification with Peter's emotions, despite the fictional situation, support the characters' realism and presence. The spectators witness the realistic limits of the fictional reality from Peter's behaviour and from the uninterrupted impression of consistency of both physical and CGI elements.

The space of action

Despite Peter's extraordinary actions, the outcome of his interactions with the reality is lifelike, affected by laws of physics verisimilar to ours. The actor's natural performance, the character's human nature and the overdetermined world building convey the physical consistency of Peter and the same space.

Testing his abilities and physical limits in the narrative, Peter, both as an actor and as a CGI stunt model, reiterates his physical presence in the fictional reality. As I have suggested in the sub-chapter "the four-dimensional space", the actors' physicality is extended to their CGI double through the montage and the staging on physical sets. An uninterrupted impression of the character's physical properties is conveyed by the alternation of Tobey Maguire's performance in actual locations and of his CGI double footage edited in the live-action recordings.

The same continuity in the editing, Tobey Maguire's expressivity and his body language communicate the character's awareness before and after his actions, anticipating or remarking their outcome.

The viewers are able to comprehend Peter's inner thoughts and anticipate his decision thanks to the associative montage of shots. When Peter decides to swing from the rooftop to the building on the opposite side of the street, the decision is rendered in multiple shots: firstly the camera frames Peter looking over the rooftop edge, secondly the camera assumes Peter's point of view by showing the street between the buildings, lastly the sequence is repeated to create additional suspense.

The anticipation of the consequences through the montage reinforces the impression of actual dangers and of the subsequent impact.

According to Wells, hyperrealistic representations exploit animated conventions such

as exaggeration, anticipation and timing to convey a greater impression of realism.¹⁷⁷ When Peter swings towards the opposite building, the viewers become aware of Peter's failure because they witness his uneasiness and they temporarily assume his perspective through the camera. The camera dynamically emulates Peter's descent, advancing too close and fast to the advertisement billboard. Peter tries desperately and comically to brake with his feet and screams in an extreme close-up. The physical impact is reinforced by Tobey Maguire's vocal expression and by the sound effects of the collision and of Peter's sliding on the billboard.

In this scene New York City is still the stage of Peter Parker's ordinary misadventures, but it gets an additional meaning. The metropolis becomes an urban jungle, a playground where the physical and human limits of reality are tested from Peter's point of view.

In *Spider-Man* New York City is a super imitation of the actual city and Peter's presence offers a new insight into the iconic metropolis. Eco suggested that, being a fake simulation, hyperreality is often perceived as magical and coherent because it overcomes the imperfections and the ambiguities of the physical reality. Peter is a New Yorker and he can crawl on walls. Peter comes from the Queens and he can jump on the rooftops of the buildings. Peter is an average American student and he can spin webs out of his wrists. The real settings and the references to the actual American metropolis root Peter's character in a realistic space, which is familiar to both Peter and the viewers, enabling him to slightly bend the laws of physics with his superpowers without losing his realistic qualities.

Realism of action:

The inner-dimensional space

In this particular scene the focus is mostly on Peter exploring the space and testing his abilities, rather than on Peter interacting with other characters and unveiling the structures of the fictional society.

At this point of the film, the viewers witness a new shade of Peter's personality even if they are already acquainted with his identity and interrelationships. Peter is afraid but also fascinated by his new powers and despite he faces real dangers, he is brave enough

¹⁷⁷ Wells, Understanding Animation, 27.

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¹⁷⁸ Eco, Travels in Hyperreality, 40-43.

to test his limits. When he attempts to shoot the web from his wrist, Peter uses different catchphrases: "Go, web!", "Fly!", "Up, up and away, web!", "Shazam!", "Go!", and "Go, web, go!".¹⁷⁹

Two exclamations in particular ("Up, up and away, web!" and "Shazam!") are explicit references to the Superman and Captain Marvel superhero comic books. In this peculiar situation Peter's choice of words highlights that he is both familiar with actual comics and superheroes stories.

According to Arnheim, the inclusion of real references favours a process of transposition between the viewers' experience and the fictional content and also between the viewers' perception of their society and the fictional one. The references to the viewers' knowledge make Peter's character relatable and his society verisimilar. Peter's extraordinariness is opposite to the secondary characters' ordinariness. The New Yorkers are unaware of Peter's abilities because they are too busy minding their own business. While Peter is jumping onto rooftops and swinging between buildings, cars and pedestrians fill the streets with motion.

The secondary characters convey the impression of a multicultural society and their unconcern in Peter's hazardous actions and screams suggest that the fictional New Yorkers are used to strange events or they are too busy to notice them.

The psychological motion

The scene revolves around Peter personally testing his abilities, therefore he does not relate to primary or secondary characters, but only to his surroundings. Moving confidently, Peter expresses his familiarity with his neighbourhood, even when he changes his perspective by leaving the street and jumping onto the rooftops. The viewers assume Peter's perspective through the camera and the naturalisation of the editing. They can relate to Peter exploring the Queens from above, because during the demonstration of his physical skills they repeatedly assume Peter's point of view through the dynamic camera and the montage.

The neighbourhood is represented as a humble area of New York City, characterised by housing projects and flat complexes: outdoor clotheslines connect the facades of the structures and kids play in the courtyards between the buildings. It is an ideal setting

¹⁷⁹ Spider-Man, R.: Sam Raimi, (Orig. Spider-Man, US 2002), (0:26:50-0:27:08).

¹⁸⁰ Arnheim, Film as Art, 154-156.

where Peter can consciously try his powers, being acquainted with the neighbourhood. As a human being Peter displays curiosity, euphoria and fear. He struggles to understand what it is happening to him, but his urge to test his own limits increases more and more when he feels empowered.

The viewers share Peter's expectations, successes and failures and also his new space and self-perspective assuming his point of view. After his initial hesitation Peter's awareness raises, conveyed by Tobey Maguire's absorptive performance: Peter accepts his new, powerful self.

He explores the space from Spider-Man's unordinary perspective, crawling on walls, jumping onto buildings and swinging: Peter is now consciously relating to his second identity, Spider-Man, for the first time.

Through the continuity in the editing, the viewers assume Peter's perception of both the space and his empowered self. The spectators can easily identify with Peter's emotional experience and introspection despite they cannot relate to his extraordinary abilities.

The impulse to action

The fictional reality deeply influences Peter's decisions and render them comprehensible and experienceable: the spectators relate to Peter's emotional states (fear, astonishment, curiosity, confidence) because they get Peter's point of view (sense of space, danger, vertigo) and have possibly experienced analogue human experiences. As stated by Arnheim, fictional characters are perceived as realistic when their behaviour and experiences are human, despite their questionable physical existence. The scene is a climax of empowerment that begins with Peter overcome by fear and it ends with Peter swinging in mid-air. The character's motivations are conveyed through Tobey Maguire's absorptive performance and Peter's human depth.

Peter is so scared about what is happening to him that he runs through the city. When he stops in an alley, he is clearly in shock while examining the marks on his hand and wrist for a logic explanation. Peter's expression gradually changes from fear into amazement.

As I suggested in the sub-chapter "the space of action", the viewers can relate and comprehend Peter's thoughts and emotions thanks to the associative editing and the

¹⁸¹ Arnheim, Film as Art, 154-156.

actor's performance. The realistic impression of risks is reinforced by building anticipation through the editing.

In this particular scene, the montage of Tobey Maguire's close-ups and of symbolic images, such as the spiderweb in the alley, lead the character as well as the viewers to the same conclusion about the character's powers origin. The shot sequences of a thoughtful Peter and detail shots from Peter's point of view visually support the character's psychological reaction.

According to Rushton, the actor's absorptive performance is truer to life and to the fictional existence of the character. 182

There is no dialogue or monologue that explains what is happening to Peter, uniquely images do. Peter's stream of thoughts is conveyed even through the continuity achieved by the camera movements and the editing. The montage stretches the actor's absorptive performance in an uninterrupted experience, dividing the character's action in distinct camera shots from different camera angles. For example, when Peter shifts his attention from his hand to the web in the alley, his action evolves in three shots: in the first shot Peter looks at his hand and lifts his head, in the second Peter partially raises his head and looks up, in the third Peter observes the web and lowers his head. The mood of the scene shifts with Peter's enthusiastic reaction while he is crawling on the brick wall in the alley. Tobey Maguire's emotional display and his body language convey Peter's state of mind: he is not scared of his physical changes anymore, rather he is very impressed by what he is able to do.

Peter's psychological reaction is realistic in extraordinary events because it is based on human behaviours and self-discovery relatable experiences.

Spider-Man: Into the Spider-Verse

In order to test his own powers Miles decides to jump off a building, re-enacting a Spider-Man comic book story. He runs up the stairs of a tall building, but he changes his mind when he is on the rooftop. Miles decides to try jumping off the smaller building nearby. Before jumping, he trips over his shoe laces and badly falls from the roof, crashing against different surfaces and landing on the sidewalk.¹⁸³

¹⁸² Rushton, The Reality of Film, 73-75.

¹⁸³ Spider-Man: Into the Spider-Verse, R.: Bob Persichetti, Peter Ramsey and Rodney Rothman, (Orig. Spider-Man: Into the Spider-Verse, US 2018), (0:32:59 – 0:34:13).

Realism of space:

The four-dimensional space

In this scene Miles changes his ordinary routine and consciously tests his superabilities, interacting with the space from a different perspective.

Through his actions and point of view, the viewers witness the laws of physics of his reality as well as the risks that Miles faces when he embraces his extraordinary nature. Bordwell argued that classical Hollywood films favour a linear time progression to support the viewers' immersive experience without drawing much attention to the medium.¹⁸⁴

Similarly, *Spider-Man: Into the Spider-Verse* observes a linear time progression to engage the viewers in following Miles's actions and reactions to the ordinary and extraordinary happenings of his reality.

The animated camera conveys Miles's perception of the space either by assuming his perspective or by following him dynamically, naturalising the fictional content and the metaphysical space. The viewers experience Miles's vertigo and perception of depth when the character leans over the rooftop edge: the camera frames the buildings, the street and the moving cars from Miles's point of view. These impressions are also emphasized by the falling snow slowly descending on the street .

Even when the camera does not assume Miles's perspective, it emulates his movements and is influenced by the same laws of physics that affect the character. For instance, when Miles opens the door that accesses to the building rooftop, the image briefly gets brighter, conveying the change of light from darkness to outdoor, natural illumination.

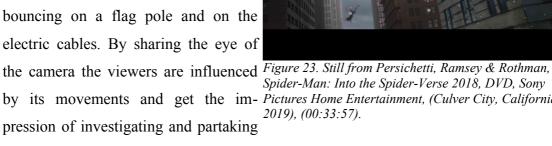


Figure 22. Still from Persichetti, Ramsey & Rothman, Spider-Man: Into the Spider-Verse 2018, DVD, Sony Pictures Home Entertainment, (Culver City, California, 2019), (00:33:27).

Emulating Miles's motion the camera movements even underline his physical dexterity and emphasize when the character overcomes the laws of physics or when he is defied by them. Miles's speed and motion in space is given by a lateral tracking shot of Miles running towards the rooftop edge.

¹⁸⁴ Bordwell, The Classical Hollywood Cinema, 42.

The character's physical impacts are emphasized by the camera movements: the animated camera supports and exaggerates the character's motion, it emulates the rebound effect of Miles bouncing on a flag pole and on the electric cables. By sharing the eye of



in the fictional space.



Spider-Man: Into the Spider-Verse 2018, DVD, Sony by its movements and get the im-Pictures Home Entertainment, (Culver City, California, 2019), (00:33:57).

Spider-Man: Into the Spider-Verse uses traditional animation techniques which exaggerate real and live-action references, but support the physicality of the characters' action and the laws of physics of their fictional reality. Miles's interactions with the space are reiterated by sound effects and motion lines.

While the sound effects support the action, the motion lines visually convey both the character's impact and change of direction in space. During Miles's fall, the voice actor's desperate cry as well as Miles's onomatopoeic scream accentuate the fall, its trajectory and the gravity.

The animation shows the viewers the speed of action and renders the impact more authentic, by animating Miles's extra limbs and skipping some of the character's key positions.

According to Wells, the animators magnify the character's human movements and behaviours to be consistent and realistic within the fictional reality. 185 During the fall, the change in Miles's frame rate supports the impression of increasing speed: he is animated on two's when he stumbles over the rooftop edge and on one's during his fast descent.

Spider-Man: Into the Spider-Verse relies on live-action realistic conventions of representation to convey the characters' perception of the fictional reality and on traditional techniques of animation to emphasize the characters' physical presence in the metaphysical space.

¹⁸⁵ Wells, Understanding Animation, 27.

The physical motion

The viewers experience the fictional New York City from Miles's perspective, assuming his point of view and perception. For example, when Miles observes the city from the rooftop, the animated camera frames Miles's shoes over the edge and the crowded street below, conveying Miles's space perception to the viewers. On top of the building Miles's small silhouette offers an impression of the spatial proportions, of the distance and the height of the skyscrapers.

Even the people and the cars are small, simple moving shapes in the background, but they still represent a lively society that exists beyond Miles's story.

The character's presence and consistency are supported by Miles's body language as well as by his relatable, human behaviour. Miles's way of being is reiterated by verisimilar interactions and expressive gestures in the fictional reality: he grips the handrail while running up and down the stairs, he kneels to read the comics, warms up before jumping off the building and lies exhausted on the sidewalk.

The character's way of life, his small expressions and emotional display are authentic despite the extraordinary situation that Miles experiences.

As already suggested in the sub-chapter "the four-dimensional space", motion lines and sound effects emphasize the character's physical impacts with surfaces, although the camera already support the outcome of Miles's action by anticipating his collision with the wall, the street sign, the taxi and the pavement. The anticipation prepares the viewers and draws their attention to the over-detailed reality, overcoming their expectations and familiarity with actual situations. Miles's fall and the laws of physics that affect it are exaggerated for comedy purpose, moreover the additional graphic elements, the character's point of view, his behaviour and body language constantly reiterate the character's physical presence in the fictional space.

The space of action

In the fictional reality Miles's extraordinary experiences do not always observe the true laws of physics, nevertheless they remain self-referential and consistent to the pragmatic terms of the fictional reality. In this scene New York City is hyperrealistic, coherent and overdetermined, it influences the outcome Miles's action in a peculiar way: Miles can jump from the rooftop of a building and survive in this "super

imitation" of the real American city. 186 The character's fall overcomes the viewers' expectations despite the montage repeatedly suggests the risks that Miles faces by alternating shots of the street below and Miles's terrified expression.

New York helps Miles, slowing down his fall and reducing the harmful outcome of his action: he bounces on the pool flag and on the electric cable, he crashes against the wall, the road sign, the taxi and eventually lands on the side-walk.

However, Miles suffers realistically from the fall and does some damages: the numbers of the vertical sign scatter, hitting the taxi, Miles dents the vehicle rooftop and briefly contracts in agony on the pavement.

The animation is perceptually realistic by addressing the viewers' real experience and knowledge of the analogous scene in Raimi's trilogy, but referentially fictional by overcoming real references and the viewers' expectations. As already suggested, the animation exploits unrealistic comic book elements such as motion lines to emphasize the outcome of the character's physical interactions with the space. In this scene the animation exploits a rapid sequence of drawings to show an additional consequence of Miles's fall: the breakage of a USB key in his pocket.

The digitally drawn frames overlap Miles's CGI silhouette and render a simple, fast animation of the USB key breaking in smaller pieces.

The combination of sound effects (acoustic and visual, represented by a comic book 'sound effect' balloon) and drawn frames anticipate Miles's damage to the viewers before the character realizes it. In this situation Miles's emotional display is subtler and more intense than his exaggerated and dramatic reaction during the fall.

Miles appears quite exhausted, both physically and emotionally, his attitude is true to life and justified by the fictional context.

Despite the unusual, unrealistic technique of representation, the damage to the USB key is authentic and has a realistic result on the Figure 24. Still from Persichetti, Ramsey & Rothman, fictional reality and on Miles.

Spider-Man: Into the Spider-Verse 2018, DVD, Sony Pictures Home Entertainment, (Culver City, California, 2019), (00:34:00).

¹⁸⁶ Eco, Travels in Hyperreality, 40-43.

Therefore *Spider-Man: Into the Spider-Verse* deviates from realistic references but it is realistic by being consistent to its own realistic terms.

Realism of action:

The inner-dimensional space

The scene only contains few suggestions about Miles's society because it is mostly concentrated on the main character and there are no monologues or dialogues with secondary characters that highlight social and political aspects of the fictional reality. There are few details of the mise-en-scène that convey an authentic impression of the context in which Miles lives: the Spider-Man comics, the replica of the Spider-Man costume, the "TUS: Trust Us Bank" building, the Mandeville hotel. According to Bordwell, an authentic mise-en-scène is characterised by the careful planning of details which must evoke a time and spatial context comprehensible to the viewers. While TUS and Mandeville are fictional brands that emulate the authentic ones, they only exist in Miles fictional universe. On one hand the representation of the bank and the hotel reiterate the urban context, on the other Spider-Man references support the impression of a society that coexists with its superheroes' presence.

Spider-Man influences the fictional society status quo as well as Miles's motivations. Despite his reckless actions, Miles is motivated by the context in which he has grown up, a society in which super-people are accepted. The fictional New Yorker is too busy to care about a masked teenager emulating Spider-Man.

The viewers can relate to Miles's actions and even identify with his human experiences: Miles's attitude to emulate a public figure, his comic book passion and his homage to Spider-Man in dressing up. The Spider-Man media and merchandise are both real and self-referential to the animated reality.

The animation addresses the viewers' personal experience and prior knowledge of the masked superhero to embed Miles's actions realistically in the fictional reality.

The psychological motion

As I already pointed out, the scene contains no social interactions with secondary

¹⁸⁷ Bordwell, Film Art, 176-177.

characters, but it is focused on Miles relating to the space from a different perspective: Miles has no familiarity with the space or at least there are no further details to suggest it, contrary to the previous sequences in which Miles has a personal connection to the locations.

The focus of the camera alternates between Miles's close-up and Miles's point of view to establish a correspondence between the character's and the viewers' perception.

The viewers experience the fictional reality, as they were part of it, by relating to Miles's emotional display and by assuming his perspective. Uninterrupted shots of Miles's point of view are effective in communicating his perception and decision making. For instance, when the animated camera shifts its focus from the Spider-Man comic book in Miles's hands to the building in front of him, the viewers infer Miles's intention

The animated camera functions as an intermediary between the viewers and the content, it involves the audience perceptually and emotionally. Williams argued that in the documentary practice "the camera and the movement in the material" act as intermediaries between the viewers and the filmmakers' representation of reality. 188

By relying on the perceptual cues, which constitute the real world, *Spider-Man: Into the Spider-Verse* addresses the viewers' experience and perception of solid objects and three-dimensional environment. Being familiar and involved with the represented associations, the viewers compensate the illusion even if the representation of the fictional reality is fragmented and the correspondences are partially realistic.

According to Arnheim, the cinematic medium is able to represent only a partial impression of reality, therefore the viewers unconsciously correct the discrepancies of the representation during the cinematic experience.¹⁸⁹

The design of the space is overdetermined, it evokes a realistic impression of New York City's skyscrapers landscape and explicitly refers to Raimi's *Spider-Man* scene in which Peter Parker tests his powers.¹⁹⁰

Real references and previous media representations of the metropolis are reduced to essential, visual details which are familiar despite they are fake. It is mainly evident in New York's varied and modern architectures, neon signs, fire hydrants, rooftop pipes

¹⁸⁸ Williams, Realism and Cinema, 91.

¹⁸⁹ Arnheim, Film as Art, 27.

¹⁹⁰ Spider-Man, R.: Sam Raimi, (Orig. Spider-Man, US 2002), (0:25:12 – 0:27:56).

and air ducts, yellow cabs and side-walk curbs.

The animated reality in *Spider-Man: Into the Spider-Verse* is unequivocal and familiar, since it is drawn from the actual world and the realistic conventions of live-action films.

The impulse to action

As I already suggested, Miles's motivations are human and relatable as well as his path of growth in the narrative. His actions and most of all his intense emotional display communicate comprehensible and relatable emotions to the viewers.

Even if Miles is enough motivated to jump off the building, he hesitates and his change of mind is comprehensible: his afflicted look on the side-walk and temporary immobility is human and true to life.

Contrary to Raimi's Peter Parker, Miles has no personal goal in testing his powers, he only desires to fulfil Spider-Man's last wish. The viewers relate to the universal feeling of responsibility despite they cannot relate to a fictional context in which superheroes feel responsible for the safety of their entire community.

Miles remains relatable in the extraordinary scenes because he still desires to fulfil his parents', teachers' expectations and his promise to Spider-Man. Even if the character has the abilities to reach great goals when he faces the risks he is often overcome by fear.

Miles is relatable since he is afraid of heights, physical dangers and equally he is little confident or skilled to achieve the goal at the first attempt. Miles's failure in his first leap in mid-air is a metaphor of a human experience to which any viewer can relate.

As I previously stated, the animation consciously relies on the audience familiarity with Spider-Man previous adaptations to credibly root Miles's character in the comic book universe and overthrow the viewers' expectations. *Spider-Man: Into the Spider-Verse* exploits references that are fictional but also part of the viewers' tangible experiences with the content. The spectators empathize with Miles's human flaws and relate to Miles's desire to test his ability and find out his inner strength.

3.4 Analysis findings

My film analysis highlights that *Spider-Man: Into the Spider-Verse* mimics the realistic conventions of the Spider-Man live-action adaptations as well as the unrealistic conventions of the comic books, achieving not only a "new kind of animated language", but also a different kind of realism.¹⁹¹

Drawing on Darley's theory concerning *second order realism*, Spider-Man animated reality could be regarded as a *second order simulation*, " a copy without original", being the animation a simulation and a combination of different representation of fictional and actual realities.¹⁹² Moreover, the innovative approach to the popular comic book character addresses concepts of intermediality and of self-reflexivity in the animated medium.

The Romance scholar Irina Rajewsky defined intermediality as those phenomena and configurations that result from the "crossing of borders between two media". The animators and directors of the 2018 computer-generated animation consciously combined the representative techniques of the animation, live-action and comic book media with the latest computer technology, writing new softwares that could realize their experimental vision. 194

According to Rajewsky's theory about intermediality, *Spider-Man: Into the Spider-Verse* could be considered as a "medial transposition" of Miles Morales comic book story in an animation and as a "media combination" of three distinct media.¹⁹⁵

The animation even uses "intermedial references", evoking and commenting aspects of the media it refers to, as well as self-reflecting on the animated medium. ¹⁹⁶ *Spider-Man: Into the Spider-Verse* consciously imitates and evokes the cinematic and comic book languages of representation through animated techniques and technology, distancing itself from the original texts and references. In Darley's opinion, a computer-generated simulation produces a different kind of text from its original sources, which he referred to as *second order reality*.

¹⁹¹ Bramesco, Charles "How Spider-Man: Into the Spider-Verse changed the animation genre", 18th January 2019, Retrieved on: https://www.vulture.com/2019/01/how-spider-man-into-the-spider-verse-changed-animation.html, (02.01.20).

¹⁹² Darley, Visual Digital Culture, 61.

¹⁹³ Irina Rajewsky, "Intermediality, Intertextuality, and Remediation: A Literary Perspective on Intermediality", *Intermediality, History and Theory of the Arts, Literature and Technologies* no. 6 (2005): 46.

¹⁹⁴ Bramesco, Charles "How Spider-Man: Into the Spider-Verse changed the animation genre", 18th January 2019, Retrieved on: https://www.vulture.com/2019/01/how-spider-man-into-the-spider-verse-changed-animation.html, (02.01.20).

¹⁹⁵ Rajewsky, Intermediality, Intertextuality, and Remediation, 52.

¹⁹⁶ Rajewsky, Intermediality, Intertextuality, and Remediation, 52.

By conveying the illusion of an immersive world through an innovative method of representation that overcomes any real and fictional references, Spider-Man: Into the Spider-Verse is "real-in-its-own-terms": it is consistent to its own realistic parameters, defined by the simulation and combination of other representative media. 197 Media scholar Jan Siebert argued that instead of challenging the realism of the photographic images the animated films create "a world with its own rules in which not only the characters are very flexible [...] but also the borders of the media". 198 The cartoonish and sometimes exaggerated design of Spider-Man: Into the Spider-Verse is consistent to its animated language and medium. The lack of photorealism and graphic fidelity to the *orthodox* proportions of a human being does not undermine the realistic quality of the animation. On the contrary, the viewers' engagement suggests that despite the animation fails to reproduce our reality, it does not even try to, its partial simulation is enough: the animators craft a composition of realistic impressions, showing the viewers only the necessary elements that support the narrative. Therefore, the realism of Spider-Man: Into the Spider-Verse is defined by the dual balance of realistic and unrealistic elements, by its intermediality and consequent selfreflexivity and by its partial illusion of reality.

Animated duality:

"We all have powers of one kind or another." 199

The Spider-Man trilogy as well as Spider-Man: Into the Spider-Verse contain CGI



Figure 25. Still from Persichetti, Ramsey & Rothman, Spider-Man: Into the Spider-Verse 2018, DVD, Sony Pictures Home Entertainment, (Culver City, California, 2019), (00:16:24).

effects, comic book graphic conventions and non-realistic aspects, however the two adaptations combine the realistic and non-realistic aspects in a very different way.

The live-action films try to hide the artifice by blending the computer-generated imagery with the live-action recordings in an almost invisible montage. Raimi's trilogy aims to

¹⁹⁷ Williams, Realism and the Cinema, 9.

¹⁹⁸ Nina Bishara and Winfried Nöth. "Self-Reference in the Media", (The Hague: De Gruyter Mouton, 2007), 157.

¹⁹⁹ Spider-Man: Into the Spider-Verse, R.: Bob Persichetti, Peter Ramsey and Rodney Rothman, (Orig. Spider-Man: Into the Spider-Verse, US 2018), (0:32:38).

create an immersive illusion and distract the viewers as little as possible, conveying both realistic and unrealistic elements as the same, undistinguishable content of the cinematic experience.

The evolution of CGI technology enabled both the realistic rendering of Figure 26. Still from Raimi, Spider-Man 2002, DVD,



synthetic models and the concealment *Sony Pictures Home Entertainment, (Culver City, California, 2004), (0:23:31).*

of mechanical props in live-action films.

However, the realistic animation of computer imagery requires additional adjustments such as the effects of motion blur and rank of focus in order to subtly emulate the photographic image.

On the contrary, the animation feature films do not need to conceal their manipulative devices because the audience is aware of their artificial nature. Spider-Man: Into the Spider-Verse brings out the graphic elements and exploits their expressive quality, consciously adapting and thematizing the comic book media. Graphic conventions such as motion lines, comic panels and onomatopoeic words pop up on the screen and capture the viewers' attention, temporarily breaking the immersive illusion of the animated reality.

American cartoonist and comic theorist Scott McCloud suggested that comics, liveaction and animated films are all forms of sequential art.

In fact a movie could be considered a "very slow comic" before being projected.²⁰⁰

However, while comic panels are spatially juxtaposed on the page, the frames of the animated and live-action films are sequential in time and occupy the same space, the screen.

Spider-Man: Into the Spider-Verse is neither a comic book nor a live-action film and it is neither a two-dimensional nor a three-dimensional animation, but it is something in between

Rajewsky stated that a media composition is "the result or the very process of combining at least two conventionally distinct media."201

Combining the representative qualities of sequential media with the techniques of

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²⁰⁰ Scott McCloud, Understanding Comics: the Invisible Art, (Northampton: Tundra, 1993), 8.

²⁰¹ Rajewsky, Intermediality, Intertextuality, and Remediation, 52.

traditional and computer animation, *Spider-Man: Into the Spider-Verse* achieves an "unprecedented text". ²⁰²

The animators of *Spider-Man: Into the Spider-Verse* avoided cinematic conventions such as motion blur and rank of focus, simulating both effects through the color aberration effect of comic books, and rendered the 2D models with a 3D look, giving a three-dimensional consistency to the bidimensional quality of comic book illustration.

The animation emulates the live-action conventions such as an authentic mise-en-scène, the continuity in the montage and in the camera movements to support a genuine representation of Spider-Man fictional reality and an immersive experience for the viewers.

The animation also mimics the comic book stylized character design, favoring a cartoonish look and a hand-drawn style, as well as the expressive use of graphic conventions, communicating and reiterating its intermediality.

Thus *Spider-Man: Into the Spider-Verse* is "a copy without original" because it achieves a different kind of animated language and realism through the emulation of the other representative media. According to Darley, the *second order realism* does not hide its virtuosity and artifices like live-action realism usually does, but it shows off the expressive potential of the animated medium. Likewise, *Spider-Man: Into the Spider-Verse* seeks transparency by consciously displaying its artificialness and its ability to copy and transcend any previous adaptation.

Viewers are able to enjoy the hyper-realistic quality of the animated film because they are aware of its "fakeness". *Spider-Man: Into the Spider-Verse* openly embraces the imperfections and unrealistic exaggerations of comic books and live-action films to convey a greater impression of realism. Even if the magnification of the laws of physics and of the human behaviors is unrealistic, it remains consistent to the realistic terms of the overdetermined reality and of the animation.

The animated film does not require the same consistency of a realist film to be believable, rather it uses representative codes that are familiar to the viewers to reiterate its connection to other forms of realistic representation.

The directors and animators of *Spider-Man: Into the Spider-Verse* combined different styles, genuine and artificial expedients, exceeding *orthodox* and live-action references to represent a reality that is aware of being both fake and realistic.

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²⁰² Darley, Visual Digital Culture, 50-60.

²⁰³ Darley, Visual Digital Culture, 61.

Self-consciousness and self-reflexivity:

"All right, people, let's do this one last time." 204

Both the animated and live-action films are self-referential, they consciously address the viewers' knowledge about the comic book character and their experience with the previous Spider-Man media adaptations. Self-referentiality is regarded by media studies "at the root of every medium": not only each medium is self-referential because it refers to itself, but also "(allo)referential" because it refers to other media such as its historical precursors.²⁰⁵

German linguist and semiotician Winfried Nöth defined different kind of self-reference: meta-reference (comments on the form and content of the medium), intratextual-reference (commentary on the individual text) intertextual-reference (quotations and allusions to other texts) and intermedial-reference (involvement and borrowing from more media). Nöth suggested that these self-references can be enunciative (when they refer to the authors, the actors or the readers of the text), iconic (when they repeat a point in the text or in other related texts and media representations) or indexical (when they refer to indices in the text or in other related texts and media representations). Or indexical representations).

Self-references highlight a self-conscious manipulation in live-action and animated representations.

According to Bordwell, a film is self-conscious when to "a greater or lesser degree it displays its recognition that it is presenting information to an audience" and its disclosed awareness may vary depending on the film genre or on the plot sequence. Narrative expedients such as voice overs directly addressing the audience, restricted point of views characterize a self-conscious manipulation as shown in all the examples of my analysis. 209

Jan Siebert argued that every time the animated characters address the viewers and make them reflect about their roles as part of the representation, the characters and viewers draw closer. The spectators feel like witnesses of a work in progress, of a "live broadcast".²¹⁰

²⁰⁴ Spider-Man: Into the Spider-Verse, R.: Bob Persichetti, Peter Ramsey and Rodney Rothman, (Orig. Spider-Man: Into the Spider-Verse, US 2018), (0:35:43).

²⁰⁵ Bishara, "Self-Reference in the Media", 6.

²⁰⁶ Bishara, "Self-Reference in the Media", 16-22.

²⁰⁷ Bishara, "Self-Reference in the Media", 16-22.

²⁰⁸ Bordwell, The classical Hollywood cinema, 24.

²⁰⁹ Bordwell, The classical Hollywood cinema, 32.

²¹⁰ Bishara, "Self-Reference in the Media", 159.

All the Spider-Man characters of *Spider-Man: Into the Spider-Verse* present themselves to the audience, repeating a similar formula with slight variations: "All right, let's do this one last time. My name is Peter Parker. I was bitten by a radioactive spider. And for 10 years, I've been the one and only Spider-Man." Not only is the animation self-conscious and aware of the viewers, addressing them through similar meta-references, but it also reveals its intertextual reference through the characters. In its first introduction, Peter Parker/Spider-Man states "I'm pretty sure you know the rest", acknowledging both the viewers' presence and familiarity with the previous media adaptations whose iconic scenes are successively presented and reenacted in the style of the animation.

An iconic self-reference that recurs in *Spider-Man: Into the Spider-Verse* as well in the prior adaptations are uncle Ben's words "with great power comes great responsibility". ²¹² As I have already pointed out in my analysis of the scenes, Miles's father humorously distorts the iconic phrase and by misquoting it he makes a meta-reference (comments on the form and content of the animation), an intratextual-reference (comments on the text of the animation), an intertextual-reference (quotes the comics and alludes to other adaptations), and a intermedial-reference (borrows the prior interpretations of the quote from more media). ²¹³ Consciously highlighting their references, the *Spider-Man* trilogy and *Spider-Man: Into the Spider-Verse* are self-deprecating, displaying self-referential humor. Both the adaptations invite the viewers to mock previous representations and in the case of the animation, even to mock the

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Figure 27. Still from Persichetti, Ramsey & Rothman, Spider-Man: Into the Spider-Verse 2018, DVD, Sony Pictures Home Entertainment, (Culver City, California, 2019), (00:32:05).

animated transposition of some iconic scenes.

As previously suggested, the intermediality of Spider-Man: Into the Spider-Verse implies a conscious self-reflection and it invites the viewers to contemplate the manipulative nature of the medium.

The recurring *Easter eggs*, "background details that contain references

²¹³ Bishara, "Self-Reference in the Media", 16-22.

²¹¹ Spider-Man: Into the Spider-Verse, R.: Bob Persichetti, Peter Ramsey and Rodney Rothman, (Orig. Spider-Man: Into the Spider-Verse, US 2018), (0:01:20 - 0:01:35).

²¹² Spider-Man: Into the Spider-Verse, R.: Bob Persichetti, Peter Ramsey and Rodney Rothman, (Orig. Spider-Man: Into the Spider-Verse, US 2018), (0:01:35-0:01:38).

to Marvel lore and hints of what may come in future films", and Stan Lee's cameos in the Marvel productions are humorous, transmedial and intertextual references that address the viewers' collective knowledge.²¹⁴

They please and encourage the spectators to be more attentive and Figure 28. Still from Raimi, Spider-Man 3 2007, DVD, therefore more involved with the California, 2012), (00:39:59).



Sony Pictures Home Entertainment, (Culver City,

fictional content and also reiterate the intermedial quality of the representations. In Rajewsky's opinion, intertextuality is a "subcategory of intramedial references" because it involves the crossing between distinct media, highlighting their differences.²¹⁵

The Spider-Man trilogy and Spider-Man: Into the Spider-Verse exploit intertextual references to embed the fictional stories realistically through the viewers' experience of real and fiction.

By recognizing the existence of a wider network of Spider-Man media that extends beyond their narratives, both adaptations consciously integrate intertextual references to please the audience as well as to ground themselves.

According to media scholars Terrance Lindvall and J. Matthew Melton by "alluding to other texts and context beyond itself" an animated text roots itself in the viewers' reality. 216 Addressing the viewers' knowledge of previous adaptations, both the liveaction and animated film establish a connection between the fictional content and the viewers' personal experiences of Spider-Man media representations in their physical reality. In Rajewsky's opinion the viewers' reception of an intermedial representation is influenced by the reference to their prior knowledge as well as by the relation between the involved texts. Because of its implicit and explicit commentaries to other media representations, Spider-Man: Into the Spider-Verse has an additional layer of meaning: it tricks the viewers by imitating and evoking familiar media, but it also reiterates the potential of the animated medium to emulate and transcend other medial experiences and consequently other realistic experiences.

²¹⁴ Matt Yockey, Make Ours Marvel: Media Convergence and a Comics Universe, (Austin: University of Texas Press, 2017), 303.

²¹⁵ Rajewsky, Intermediality, Intertextuality, and Remediation, 54.

²¹⁶ Terrance R. Lindvall and J. Matthew Melton, "Towards a Post-Modern Animated Discourse: Bakthin, Intertextuality and the Cartoon Carnival" In A Reader in Animation Studies, ed. Jayne Pilling, (London: J.Libbey, 1997), 212.

Spider-Man: Into the Spider-Verse presents itself as a crossover of multiple Spider-Man comic books and of multiple medial representations of the character. Film professor Henry Jenkins described transmedia storytelling as the "process where integral elements of a fiction gets dispersed systematically across multiple delivery channels for the purpose of creating a unified and coordinated entertainment experience". In Jenkins's opinion transmedia texts set a system of roles and objectives that are useful to the viewers to understand them as a whole, but the texts also disperse information and they cannot elaborate every primary and secondary story. Thus the viewers feel entitled and responsible to collect all the data, speculating on the given texts in order to expand them and give them a "life of their own". 218

Spider-Man: Into the Spider-Verse satisfies the viewers' interests and imagination by gathering different 'Spider-People' and distinct medial transpositions. Self-references are expedients that highlight the creator's presence, expose the creative process, address the materiality of the film, offer a commentary about other media and also get the viewers to be closer to the fictional content and its making.

The animation self-consciousness and self-referentiality challenge the viewers' concept of reality, drawing from their knowledge and experience of both real and fiction.

Uncanny Valley and partial illusion: "It's a leap of faith, that's all it is." ²¹⁹

The Spider-Man trilogy and Spider-Man: Into the Spider-Verse simulate the perception

Figure 29. Still from Persichetti, Ramsey & Rothman, Spider-Man: Into the Spider-Verse 2018, DVD, Sony Pictures Home Entertainment, (Culver City, California, 2019), (00:01:34).

perception with an "enigmatic alive-ness", being projections of moving

of everyday life along with the perception of human beings.

As I have already examined in the second chapter, motion is an inherent quality of life as well as a fundamental characteristic of the live-action and animated media. The films trick our perception with an "enigmatic aliveness", being projections of moving

²¹⁷ Henry Jenkins, "Transmedia Storytelling 101", 21st March 2017, Retrieved on: http://henryjenkins.org/blog/2007/03/transmedia storytelling 101.html, (02.01.20).

²¹⁸ Henry Jenkins, "Transmedia Storytelling 101", 21st March 2017, Retrieved on: http://henryjenkins.org/blog/2007/03/transmedia storytelling 101.html, (02.01.20).

²¹⁹ Spider-Man: Into the Spider-Verse, R.: Bob Persichetti, Peter Ramsey and Rodney Rothman, (Orig. Spider-Man: Into the Spider-Verse, US 2018), (01:19:39).

images.220

In McLaren's opinion, animation is the art of movement and according to the German film historian Thomas Elsaesser "the only element which is mimetic in the most realistic film is the physical movement of the characters".²²¹



Figure 30. Still from Raimi, Spider-Man 2002, DVD, Sony Pictures Home Entertainment, (Culver City, California, 2004), (00:35:15)

The substantial difference between the California, 2004), (00:35:15).

animated and live-action media is that the audience is well aware of the artificial nature of the animated motion. Eisenstein pointed out that despite the audience acknowledges the animations as lifeless drawings, puppets or three-dimensional images on a screen, they also perceive them "as alive, as existing and even thinking". The aliveness of the animated character is bestowed not only by the motion but mainly by the viewers' perception.

The Japanese robotic professor Masahiro Mori coined the term "uncanny valley" to define the unsettling feeling that a person experiences when confronted with an imperfect physical or computer-generated simulation of a human being.²²³

Mori observed that applying a hyperrealistic human likeness on a robot can provoke an eerie sensation in the consumers. When they realize that something that "looked real is in fact artificial" they lose a sense of affinity and distance themselves from the representation.²²⁴ If the simulation is photorealistic, surrealistic or a mix of realistic tendencies, its discrepancies in the voice, movement and appearance stand out, underlining a lack of verisimilitude.

Moreover, the motion risks to intensify the sensation of eeriness: "movement related effects" such as the change of expression can turn creepy when they are relatively close but not exactly faithful to the real thing.²²⁵

However, Mori argued that "is possible to create a safe level of affinity by deliberately pursuing a nonhuman design". In fact an incomplete, stylized representation of a human-like character is perceived as more appealing and even more relatable when it

²²⁰ Wells, Understanding Animation, 24.

²²¹ Williams, Realism and Cinema, 9.

²²² Eisenstein, Eisenstein on Disney, 55.

²²³ Masahiro Mori, "The Uncanny Valley", *Energy*, vol. 7, no. 4, (1970): 33–35.

²²⁴ Mori, "The Uncanny Valley", 33–35.

²²⁵ Mori, "The Uncanny Valley", 33–35.

lacks graphic fidelity. Confronted with an incomplete simulation, for example a cartoonish representation of a human being, the viewers are engaged by its human behaviors rather by its visual imperfections and tend to compensate the discrepancies with a personal interpretation. The viewers are invested in deciphering the human alikeness in the partially simulated being, instead of concentrating on the lack of verisimilitude. *Spider-Man: Into the Spider-Verse* neither copies the actor's appearance of Raimi's trilogy, nor it thrives for a photorealistic representation of the human being. Even when the animation reenacts certain live-action scenes, it avoids the caricatural or the photorealistic rendering of the actors it refers to, favoring stylized characters.

The viewers can easily imagine the live-action interpreters of prior adaptations under the Spider-Man mask.

Exaggerating the character design, the animators consciously strayed away from a perfect simulation, magnifying the characters' human flaws with a cartoonish style. Mori used the example of the *bunraku*, the traditional Japanese puppet theater, to stress that the awareness of being in the presence of an artificial simulation does not undermine its realism. Despite the puppet "realism in terms of size, skin texture, and so on, it does not even reach that of a realistic prosthetic hand", once the audience is being absorbed by the performance it feels a strong empathy for the marionette. ²²⁶ As I have already affirmed in the second chapter, the animated realism goes beyond the mere graphic fidelity to photographic and live-action references and the viewers' participation is fundamental to the reception of determined aspects of the animated film.

Arnheim stressed that as long as non-human characters behave like human beings the viewers consider them "real enough" despite their physical non-existence and that in front of a partial representation of reality the viewers tend to compensate it with their experience. The spectators are actively engaged in their own interpretation of *Spider-Man: Into the Spider-Verse* fictional universe and of its inhabitants because of the lack of verisimilitude. They compensate and partake into the animated simulation, overcoming the differences and rather enjoying the affinity with nonhuman characters. *Spider-Man: Into the Spider-Verse* appeals the viewers with its stylized and partial representation of reality engaging them in an immersive experience that they perceive almost real.

²²⁶ Mori, "The Uncanny Valley", 33–35.

²²⁷ Arnheim, Film as Art, 29.

CONCLUSION

Animation is per se a conscious art, it does not hide its artifice. Orthodox animations exploit intertextual-references to support the plot by reiterating the nature of the events and characters. Developmental animations are self-referent because they consciously challenge the potential of the animated media and the viewers' perception of the boundary between unrealistic and realistic elements.²²⁸ Though I initially considered Spider-Man: Into the Spider-Verse an orthodox animation, it could also be regarded as a developmental one since it is aware of its hybrid, experimental form and of its address to the viewers.²²⁹ The animation challenges the representative potential of the medium as well as the theories about realistic representation in both animated and live-action media. When I first tackled the theoretical debate about realism I wondered whether it would be possible to apply the theory about cinematic realism to animation or if it would be necessary to define a new theory. During my analysis I came to the conclusion that animation emulates some of the realistic conventions of live-action and therefore animated realism could be regarded as a further development of live-action realism. Not only are the two theories intertwined, but they are also related to theories of realism in prior and distinct media. As I have already suggested, intermediality is an intrinsic quality of the animated medium and the reason why animation can be so expressive, innovative and yet familiar at once. Applying the theory of cinematic realism to animation highlights the medial similarities between the two practices, the analogue and different approaches to realism. Therefore, animated realism should not be considered as a distinct theory, but as an essential part of the larger debate in the visual media. However, the progress of technology and of the animated language implies a constant evolution of both live-action and animated theories about realism. Since computer-generated animations convey a realistic impression by staging fictional realities on a metaphysical plane I also questioned whether these synthetic representations can be realistic at all. Despite the live-action and animated media have distinct approaches to reality they rely on a similar technology and they both trick the viewers' perception to deliver a realistic illusion. However, animation does not strive to be realistic in terms of graphic fidelity, but rather to be believable for the viewers. Unbound to any photographic recordings the animated medium creates a world anew

²²⁸ Wells, Understanding Animation, 35-46.

For further information see chapter 3.3.2 "*Spider-Man: Into the Spider-Verse* (US 2018, Persichetti, Ramsey & Rothman)", specifically page 70-78 of this work.

that appeals the viewers' experience and their idea of reality, achieving even a higher degree of realism than live-action on an emotional level. The viewers consider an animation realistic when it conveys a credible representation despite the fact that the represented reality is staged on a metaphysical plane.

In the history of animation the viewers' curiosity towards believable meta-realities increased and the animators' tendency towards realistic representations as well. Therefore, I pondered whether this fascination between animators was justified by a scientific curiosity or by an aesthetic goal.

Indeed the animators have a dual role, they are both developers and creatives. In the case of *Spider-Man: Into the Spider-Verse* the animators had to develop programs and tools that could realize their aesthetic vision. The medial flexibility of animation enables the animators to master its representative potential more and more in order to convey their creative visions.

I would properly state that rather than scientific, the animators' curiosity may be defined as technical. In fact, when it comes to animated realism the animators' technical fascination and aesthetic goal overlap and it is difficult to understand which one prevails because they foster each other. Mori demonstrated how tricky the pursuit for photorealism can be for animation and how extensively the technology has achieved a perfect, pleasant simulation of the human being.

The constant technology progress and the most recent and evident tendency of computer-generated animation towards a realistic representation suggested an ambition in the medium to surpass live-action in the depiction of reality. However, realism is not an ambition in animation, but rather an expedient that enables the medium and the genre to ground themselves and to convey a believable meta-reality by addressing the viewers' experience of the real. Sometimes a certain degree of realism is required to appeal the audience and enhance the immersive experience: realism can be either disrupted or reinforced, depending on the animator's goal and message. Animation has always been influenced by live-action and I would affirm that today the opposite is also true. The viewers are used to both media, they are accustomed to have their perception of reality challenged, making it increasingly difficult to surprise them. Maybe the future technology and animation techniques will indeed achieve a more genuine representation of reality than the live-action medium, however today the media combination of live-action and animation is capable of surpassing any other representations.

Similar to Raimi's trilogy, more recent examples, which rely upon even more advanced CGI technology, showed that the two representative media can achieve a higher, realistic illusion. The borders between real and unreal can become even more blurred when the live-action and animated media join forces, drawing from the reciprocal potential.

In the end the viewers are the ultimate judge and regard a representation as plausible according to their own experience of both real and cinematic fiction. During the writing of my thesis I understood that realism can be subjective, its use can be different in each media and its definition constantly changes with the passing of time. I also dealt with the never-ending evolution and experimentation within and in-between the media which influence the theoretical debate about realism.

Regretfully I could only tackle the surface of the theoretical debate about realism and I limited my research of animated realism to the analysis of an anomalous animation that combines different styles by imitating distinct media. Nowadays the animated language and the realistic approach of *Spider-Man: Into the Spider-Verse* may be regarded as innovative because the animators achieved an unprecedented form of representation by combining pre-existing devices and techniques. However, I can only suppose that in the future the computer technology and animated techniques adopted by *Spider-Man: Into the Spider-Verse* will not only be mastered but also surpassed.

The discourse about realism is in constant progress, it is changing and expanding because of the endless evolution of the animated and live-action media as well as the changing reception of the audience.

The realistic conditions that I investigated in *Spider-Man: Into the Spider-Verse* might vary or even not apply to other computer-generated animations. More research is required to further explore the different realistic approaches in the other forms and techniques of animation.

By expanding the historical research about animated realism it can unveil different theories and approaches through the analysis of prior and relevant realistic examples according to the considered animation technique.

A specific cultural outlook of both the theory and the animated pictures could suggest other trends, other ways to convey a realistic impression that differ from the mainstream, western animations.

It might also be interesting to expand the analysis to other animation techniques: bidimensional such as traditional, hand-drawn animations or three-dimensional,

photographic related techniques such as puppet animation.

It is still challenging to think about animation in terms of realism. Even if the present audience is more used to the animated practice, the viewers often associate realism to improvised acting, to the contextualization of social issues, to the shaking camera and the filmmaker's presence, common in the live-action and documentary genre. Improved by the constant experimentation of the entertainment industry, the ongoing theoretical debate about animated realism has highlighted realistic expedients that go beyond the photographic, naturalistic and spontaneous recording of reality.

Realism in animation has a different meaning and also a different purpose: animation is the art of movement, of enigmatic aliveness and of realistic lies such as fictional immersive worlds. The animators desire to tell a story as it has never been told before and to let the viewers join in a lively animated world.

According to *Spider-Man: Into the Spider-Verse* co-director and writer Rodney Rothman, the most fascinating aspect about Miles's animated reality for the viewers as well as for the animators is that "we are in an alternative universe [...], we can do whatever we want. It's not reality, it's another reality."²³⁰

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