Aesthetics and Narratives in Audiovisual Media

Francisco José Mateu Torres

UNIVERSITAS Miguel Hernández

Aesthetics and Narratives in Audiovisual Media

Autor:
Francisco José Mateu Torres

ISBN:

979-13-87966-00-3

Fecha de edición:

21/07/2025

Editorial:
Universidad Miguel Hernández de Elche
Maquetación:
Servicio de Innovación y Apoyo Técnico a la Docencia y a la Investigación UMH

UNIVERSITAS Miguel Hernández

Introduction

This book offers a series of contents that revolve around the different theoretical aspects of aesthetics and narratives in audiovisual media. Under this aspect, this publication works under a double aspect. On the one hand, it is a research and dissemination work, since it presents the concepts in an accessible way, allowing any reader interested in the audiovisual world to delve into the principles that govern the creation and analysis of the different audiovisual contents. But on the other hand, the book can serve as teaching material for audiovisual communication studies (script, sound, postproduction, etc.), as it delves into key issues for the training of future professionals in the audiovisual sector. All this, accompanied by a multitude of graphic examples.

Based on these particularities, this book introduces contents ranging from the creation of a film script, delving into the structure and essential elements of audiovisual narrative, to the analysis of the sound aspects that enrich the audience's experience. The book also explores audiovisual editing and postproduction techniques, which are essential to give aesthetic and narrative coherence to the works; and a section is dedicated to storytelling in interactive digital media, highlighting the importance of the user's active participation in the construction of the story. Finally, transmedia narratives are addressed, understood as strategies that expand the narrative universe through multiple media and platforms, allowing an immersive and fragmented experience that involves the audience at different levels and contexts.

Chapter 1. The creation of storytelling in the audiovisual media

Storytelling offers a series of instruments that facilitate its subsequent treatment in images and sounds. These tools are used in any audiovisual story, whether it is a video for an advertising campaign, a short film, a fiction or documentary film, the cinematic of a video game, etc. In this sense, all audiovisual works are circumscribed to a series of elements that make up the so-called audiovisual narrative, the script being one of them, and whose essence is based on storytelling. Storytelling etymologically responds to oral narration, which already indicates that it is a vehicle of expression prior to the invention of writing itself, which was also the first object of literary creation.

Storytelling is therefore the art or skill of telling a story, applied to any medium of expression. In the context of literary scripts, these did not become particularly relevant until the advent of sound films, with the incorporation of dialogue in the characters. It should also be remembered that, depending on the different bibliographical references consulted, the procedure for the development of a screenplay may vary. However, in the following sections of this chapter, a methodology is proposed that groups together a series of elements, which will allow us to introduce us to storytelling within the audiovisual story.

1.1. From the initial idea to the synopsis

When we start writing an audiovisual story, the first thing to bear in mind is to know how to express our idea. As Blake Snyder (2005, p. 26) points out, it is a matter of telling what our story is about in a single sentence. The idea can come from a real experience, an imaginary event, a hypothetical question, etc. For example, an idea for a film could be the result of what would happen if a prehistoric mosquito was found trapped in amber after having bitten a dinosaur. Thus, an idea must contain sufficient material to give rise to a dramatic development, but also to the thematic message to be conveyed, providing the basis on which the substance of the story will later be articulated (McKee, 1997, pp. 171-172).

Under these aspects, there are various concepts that can sometimes allude to the same meaning, or that differ only by some nuance. For this reason, and based on our research, we will define and combine the most common terms when starting to write an audiovisual story. Firstly, the premise is defined as the desire or objective of the story. It has to function like the cover of a book that catches our attention and therefore we want to discover its interior (Snyder, 2005, p. 29). The theme, on the other hand, is the guideline stated in a single sentence, but instead of synthesizing the story it unifies the whole narrative (expressing its irreducible meaning) through what Robert McKee (1997, pp. 148-149) defines as the controlling idea. For McKee (1997, pp. 145-146), the creative process is limited by the premise and the controlling idea, which is the ultimate meaning of the story through a closed statement; unlike the premise, which is the initial inspiration.

We also find the logline, which is considered a synonym of the idea, but synthesizing the starting point. In this sense, the logline states in thirty or forty words the most significant summarized content, as it is the concept of the story. Although they may sometimes coincide, the logline should not be confused with the tagline, which in advertising discourse is usually identified with the slogan (Snyder, 2005, p. 29). Finally, the synopsis consists of summarizing the plot based on the most relevant events that occur in the story, and offers a glimpse of the narrative structure in terms of what the main characters are like, what the place is like, how the events will occur, etc.; therefore, it must answer what happens (how the story begins, how it

develops and how it ends), who the main characters are, when it happens, in what place and for what reasons.

The synopsis is written without dialogue, in the present tense, and in story format. That is, it has to have a beginning, a development and an end, as every story has to be closed (Gaudreault and Jost, 2005, p. 26). It is also known as a plot synopsis, and it sets out the facts from beginning to end, unlike a commercial synopsis, where the ending is not revealed, and which can be found in film credits, book back covers, etc. If it is very schematically elaborated, it is called a storyline, although its use and terminology is very disparate, since it proposes principles, not rules (McKee, 1997, p. 17). Its length will depend on the type of story, since it is not the same to write the synopsis of a commercial, which will take up half a page or even less, as it is to write the synopsis of a film, which will be three, four or five pages long.

As an example of these concepts, an old spot entitled *True Love* (2009), produced independently, tells a short story that takes place in New Mexico in 1964. In the spot, a girl and a boy are isolated in a parked car at night. Meanwhile, music plays on the radio. As the couple begins to get more intimate, loud radio interference and a sudden swaying sound interrupts the situation, and they both get out of the car. Finally, the boy is abducted by a UFO; but before this happens, the girl manages to pull off his Levi's trousers to keep them, as the boy was wearing them unbuttoned. The lines just written articulate the synopsis of the spot. What happens? We have summarized how the story begins, how it develops and how it ends.

Who are the main characters? We have a girl and a boy, who are the protagonists of the spot. When does it happen? A night in 1964, as, in this case, it is indicated by a sign above the image (Fig. 1.1), as well as the place, as this type of text offers linguistic effects, but also narrative ones. If this were not the case, it should be understood through the audiovisual story itself. Where? In New Mexico, the same place where, almost two decades ago, the Roswell case took place, which connects with the UFO theme. For what reasons? The intimacy between the couple and the abduction of the young man trigger the final outcome; in other words, they are the determining events.

Figure 1.1. *Frame from the spot True Love (2009). Source: Own elaboration using the original material.*

The idea of the spot is that a boy is abducted by a UFO with his Levi's trousers unbuttoned, and the girl decides to save the trousers (the advertised product) rather than the boy. Regarding the

premise, it is about giving more importance to the product through a personification of the product, which would symbolize true love. The theme of the spot is that true love saves the advertised product from a UFO abduction. On the other hand, the Logline is that a couple is inside a parked car. While the radio is playing, the two begin to get intimate, but some interference and sudden swaying interrupts the situation, both get out of the car and find themselves in front of a UFO, which will result in the loss of the Levi's trousers that the boy is wearing. In this sense, the logline is less detailed than the synopsis; and the tagline would be the slogan itself, which announces that we can only have one true love. If we did not reveal what happens after they both get out of the vehicle, we would be closer to the concept of a commercial synopsis.

This series of terms is very heterogeneous, as there are authors who, for example, use the concepts of theme and plot, or theme and idea indistinctly (Field, 2006, p. 16). For this reason, we only intend to present the concepts under their most common definitions, since the fundamental thing is to understand that storytelling is based on knowing how to use a series of tools that allow reaching the audience. As can be seen, when faced with a blank page, one does not start directly with writing the script: first one has to think about the idea, the theme, the desired premise, etc.; and so, after drawing up the synopsis, the next step is the plot.

1.2. The plot

When we have finished our synopsis, we will proceed to elaborate the plot. The main difference with respect to the synopsis is that the plot is a more descriptive and detailed account, going deeper into the plot (McKee, 1997, p. 65). For this reason, its length will be more extensive, and will depend on the type of audiovisual work. Under this aspect, in the plot of the aforementioned spot *True Love*, the actions offered in the synopsis, which consists of a summary of the plot, would be more detailed. Thus, new information would be offered, such as the specific actions carried out by the young people inside the vehicle. Although this is something to be taken into account from the articulation of the synopsis, in the plot we have to think about the concepts of storyline and conflict, two basic elements of storytelling.

1.2.1. The storyline

Storyline is the choice of interrelated events that occur in the story, as well as the design and temporal form in which they are framed (McKee, 1997, p. 65). If a story is based on a causal chronology of events, storyline is about selecting and ordering the events that will appear. It is therefore important to decide what will be incorporated and what will be left out, since every narrative event has to create a change of value in the situation, and this will be achieved through conflict (McKee, 1997, pp. 54-55).

1.2.2. The conflict

The conflict rests with the characters, and ideally one should appear in every scene, although there are no rules. From a primary aspect, including a conflict in every scene ensures the audience's attention (Snyder, 2005, p. 152). A conflict can be something as simple as wanting to go to the toilet and being prevented from doing so; or having loud interference and sudden swaying interrupt the intimacy of young people in a car. However, the abduction of a UFO would be a major conflict; that is, if conflicts appear in crescendo, a plot with a continuous interest will be articulated. Thus, a conflict is constructed through a character's motivation and urgency to reach a goal with an obstacle, and three levels can be distinguished (Fig. 1.2). On the one hand, we have inner conflicts. This is the most internal level; the character with himself, his

own self. Secondly, we have the personal conflicts. This is the second level; the character's conflict with his closest environment: family, partner, lovers, friends, etc. Finally, we find extra-personal conflicts. This is the third level; it includes antagonistic sources that are far from the personal circle, such as justice or nature.

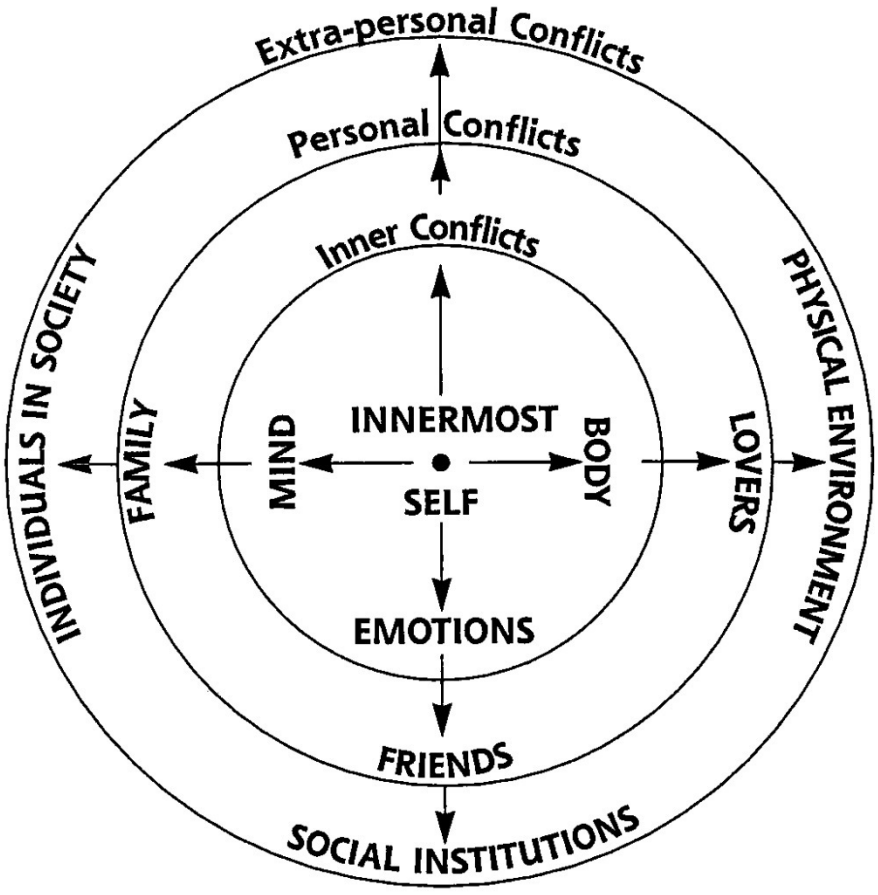

Figure 1.2. *The three levels of conflicts. Source: Robert McKee (1997, p. 146).*

Ideally, any story, audiovisual or otherwise, should have all three levels, but this is not always the case. For example, the characters in the spot *True Love* feel a mutual desire as a motivation, with a certain urgency, but the advertised product is the obstacle. This is the first conflict, which affects both of them internally because they cannot satisfy their intimate desires. However, the obstacle is also part of the young man's wardrobe and comes between the two (as a personification, because the trousers are really true love), on a second personal conflict level. From this point onwards, the events outside are triggered, the resolution of which takes place with the abduction of the UFO, which, as a threat from the outside, acts on a third level as an external conflict.

1.3. The structure

Structure consists of the relationship between the parts and the whole. As a dramatic structure, Syd Field (2006, p. 28) calls it a *paradigm*. Under this aspect, it is a skeleton, narrative scaffolding or conceptual scheme of the aspect that the future script will have, counting in most cases with three common elements: a beginning (first act), a development (second act) and an

end (third act), which is what is known as the classical or Aristotelian structure of a story. Thus, an act is defined as the macro-structure of a story through significant events that give way to each other (McKee, 1997, p. 265). The structure is also composed of a number of elements that are present in most linear stories. This is the most common scheme, although there are other formulas, such as Blake Snyder's time sheet (2005, p. 104) or the hero's journey (Campbell, 2008). If in this classic structure, where we will always find three acts, we advance in its story, six events will mainly emerge, which will affect the main characters.

Firstly, there is the inducing incident. Also known as the inciting incident, this is the first major event that breaks the initial stability of the protagonist and is the cause of everything that happens afterwards. In a feature film, it usually happens before the first ten minutes of the film, although this is a relative factor, depending on the final length of each audiovisual story. A triggering incident, which is always found in the first act, can be the arrival of a letter from Hogwarts School of Witchcraft and Wizardry, or a wizard breaking into a hobbit's daily life and setting him on an adventure, so the protagonist must know how to react to such an incident (McKee, 1997, p. 236).

This is followed by the first twist or turning point. Also known as plot twist, a dramatic twist is a completely unexpected direction taken by the events of a story following an action or event by one of the main characters, requiring new decisions to be made. After the inducing incident, the actions that follow should ideally be in crescendo, but the arrival at the first turning point will be a bigger event than anything that has gone before, giving way to the second act, which in a film usually begins at about the thirtieth minute and lasts for an estimated seventy minutes (McKee, 1997, p. 267). A first plot twist may occur, for example, when a character must choose whether to participate in the so-called hunger games, or allow his sister to be killed.

The second turning point or plot twist consists of a borderline event between the second and third acts of the story. This represents a turning point where all seems to be lost, and such a turning point will bring about a change in events, where the decisions of the protagonists will be crucial. A second turning point would be, for example, when an extraterrestrial called ET appears to be dead, but the right circumstances lead to his resurrection, giving way to the third act.

On the other hand, the crisis represents the ultimate decision of the protagonists, where they are involved in a dilemma that they have to resolve, and it is also an obligatory element in any story (McKee, 1997, p. 365). Under a crisis situation, the characters are faced with the greatest pressure they can endure throughout the story, and it usually precedes the climax, to the extent that there may be cases where the crisis is within the climax itself, depending on the length of the latter (McKee, 1997, pp. 366-368). An example of a crisis would be when a hobbit has no more strength to reach Mount Doom, where he must throw the one ring, but his companion carries it on his back to go on.

As for the climax, its existence culminates the dramatic course of the action and brings about the resolution of the storyline, usually functioning as an action following a previous decision located in the crisis. Thus, the climax is the big final change in the story, and ideally it should respond directly to the inducing incident. That is, if the incident is that the protagonist must go to Mount Doom to throw away the one ring, the climax would have to consist of getting rid of the one ring there. Finally we have the resolution. Thus, the stories do not end right at their climax, as the protagonists have to regain the stability (or a new kind of stability) they had lost before the arrival of the inducing incident (McKee, 1997, p. 377). For example, after making the single ring disappear, a possible resolution might be a return home.

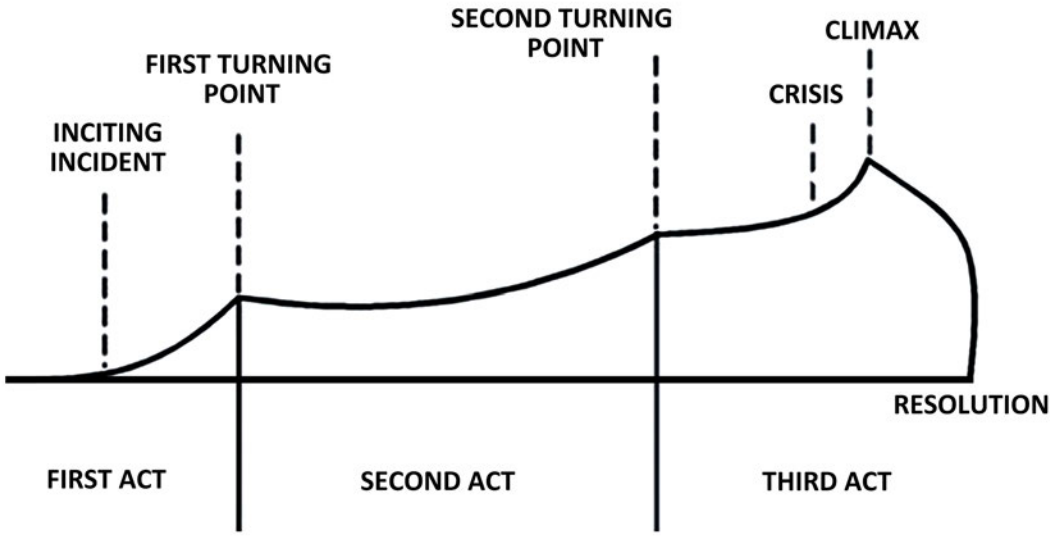

Figure 1.3. *Classic storytelling structure. Source: Own elaboration.*

If we go deeper with new events, we sometimes find, for example, an important event in the middle of the story, a midpoint climax (McKee, 1997, p. 269). However, it is the aforementioned introductory elements that make it possible to detect the structure of an audiovisual story. In the case of a spot, it is sometimes common that there is no classical structure scheme due to its short duration. However, if its storytelling allows it, as in the case of the aforementioned spot *True Love*, its structure can be analyzed. Thus, the inducing incident is the event that breaks the initial stability of the main characters, embodied in the boy's trousers, as the fact of not being able to take them off completely prevents the couple from continuing to have intimate relations.

In relation to the first turning point, loud interference on the radio and some abrupt rocking interrupt the situation even more (covering the ears), being an event with a greater dramatic twist than the previous one, entering a micro second act. Thus, the protagonists must make a decision, which is to get out of the vehicle. As a second plot twist, the point of inflection where it seems that all is lost by provoking a change in events, and which gives way to the micro third act, is the moment when the light of the out-of-field UFO appears in a zenithal way over the young man, who begins to rise towards the sky.

As the final decision of the protagonists, the boy has no power of decision, as he is unprotected, with his trousers down, and ascending towards the UFO, and he asks for help from the girl, who initially seems to try to help him back down to the surface of the ground, but fails to do so. This would be the crisis, which would then lead to the climax. As for the climax, since it is an action following an immediate prior decision, it is situated at the moment when the girl decides to leave the boy after having been able to save only his trousers from him, which, having lowered them, responds directly to the triggering incident; in other words, now she has been able to remove them completely. As for the resolution, stability falls solely on the young woman, who leaves with the trousers while the tagline of the spot appears.

Once we have the structure of the plot, the next step is ideally to design a sketch. The rundown is a tool that allows us to work in a more detailed way on the actions that take place throughout the audiovisual story. In this sense, a rundown is a list of all the actions that the future script will have, with a brief description of them. Sometimes, the playbill is defined as a list of scenes or sequences, but if instead of listing scenes, we list actions, we will have a more detailed

vision. The outline is also written in the present tense and without dialogue, although dialogue is indicated indirectly, listing everything that happens. Once our storyline has been structured and our rundown has been written, we will carry out the treatment, which is the immediate step prior to writing the final script of the audiovisual story.

1.4. The treatment

The treatment is the literary exposition of the whole story under the appearance of a story. The treatment arises from the content of the playbill, and although no dialogue is incorporated in it either, the actions are more detailed and grouped into paragraphs; and each paragraph will contain a scene, which is that part of the narrative with spatial continuity (Bordwell and Thompson, 1994, p. 493). That is, when the space or location is changed, a new paragraph begins. To use the spot *True Love*, again as an example, it should first be noted that if part of the audiovisual story takes place inside a vehicle, it is necessary to differentiate those actions that take place outside the vehicle from those that take place inside it, since for practical purposes all this will condition the different aspects of the future filming. With this in mind, the treatment would begin in this way: A vehicle is parked in a fence with no one around. A text appears indicating that we are in New Mexico in 1964. A young girl and a young boy are inside the vehicle, listening to the song *I love how you love me*, by Bobby Vinton. They look at each other with desire, while he gestures with his gaze towards the area of his trousers.

They kiss, pulling each other close. She pushes him back into his seat, practically on top of him. She looks down at the boy's trousers area. They both try to pull his trousers off, but are unsuccessful. He steps on one of the vehicle's pedals as a result of the struggle. They both manage to unbuckle the belt of his trousers. A buzzing noise starts to sound, disconcerting both of them. The vehicle starts to lurch. The girl asks the boy what is happening. The boy tells her he doesn't know. Loud interference intermingles with the music. They both cover their ears because of the interference. The girl asks what it is that is playing. The boy answers something unintelligible due to the interference, which is in crescendo and results in both of them going outside. The boy finds it harder to get out of the vehicle, as his trousers are not buttoned, falling to the ground. The boy crawls slowly away from the vehicle. The girl watches the boy from the other side of the vehicle. The music plays louder and louder inside the vehicle, until the music cuts out. The song *Crazy Love*, by Paul Anka, begins to play on the car radio. The light of a UFO invades the boy, who looks up. The girl runs towards the boy, who has already ascended a little into the sky. Ultimately, the more detailed the treatment, the more work will have been done on the next step, which is the development of the final script.

1.5. The literary script

The literary script is a document where everything that is to be seen and heard in the structure of the audiovisual story is indicated. In this sense, the script consists of actions, descriptions and sounds (dialogue, music, etc.), and does not digress into aspects that cannot be physically materialized in the filming. This is an element to be taken into account from the beginning of the creative process, as the script adapts the content of the treatment, which in turn is derived from the sketch.

Therefore, every audiovisual story is written in the present tense and with content that is visual, unlike the writing of a novel. For example, it should not be written that Anne drew the gun while remembering her murky past, as the shots will be seen in the present tense. Therefore, Anne draws the gun, and if she remembers her murky past, there will be a change of scene to a moment in the past where the images will be seen in the present tense, so that they are photographable actions and descriptions. Nor would we write, for example, that Ana is a loner,

as we should describe those visual or photographable situations that convey her loneliness. Likewise, sequences are not usually stated in a script, as for the purposes of filming it is always more useful to state the scenes so as to know at what point there is a change of location (Field, 2006, p. 135). The script is written under specific guidelines so that the technical and artistic team can easily understand it, and is composed of the scene heading, the description of the action and the dialogue, as well as possible transitions between scenes. Thus, although there are similar formulas, the beginning of the scene of a screenplay would look like this:

```
1. INT. BUNKER - DAY.

MALDONADO (42), half-dressed, sits in a chair, picks up
radio transmitter phone, presses a button, and starts
talking.

                    MALDONADO
                    (Altered)
          Control Centre. This is bunker
          3.03.38. Do you read me?

All is silent. MALDONADO presses another button.
```

Figure 1.4. *Appearance of a literary script. Source: Own elaboration.*

Nowadays, there are several software that make script writing easier, such as Celtx, Final Draft or KIT Scenarist, since a standard format must be followed in their pages, which must always be numbered and aligned to the left margin. In addition, single line spacing should be used with Courier or New Courier typeface with a font size of 12 points. In scene headings and descriptions of the action, there should be a margin of two and a half centimeters to the left and right. In dialogue, there shall be a margin of five centimeters to the left and right. And in the dialogue annotation, there will be a margin of seven and a half centimeters to the left and to the right. If the correct format is followed, one page will represent one minute of screen time (McKee, 1997, p. 351). But it is also true that this is a very relative factor, depending on the actions described.

We must bear in mind that a script is a guide and is not the finished work, as there may be continuous modifications, both in the writing process and in the filming, which will determine the final result shown to the audience (Snyder, 2005, p. 36). In this context, if the person who writes the script will not be directing the spot, video clip, film, etc., his or her work would a priori already be finished. However, if this person will also be in charge of directing the audiovisual work, the next step would be the elaboration of the technical script, which is usually accompanied by a storyboard.

1.6. Technical script and storyboard

The technical script is a document that includes the description of the types of framing, angles, camera movements, etc. that will be carried out during the filming of an audiovisual work. That is to say, a literary script does not include any technical audiovisual narrative notes, as these are decisions to be taken by the person directing the work, and these indications will be reflected in the technical script (Field, 2006, p. 136). The only exception is when the writer of the literary

script also directs the work, in which case he/she can give some kind of indication in this document, especially if it affects a narrative level.

Thus, in the technical script, any other details to be considered are indicated: scene number (based on the literary script), shot number (each scene will contain a certain number of shots), type of framing or scale, angles, camera movement, what will be seen on screen, what will be heard, etc. There is no single style, as it is a working document that the person acting as assistant director will later use to draw up the shooting plan, rearranging the shots for recording according to needs, availability of equipment, special effects, etc. Sometimes a new column can also be added, in which the storyboard will be illustrated. If this is not the case, it will be done in a separate document, and its preparation will always help to visualize the shot to be filmed.

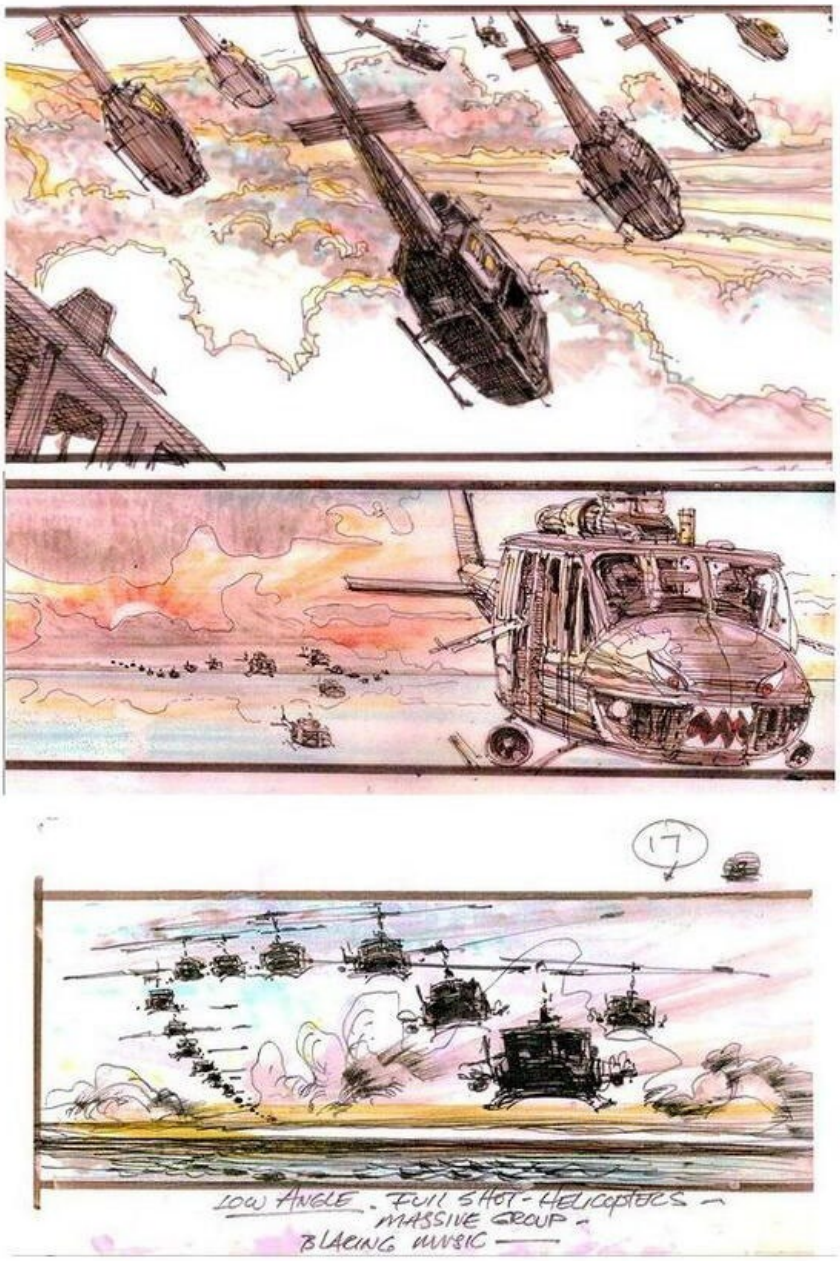

Figure 1.5. *Excerpt of the storyboard from Apocalypse Now (Francis Ford Coppola, 1979), created by Dean Tavoularis. Source: Lost In Film (2014).*

The storyboard is a set of illustrations where the shots to be filmed are reflected, facilitating the visual understanding of the script and serving as a guide for future filming. Thus, it will help the entire technical and artistic team to better understand what the future shot will be like, being able to indicate with arrows any camera movement, and even the characters themselves. Once the storyboard is finished, the basic tools will be available to be able to carry out a storytelling articulated through an audiovisual story, which will be recorded in the next phase. Therefore, the art of storytelling implies a structural process, where images and audio have to be thought of at all stages, not only during pre-production. In this way, the desired message can be conveyed to the audience.

Chapter 2. The audiovisual narrative

In any audiovisual project there are three phases: pre-production, from the creation of the idea to the start of filming; production, which includes all the days on which filming takes place; and post-production, which takes place after filming when the images and sounds are edited until the final piece is obtained. A fourth phase oriented towards distribution could also be included, but this is normally carried out by companies or organizations external to the audiovisual production companies (distributors, agencies, cinemas, etc.).

In this context, the aesthetic and narrative aspects take place during each of the three phases: through the creation of the literary and technical script, the storyboard, etc. (pre-production), when we shoot the content we will use (production), and when we finish writing our audiovisual work thanks to the editing (postproduction). Audiovisual narrative is used for the creation of any work of this nature, whether in advertising communication, the creation of video games, television series, cinema, etc.

2.1. Studies in audiovisual narrative

David Bordwell (1985, p. 17) indicates that the first comparative experiments between literary narration and audiovisual narration took place with the Russian formalists, finding reflections in texts by writers or filmmakers such as Propp, Pudovkin, Kuleshov, Eisenstein or Vertov. For example, the historian Yuri Tynyanov compared the lines of verse with audiovisual shots, looking for equivalences between the different poetic elements (similes, epithets, metaphors, etc.).

However, the Russian formalists did not develop a model that would delve into relevant linguistic categories applied to audiovisual narrative, unlike what would happen later with the arrival of semiological studies, French structuralism, or figures such as the British producer and writer Colin MacCabe, who considered audiovisual narrative as an analogy of the 19th century realist novel, as both were structured through a metalanguage that spoke about an object language and transformed it into content (Bordwell, 1985, pp. 17-18).

On the other hand, the origins of audiovisual narrative can also be dealt with from three different perspectives born in France: the classical contributions of Marcel Martin; the aesthetic trend of Jean Mitry; and the audiovisual semiology of Christian Metz. These are studies that have allowed the exploration of audiovisual narrative to continue today through different media, supports and platforms.

2.1.1. The classical contributions of Marcel Martin

The reflections of the French film critic and historian Marcel Martin made it possible to move forward with research work on audiovisual narrative. His most influential work is possibly *Le langage cinématographique* (1977). In his work, the author deals with the fundamental elements that allow audiovisual narrative to exist. In this sense, audiovisual discourse would not be considered a language, as there is no systematicity in a hermetic sense, but it could be considered a language, as it conveys information to the audience. Martin describes the creative function of the camera through the different elements that make up audiovisual narrative, such as framing, scale, angulations and camera movements. These are essentially audiovisual components, which is why Martin also analyses those elements that pre-existed cinema, such as light, color and costume.

2.1.2. The aesthetic trend of Jean Mitry

Under a more structuralist and psychological vision, the French critic and filmmaker Jean Mitry synthesized the predecessor theorists, and his theories are close to those of authors such as André Bazin. Mitry was also the first author to defend the idea of audiovisual language in a linguistic sense; and he argued that it was a true language, whose nature was far removed from verbal language, sharing only the fact of being languages in themselves (Mitry, 1987, p. 5).

From a semiological approach, verbal language has a fixed lexical meaning, while in audiovisual narrative there are variables that give it dynamism, lacking a constant link between the signifier and the meaning of the image, since the latter is, in itself, a copy of reality, containing an iconic meaning subordinated to audiovisual language, above all to montage, being, as the author indicates, an essentially relational meaning (Mitry, 1987, pp. 20-23). For Mitry, the image is a complex signifier, but it is also individualized. Therefore, it will never be the image of an object, but the image of that specific object. The author used semiotic postulates, together with their terminology, as a tool for analyzing the image.

However, he departs from pre-established rules, depending on the visual perception of the subject, as well as on each image itself. Mitry (1987, p. 18) also quotes Christian Metz, indicating that his main mistake was to start from analogous linguistic models in the audiovisual space, instead of carrying out an analysis of the minimal units of the audiovisual shot.

2.1.3. The audiovisual semiology of Christian Metz

The French semiologist, sociologist and film theorist Christian Metz identified five elements within the audiovisual narrative, although it should be noted that the first two would be located within the silent film stage (1972; 1974): static, moving or multiple images; graphic elements (credits, subtitles, etc.); recorded phonic sound (dialogue); recorded musical sound; and recorded noises.

The author dissociated himself from the predecessor researchers, and argued that the audiovisual sign as such does not exist, since what appears are signs coming from different codes (Metz, 1971, p. 154). Therefore, the author refers to the audiovisual narrative as a filmic text provided with certain codes and subcodes, being a sign possessing a defining meaning under a semiological intuition, which allows it to be identified and differentiated (Metz, 1974, p. 38). Metz compares the image to an utterance, pointing out, moreover, that the audiovisual narrative, within the aesthetic field, suffers from the absence of two features (1974, pp. 43-46).

On the one hand, it does not contain a discrete connected unity, understood in parameters of syntactic elements common to all audiovisual works as systematization, beyond the concatenation of shots within the montage. And on the other hand, there is an absence of a criterion of grammaticality, since there is no succession of shots that would make the audience think that what they are watching is not an audiovisual work. However, both features should not be seen as problems to be solved, but rather we should be aware of them without trying to transfer semiotic studies of audiovisual narrative to other media, working under partial models derived from the plurality of codes depending on each audiovisual work (Metz, 1974, pp. 43-46).

As Robert Stam (2000, p. 134) points out, the main question that guided Metz's first studies focused on whether cinema is a language or a language. Thus, Metz differentiated verbal language from audiovisual language, but verified whether linguistic analysis could be applied to cinema, because although the shot may be the minimum unit of audiovisual language, it is equivalent to a specific reality that cannot be reduced to smaller units, unlike words within

verbal language. It is also worth noting that Metz introduced the relationship between narrativity and cinema (through its moving image, its duration and its transformation), the encounter of which allows the latter to be destined to tell stories. Thus, Martin's studies were underpinned by the early theories of montage, to which he devoted special attention; Mitry imagined audiovisual language as a reality devoid of articulations; and Metz stressed the presence of codes exclusive to audiovisual narrative, but conceiving them as a synthesis of the rest of the arts.

2.1.4. Further studies in audiovisual narrative

In addition to Martin, Mitry and Metz, new authors also appeared, such as Gilles Deleuze, creator of essays like *L'image-mouvement. Cinéma I* (1983) and *L'image-temps. Cinéma II* (1985). His positions situated the audiovisual narrative as a signetic matter with different modulating features, be they visual, sonorous, rhythmic, kinesic, intensive, tonal or verbal (Deleuze, 1985, p. 49). However, the author moved away from Metz's translinguism. As the titles of the two works cited above already indicate, for Deleuze the analogies to be made for the semiotic study of audiovisual narrative should not be posited by comparing the image with an utterance, a represented object or verbal language, but with the image-movement and the image-time. In other words, movement is the essence of the audiovisual media, not a historical consequence.

It is also worth mentioning other figures such as Roland Barthes, who differentiated the processes of signification in the audiovisual sphere with respect to verbal language, publishing works such as *Rhetoric of the image. Image, music, text* (1977); or Desiderio Blanco (1989), who grouped together a methodology for the constitution of the audiovisual text, breaking down the aspects attached to visual signs (at the iconic, plastic and iconographic levels) and sound codes. His work is based above all on Metz's studies; and although he did not provide a theoretical model, he did apply the theories of audiovisual narrative in a didactic approach through different cinematographic works.

2.2. Visualization and elements of audiovisual narrative

The concept of visualization is fundamental in audiovisual narrative, as it allows us to decide which elements to use. Thus, we call visualization the interaction of two types of activity: immediacy and reflection (Katz, 1991, p. 5). Immediacy is the conception of the content of the shots and their sequential order in a single, uninterrupted process; while reflection is the process in which balance is restored after the intense relationship with the materials as a result of immediacy. If we practice visualization, we will be more rigorous when working with the elements that make up the audiovisual narrative, such as framing, photography, sound and post-production. In this topic we will deal with framing and photography, as the rest of the elements will be dealt with in other topics in this book.

2.2.1. Framing and other concepts of audiovisual storytelling

It is common to use expressions such as medium shot, wide shot, etc. However, shot is not synonymous with framing, although it is common for them to be used interchangeably in the audiovisual industry. It must be taken into account that a shot is made up of a multitude of syntagms within the filmic text, among which the frame would also be found. From the moment we press the record button until we stop it, a single shot will have been recorded; and if it has movement, it could offer different frames, which are related to the scale, the dimension or the limits of the frame. It is therefore useful to define a number of preliminary concepts (Bordwell

and Thompson, 1994). Thus, a frame is a single static image of the audiovisual work. The rapid succession of frames on the screen creates the illusion of movement. So that our eye does not perceive the change between frames, these are usually processed at a speed of 24 or 25 frames per second. In the case of framing, it is the spatial boundaries of the frame that delimit what will be seen on the screen. On the other hand, the mere act of framing the camera limits the elements that appear within what is called the field. Therefore, all those elements that we do not see, but which narratively we understand to be outside the frame, are considered to be outside the field (Katz, 1991, p. 358).

Regarding the shot, it is all those elements that are shown on screen in an uninterrupted way. As a minimum unit, as soon as there is an interruption through editing, we will speak of a new shot. And the different versions of the same shot during its uninterrupted recording are defined as takes. Each time the recording of a shot is repeated, we will speak of a new take. This is why the scene number, shot number and take number are indicated on the clapperboard.

On the other hand, a scene is a fragment of the narrative that has spatial continuity. Thus, when there is a change of location, there will be a change of scene, and it is usually constructed through a succession of shots. However, the sequence is a fragment of the narrative that has temporal continuity, even if there is a change of location. Therefore, when there is a time jump, there will also be a change of sequence. Meanwhile, a sequence shot is a sequence shown in a single shot (Bordwell and Thompson, 1994, p. 496). We should not confuse a sequence shot with a long take. A long shot offers a longer duration than usual, but at the end of the sequence this shot continues.

For example, if we were to visualize a situation in which a bank robbery takes place, we could find different scenes: the robbers in the car going towards the bank, the robbers getting out of the car and entering the bank, the robbery inside the bank, the robbers running away with the money, etc. However, if we are dealing with temporal continuity, we would be referring to the sequence of the bank robbery, which would be made up of different scenes (depending on the location or place where they take place), and each scene would be made up of a series of shots. If this whole sequence had been filmed in a single shot, then it would be a true sequence shot.

2.2.2. Types of audiovisual shots

As noted above, a more correct expression would be typology of frames. However, we will focus on the most widespread nomenclatures for a better understanding. The different scales are based, on the one hand, on the composition, that is to say, on the distribution of the elements in the frame; and on the other hand, on the measurements of the human being. Firstly, we have the big long shot or plan, in which the scale of the character is very small and is diluted by the presence of other elements, such as buildings, landscapes, crowds, etc. In general, it has a descriptive or contextual function, although it can acquire a dramatic value (for example, showing the loneliness of the character).

If we go down the scale, the next one will be the long shot. This is the scale where the size of the character is small in relation to his or her surroundings, although with less amplitude than the big long shot, allowing the characters to be contextualized in terms of the space around them. The next shot is the full shot, also called the medium general shot. This shot shows the figure of the character, leaving little margin at the top and bottom of the frame, thus giving him greater prominence than in the previous scales. Next, we have the American shot, also called cowboy shot, medium-long shot or three-quarter shot; and this scale brings us closer to the character, showing him or her from the knees upwards (Bordwell and Thompson, 1994, p. 495). Normally, the delimitation is usually above or below the knees, without exactly coinciding with the joints.

Figure 2.1. *Example of an American shot in the music video Childish Gambino: This Is America (Hiro Murai, 2018). Source: Own elaboration using the original material.*

The next frame is the medium shot, in which the character is shown from the waist upwards. It is equivalent to a more personal relationship distance, and is usually applied in dialogue scenes, where a more expressive and gestural language is prioritized. Next we have the short medium shot, in which the scale of the character is shown with greater amplitude, and allows the character to be more isolated from the environment, framed from the chest upwards. The foreground, on the other hand, shows the figure from the neck upwards. The foreground is marked by a strong emotional and perceptive intensity, concentrating the attention on a reduced extension (the character's face), while the general shot can be more emotionally toned down, as well as offering a wider space for perception (Blanco, 1989, p. 56).

If we get even closer to the character, we have the big close-up, in which the character is framed from the chin upwards, showing even more of his or her face. On the other hand, the detail shot is used to show some part of the character (eyes, mouth, hands, feet, etc.) or of an object (Katz, 1991, p. 358). Thus, it makes it possible to emphasize an element in relation to the rest. The scales apply to the human body, so that an animal framed in its entirety or showing only its head would be a detail shot in both cases (unless it is in a general shot). It should be noted that if more than one character appears in the same frame, the assembly expression would be added to the nomenclature. For example, if three characters appear in a medium shot, it would be an assembly medium shot.

2.2.3. Camera angles

The camera angle is the point of view chosen to record the shot (Katz, 1991, p. 357). It is therefore the position of the frame in relation to what it shows. Camera angles can be either horizontal or vertical, although there are also certain subdivisions. Horizontal camera angles are the different angles through which the character can be framed on the horizontal axis, and can be frontal, profile, dorsal, frontal three-quarter or dorsal three-quarter. Vertical camera angles are the different angles through which the character can be framed on the vertical axis, and can be at eye level, high-angle, low-angle, zenith and nadir (Bordwell and Thompson, 1994; Katz, 1991).

Figure 2.2. *Example of a low-angle shot in the film Anora (Sean Baker, 2024).*
Source: Own elaboration using the original material.

Finally, and in relation to camera angles, a subjective shot is the one whose angle coincides with the character's gaze (otherwise, it would be an objective shot), allowing viewers to place themselves at his or her point of view (POV) (Bordwell and Thompson, 1994, p. 496). On this aspect, the film *Hardcore Henry* (Ilya Naishuller, 2015) was filmed entirely with subjective shots using GoPro cameras and was promoted as the first film shot entirely in first person (Fig. 2.3). It should be noted that there are earlier cases, such as *Lady in the Lake* (Robert Montgomery, 1946), although in this film noir film subjective angulation was only used in certain specific moments (Fig. 2.4).

Figure 2.3. *Example of POV in the film Hardcore Henry (Ilya Naishuller, 2015).*
Source: Own elaboration using the original material.

Figure 2.4. *Example of POV in the film Lady in the Lake (Robert Montgomery, 1946).*
Source: Own elaboration using the original material.

2.2.4. Camera movements

When recording a shot, the framing can change if there are camera movements during the recording of the shot. Thus, there are different types of movements, which can be combined with each other. On the one hand, we have the tracking shot, in which the camera moves on rails, on a dolly (plywood platform), or on some other moving vehicle (Katz, 1991, p. 362). GoPro cameras are also often included in this category. When a dolly is used, the camera can move in any direction.

A crane, on the other hand, is used when the camera moves above ground level, rising or descending from above, and is often done with a mechanical arm (Bordwell and Thompson, 1994, p. 219). Although the crane can move in many directions, its most notable feature is its vertical movement (Katz, 1991, p. 287). The hot head, on the other hand, consists of an extendable mechanical arm with a counterweight to hold the camera, allowing it to be moved over or through otherwise inaccessible spaces (Katz, 1991, p. 360). It is also important to note the steadycam movement. This is a stabilization mount attached to the person operating the camera by a bracket, whose mechanism maintains balance and allows for smooth and even recording (Bordwell and Thompson, 1994, p. 220).

Another very common camera movement is the hand-held camera. In this case, the camera is not attached to a tripod or dolly, but the camera operator uses his or her own body as a support. There is also the aerial shot, in which the camera is placed in an extremely high position, usually from a drone, a helicopter (wescam), etc. (Katz, 1991, p. 357). In the case of panning, the camera rotates on its vertical or horizontal axis, so there is no displacement of the artefact. And when panning is extremely fast, it is called a sweep (Bordwell and Thompson, 1994, p.

495). Finally, in the case of zoom, we are dealing with an optical movement, not a camera movement, and it basically enlarges (zoom out) or reduces (zoom in) the field of vision. It is often used to replace tracking shot, although the end result is different.

2.3. Photography

2.3.1. Basic aspects of photography

In audiovisual storytelling, photography refers to lighting. In this sense, four main characteristics of lighting can be distinguished: quality, direction, source and color (Bordwell and Thompson, 1994). Quality is the intensity that lighting can have. Harder, more direct or directional light will form sharper shadows, while soft or global lighting will produce more diffuse light. Two tools that allow us to make these adjustments are the diaphragm, which adjusts the amount of light that enters the camera; and the shutter, which controls the time that light enters and is properly exposed. In the case of direction, it is the path of the light from its source to the illuminated character or object. Thus, we can distinguish between frontal light (creating an even illumination), side light (illuminating the profile of the character), back light (from behind), overhead light (from below) and zenithal light (directly from above) (Bordwell and Thompson, 1994, pp. 153-154).

Figure 2.5. *Example of overhead light in an advertising photography of Marlene Dietrich for the film Shanghai Express (Josef von Sternberg, 1932). Source: Don English (1932).*

As for the source, as we know, light comes from natural or artificial sources, and both can complement each other. The natural source is sunlight, and it will provide different shades of light depending on the time of day and weather conditions. As Bordwell and Thompson (1994, p. 153) point out, the midday sun will produce a harsh light, while a cloudy sky, for example, will produce a soft light. The artificial source is light from spotlights, lamps, flashes, etc., with the advantage that its intensity, direction and color can be modified.

The three basic artificial sources are the key light (the most intense), the fill or secondary light (which eliminates shadows and is usually placed at a ninety-degree angle to the key light and at a lower height), and the backlight (from behind the character and against the backdrop, which allows the character to be separated from the background). This is known as a triangle of light. For these purposes, the triangle of light is suited to high-key lighting, characterized by a low contrast between the darkest and lightest areas of the shot; whereas low-key lighting is harsher, creating sharper contrasts and shadows (Bordwell and Thompson, 1994, p. 156).

In relation to color, light is necessary for color to exist. Based on their temperature, warmer or more saturated colors tend to be closer than cooler or less saturated colors. Color is a natural quality, but the beginnings of cinema were in black and white (achromatic colors), and achromatism also achieved an expressive character. Thus, color should not only be subordinated to enhance realism, it should also evoke psychological perceptions in the audience (Martin, 1977, p. 74). The subject of color will be dealt with in more detail later, but last but not least, the concept of the American night is also worth mentioning. This is a technique that simulates night but is shot during the day (usually at midday, to avoid casting shadows) using a blue filter on the camera (Bordwell and Thompson, 1994, pp. 188-189).

2.3.2. Types of optics

In aesthetic terms, the choice of the type of optics or lens is as important as deciding on the type of framing or camera angle. The optics will determine aspects such as depth of field, which is the extended area in front of and behind the character or object in focus (Martin, 1977, p. 178). For this, we must take into account the focal length, which is the distance from the centre of the lens to the point where the light coming from the outside is in sharp focus, and is expressed in millimeters (Bordwell and Thompson, 1994, p. 493). The focal length will determine the perspective relationships of the characters and the environment, giving rise to a varied typology of optics or lenses.

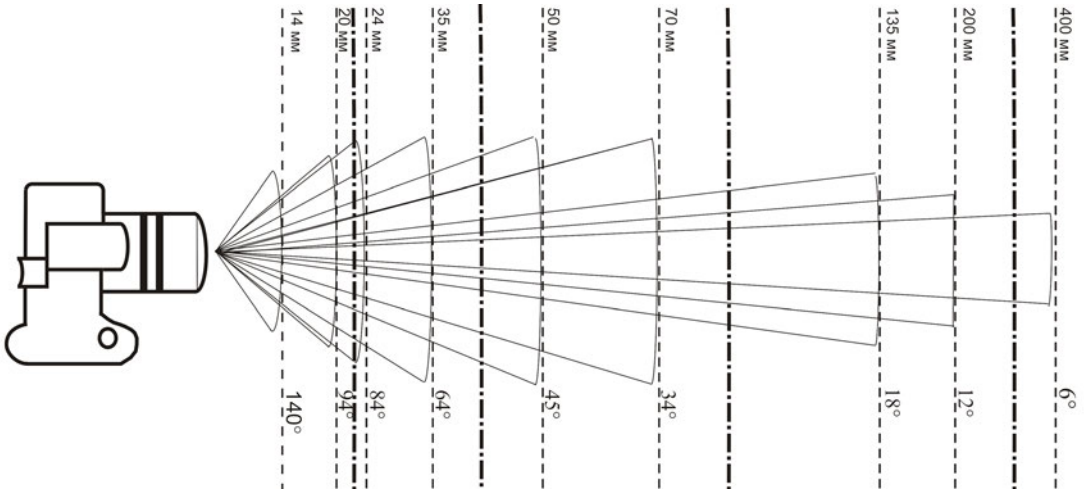

Figure 2.6. *Photo lenses with a focal length and angle. Source: MrSpyDoS (2012).*

A lens that shows characters or objects without exaggerating, or sharply reducing the depth of field, usually ranges from 35 to 50 millimeters (Bordwell and Thompson, 1994, p. 494). However, if the focal length is reduced to 14 millimeters or even less, the perspective distorts the straight lines near the edges of the frame, giving a wider angle of view and greater depth of field; this is a so-called wide-angle lens, and when it reaches 180 degrees it is called a fisheye.

Otherwise, we would be dealing with a telephoto lens, for example a lens normally larger than 70 millimeters (long focal length), which affects perspective by magnifying distant spatial elements and simulating that they are close to the elements in the foreground, offering a smaller angle of view and a shallower depth of field (Bordwell and Thompson, 1994, p. 497).

Figure 2.7. *How changing focal length affects a person's appearance. Source: Gavtrain (2015).*

Finally, it is important to differentiate between lenses with fixed optics and those with variable optics, as we will find cameras that allow us to substitute one lens for another (such as reflex cameras, for example). It is advisable to use this type of device whenever possible, as the variable optics is usually modified by the zoom, and can fluctuate from telephoto to wide-angle, but the fixed optics will offer higher quality (Bordwell and Thompson, 1994, p. 497).

2.3.3. The direction of photography

The director of photography or cinematographer has various functions during the three stages of filming an audiovisual work. He or she must agree with the director on the aesthetic approach, analyze the script as a whole, analyze the characters, events and specific factors that occur in the action, design the style and visual approach to the project, propose photography ideas to the director, reach a general aesthetic consensus with the director, and reach a general aesthetic consensus with the art director. He/she must also specify budget requirements, approve locations, make the sun-path, check the weather, agree with the art department on the set plans, consult with the director on the storyboard in terms of lighting, discuss with the art team the presence of real lights, design the light map, choose optics, formats, adjust light and camera with the lighting doubles, color grade the work, and be aware of the post-production processes that include filmed images. Some of the most representative figures in this field are as follows.

Charles Rosher was the first cinematographer to receive an Oscar. He won the award for his work, together with Karl Struss, on *Sunrise* (F.W. Murnau, 1927) (Fig. 2.8). He was among the first to realize the importance of photographic treatment in film. His work on *Sunrise* followed the guidelines of Murnau, who had already preconceived the camera movements and framing. His work is embodied in the travellings and in an intensive use of forced perspective, especially in the city scenes, in which he plays with the dimensions of the subjects in the foreground and those in the background to create a greater sense of depth. Fritz Arno Wagner, for his part, is considered one of the most influential German cinematographers. He played a key role in expressionism (the forerunner of the horror genre), working with oppressive spaces, shadows, gothic style, coldness, and directing the photography of works such as *Nosferatu* (F.W. Murnau, 1922), *Spione* (Fritz Lang, 1928), *M: Eine Stadt sucht einen Mörder* (Fritz Lang, 1931) *or Das testament des Dr. Mabuse* (Fritz Lang, 1933).

Figure 2.8. *Frame from the film Sunrise (F.W. Murnau, 1927).*
Source: Own elaboration using the original material.

Regarding Gregg Toland, he was responsible for many of the technical and aesthetic revolutions brought about by *Citizen Kane* (Orson Welles, 1941). Toland explored the expressive and narrative possibilities of light, and introduced new points of view and framing never seen in cinema at the time. Thus, *Citizen Kane* would be a perfect compendium of all that Toland brought to cinema with his photography full of impossible shadows and lights. Russell Metty was director of photography on many of the great Hollywood films of the 1940s, 1950s and 1960s. In 1961 he won the Oscar for best cinematography for *Spartacus* (Stanley Kubrick, 1960). Other notable works include *The Private Affairs of Bel Ami* (Albert Lewin, 1947), *Written on the Wind* (Douglas Sirk, 1956) and *Touch of Evil* (Orson Welles, 1958).

Meanwhile, Stanley Cortez directed the photography for *The Night of the Hunter* (Charles Laughton, 1955) (Fig. 2.9), which became one of the first cult films in the history of cinema.

The work, inspired by German expressionism and full of chiaroscuro and visual tricks, is full of scenes in which photography plays an absolutely essential role. He also directed the cinematography for *Secret Beyond the Door* (Fritz Lang, 1947), *The Naked Kiss* (Samuel Fuller, 1964) and *Shock Corridor* (Samuel Fuller, 1963), among other films.

Figure 2.9. *Frame from the film The Night of the Hunter (Charles Laughton, 1955). Source: Own elaboration using the original material.*

Nicholas Musuraca established the stylistic guidelines that would provide the characteristic visual look of film noir, with the creation of disturbing atmospheres based on the play of light and shadow, and with the silhouetting of the characters creating strong contrasts of light. He developed his own visual style of dreamlike and threatening atmospheres. The film that best defines his style is *Out of the Past* (Jacques Tourneur, 1947), with its portentous use of chiaroscuro applied to both interiors and exteriors.

On the other hand, Kazuo Miyagawa was one of Japan's most important and innovative cinematographers, working with directors such as Kenji Mizoguchi, Yasujirō Ozu or Akira Kurosawa. Among his innovations, for example, he used colored water to shoot rain and was one of the first to put the camera on a rail to achieve a much more harmonious movement. We consider the film *Rashômon* (Akira Kurosawa, 1950) (Fig. 2.10) to be his masterpiece.

In the case of British filmmaker Alfred Hitchcock, his career would have been very different if he had not crossed paths with Robert Burks. With him he shot films such as *Strangers on a Train* (1951), *Dial M for Murder* (1954), *Rear Window* (1954), *To Catch a Thief* (1955), *North by Northwest* (1959) and *Marnie* (1964). The most notable was *Vertigo* (1958), in which Burks made a masterful use of color and lighting, contributing in a transcendental way to generate the atmosphere of reverie, mystery and paranoia.

Figure 2.10. *Frame from the film Rashômon (Akira Kurosawa, 1950).*
Source: Own elaboration using the original material.

In the case of Jack Cardiff, he was a cinematographer who lived through the evolution of the film industry from the silent era to the 21st century, participating in the first Technicolor films. He was known for his influential color photography, and in 2001 was awarded an honorary Oscar for his contribution to the film industry. He was the cinematographer for films such as *The African Queen* (John Huston, 1951) and *War and Peace* (King Vidor, 1956) (Fig. 2.11).

Figure 2.11. *Frame from the film War and Peace (King Vidor, 1956).*
Source: Own elaboration using the original material.

On Italian territory, Giuseppe Rotunno is commonly considered one of the best cinematographers in the history of cinema, and he directed the photography of films such as Luchino Visconti's *Il gattopardo* (1963) (Fig. 2.12) and Federico Fellini's *Amarcord* (1973). Rotunno believed that one should not impose oneself on the audiovisual work, but serve it. Tonino Delli Colli is another of the great cinematographers of Italian cinema. Throughout his career he worked with renowned directors such as Sergio Leone, Roman Polanski, Jean-Jacques Annaud and Federico Fellini. He also worked with the director Pier Paolo Pasolini, participating in twelve of his films, such as *Accattone* (1961), *Mamma Roma* (1962), *Il Vangelo secondo Matteo* (1964), *Il Decameron* (1971), *I racconti di Canterbury* (1972) and *Salò o le 120 giornate di Sodoma* (1976).

Figure 2.12. *Frame from the film Il gattopardo (Luchino Visconti, 1963).*
Source: Own elaboration using the original material.

Figure 2.13. *Frame from the film Persona (Ingmar Bergman, 1966).*
Source: Own elaboration using the original material.

Swedish cinematographer Sven Nykvist's career is connected to that of director and screenwriter Ingmar Bergman. He made seventeen films with him. Famous for his meticulousness and his predilection for intuition over technique, Nykvist was a lifelong advocate of natural lighting, sober and free of artifice. In *Persona* (Ingmar Bergman, 1966) (Fig. 2.10), he deployed all the constants of his style to shoot the introspective close-ups that populate the entire film. On the other hand, Freddie Young was a cinematographer noted for his innovations and style. He is best known for his collaboration with director David Lean on the films *Lawrence of Arabia* (1962), *Doctor Zhivago* (1965) and *Ryan's Daughter* (1970), winning an Oscar for each one of them. He is one of the icons of British filmmaking, with a long career covering over one hundred and thirty films, from the black and white era to Technicolor blockbusters.

John Alcott is especially remembered for his four collaborations with Stanley Kubrick on *2001: A Space Odyssey* (1968), *A Clockwork Orange* (1971), *Barry Lyndon* (1975) (Fig. 2.14) and *The Shining* (1980). Of all these films, *Barry Lyndon* is a paradigmatic example of the influence of painting on film and photography. Using Zeiss 50mm f0.7 lenses (initially used by NASA), and lighting most of the shots solely with candles, Alcott managed to recreate canvases inspired by the paintings of Hogarth, Vermeer and Rembrandt.

Figure 2.14. *Frame from the film Barry Lyndon (Stanley Kubrick, 1975).*
Source: Own elaboration using the original material.

Gordon Willis directed the cinematography for Coppola's *The Godfather* trilogy (1972; 1974; 1990). He is one of the main architects of the aesthetic revolution in American cinema in the 1970s. The backlighting, the tendency to underexpose light, and the mastery of black and white photography are some of the features of his recognizable style. One example is *Manhattan* (Woody Allen, 1979), a film in which he portrayed life in the legendary city of skyscrapers. For his part, Vittorio Storaro was one of the most influential and original directors of photography on the audiovisual scene. His best remembered work is the cinematography of Francis Ford Coppola's *Apocalypse Now* (1979) (Fig. 2.15). In a particularly complex shoot, Storaro illustrated the descent into the hell of war by deploying a variety of technical and stylistic resources ranging from the naturalism of the war scenes to the expressionism of Colonel Kurtz's appearances.

Figure 2.15. *Frame from the film Apocalypse Now (Francis Ford Coppola, 1979).*
Source: Own elaboration using the original material.

Michael Chapman has gone down in history as one of the most important cinematographers of the 1970s and 1980s. Two of his collaborations with Martin Scorsese, *Taxi Driver* (1976) and *Raging Bull* (1980), have guaranteed him a prominent place in the history of cinema. *Raging Bull* is a film that is narrated almost in documentary form, with a sober black and white, and with only two cameras to capture all the rawness of the action. All this contrasted with the fight scenes in the ring, filmed almost like a musical number, very stylized and with a very expressive light.

In other aspects, Jordan Cronenweth changed the genre of audiovisual science fiction and became one of the most influential cinematographers in the history of cinema. His most representative work was *Blade Runner* (Ridley Scott, 1982) (Fig. 2.16). Inspired by his admired Gregg Toland, Cronenweth recreates a desolate, bleak and dehumanized future using intense beams of light in smoke-filled rooms and exteriors invaded by fog and rain. All this added to a raw, dark and highly contrasted photography, which made this work an authentic photography manual for later cinema.

Figure 2.16. *Frame from the film Blade Runner (Ridley Scott, 1982).*
Source: Own elaboration using the original material.

In the Spanish context, it should be noted that Spanish cinematographer Néstor Almendros developed most of his career in France, and achieved international fame with *Days of Heaven*

(Terrence Malick, 1978), a film for which he won an Oscar. He always declared himself a lover of realistic photography without artifice. In *Days of Heaven* he filmed most of the scenes using natural light sources and giving great prominence to the landscape and open spaces; and Luis Cuadrado was one of the most important directors of photography in Spanish cinema. He photographed more than eighty films, and worked with directors such as Carlos Saura, Víctor Erice and José Luis Borau. His work in *El espíritu de la colmena* (Víctor Erice, 1973) (Fig. 2.17), with interior spaces frequently illuminated by a single source of light filtered through windows, creating ghostly lights and shadows, but with a realistic and sober style, stands out in a special way.

Figure 2.17. *Frame from the film El espíritu de la colmena (Víctor Erice, 1973). Source: Own elaboration using the original material.*

José Luis Alcaine is a Spanish cinematographer who pioneered the use of fluorescent tubes as the main light in the 1970s. His cinematographic work has been rewarded with several Goya Awards for best cinematography. He directed the photography of films such as *El sur* (Víctor Erice, 1983), *Akelarre* (Pedro Olea, 1984), *Jamón, Jamón* (Bigas Luna, 1993), *Altamira* (Hugh Hudson, 2015) or *Madres paralelas* (Pedro Almodóvar, 2021), among many others. Meanwhile, Javier Aguirresarobe is another of the most prestigious directors of photography in Spanish cinema, with a career based on experimentation with light and shadow. He has won the Goya Award for films such as *The Others* (Alejandro Amenábar, 2001), *Soldados de Salamina* (David Trueba, 2003) and *Mar adentro* (Alejandro Amenábar, 2004). In 2004 he won the National Cinematography Award, and is currently one of the Spanish cinematographers with the longest career in Hollywood, having photographed films such as *The Road* (John Hillcoat, 2009), *Blue Jasmine* (Woody Allen, 2013) or *Thor: Ragnarok* (Taika Waititi, 2017).

On the other hand, Mexican cinematographer Emmanuel Lubezki won his third consecutive Oscar for cinematography with *The Revenant* (Alejandro González Iñárritu, 2015), an unprecedented case in the history of cinema. With a career that includes works such as *The New World* (Terrence Malick, 2005), *Children of Men* (Alfonso Cuarón, 2006), *The Tree of Life* (Terrence Malick, 2011), *Gravity* (Alfonso Cuarón, 2013), *Birdman* (Alejandro González Iñárritu, 2014) or *Amsterdam* (David O. Russell, 2022), Lubezki has demonstrated control with sequence shots, mastery of natural light and the tendency to immerse the camera in the action, being some of his stylistic traits. Guillermo Navarro is another Mexican cinematographer who

has worked with directors such as Robert Rodríguez and Quentin Tarantino in works like *Desperado* (1995), *From Dusk Till Dawn* (1996) and *Jackie Brown* (1997). He has also collaborated with Guillermo del Toro, making the photography of films such as *Cronos* (1993), *El espinazo del diablo* (2001), *Hellboy* (2004), *El laberinto del fauno* (2006), with which he won the Oscar award, *Hellboy II: The Golden Army* (2008) or *Pacific Rim* (2013).

Likewise, Argentinean Natasha Braier is one of the most impressive cinematographers in the audiovisual scene today. She was in charge of photographing *The Rover* (David Michôd, 2014) and the one responsible for the hypnotic images of *The Neon Demon* (Nicolas Winding Refn, 2016) (Fig. 2.18), being a work that stands out especially for the visual treatment; and for his part, Christopher Doyle has worked with directors such as Wong Kar-Wai, Jim Jarmusch or Gus van Sant, using extreme angulations and saturated colors. His visual conception is based on an organic, intuitive and experimental activity. Some examples of his photographic work are the films *In the mood for love* (Wong Kar-Wai, 2000), *Hero* (Zhang Yimou, 2002), *Paranoid Park* (Gus van Sant, 2007) or *The Limits of Control* (Jim Jarmusch, 2009).

Figure 2.18. *Frame from the film The Neon Demon (Nicolas Winding Refn, 2016).*
Source: Own elaboration using the original material.

Finally, it is worth mentioning the figure of Hoyte van Hoytema, a Swedish cinematographer whose first most relevant work was *Let the Right One In* (Tomas Alfredson, 2008). Since then, Hoyte van Hoytema has done various audiovisual works in advertising, and the photography of films such as *The Fighter* (David O. Russell, 2010), *Her* (Spike Jonze, 2013), *Interstellar* (Christopher Nolan, 2014), *Spectre* (Sam Mendes, 2015), *Dunkirk* (Christopher Nolan, 2017), *Nope* (Jordan Peele, 2022) or *The Odyssey* (Christopher Nolan, 2026).

2.4. The art direction

2.4.1. The work of art direction

In the early days of cinema, the camera remained anchored to the tripod, under a theatrical heritage. But when cinema developed as a spectacle, painted backdrops were no longer used as sets, and the transition from filmed theatre to cinema as we know it gradually took place. It was at that moment when the film industry was forced to build three-dimensional sets that were more realistic, and that was when the profession of art direction began. Thus, the art director or art director is the visual artist who creates and develops the conceptual vision of a work through the conception and creation of spaces, characters and elements that will appear on the screen.

The tasks of the art director determine the visual content of the work, and the tasks of the set designers, costume designers, props and special effects designers depend on these tasks, in order to help the director achieve the ideal atmosphere for the story he or she is telling. The art director collaborates with the director and producer in the interpretation of the script, selection of locations and necessary adjustments, deciding the overall style and visual aesthetics suggested by the script. He or she is the person responsible for all the elements that go in front of the camera and that make up the visual result of the work. He or she also selects and supervises the work of a team of professionals who contribute to technically develop the conceptual design in real locations, controlling the processes and schedule within the three stages of production (Bordwell and Thompson, 1994).

The art director designs and supervises the sets, which are built by the set designer, carpenters, painters, etc. The art director is also in charge of the props, who look for the objects that appear on the set. In addition to the sets, he or she also manages the actual locations, costumes, makeup, hairdressing, and any other visual aspect that tangibly involves how to represent the internal reality of the script; that is, the space where the time of the play takes place. The art director, in addition to having highly developed creativity, must have certain knowledge of film, semiotics, writing, design, color psychology, typography, illustration, photography, lighting, scenography, costumes, etc. He or she must also possess the ability to work as part of a team, the ability to concentrate, the ability to work under pressure, and be physically fit to deal with unforeseen set design issues that may arise on a shoot.

During the 1910s and 1920s, art direction played a crucial role in the film industry. And its importance increased as cinema became more and more relevant. Of particular note from this period was the Italian film *Cabiria* (Giovanni Pastrone, 1914) (Fig. 2.19), whose art director Camillo Innocenti did great work in his department; and the film *Intolerance* (1916) (Fig. 2.20), directed by the aforementioned Griffith, was the work with the largest sets ever built in cinema, and possibly the largest ever made in history up to the present day. Its premiere was a financial failure, and the sets were left undismantled for years. Art directors Frank Wortman and Ellis Walles designed sets on a gigantic scale (Martin, 1977).

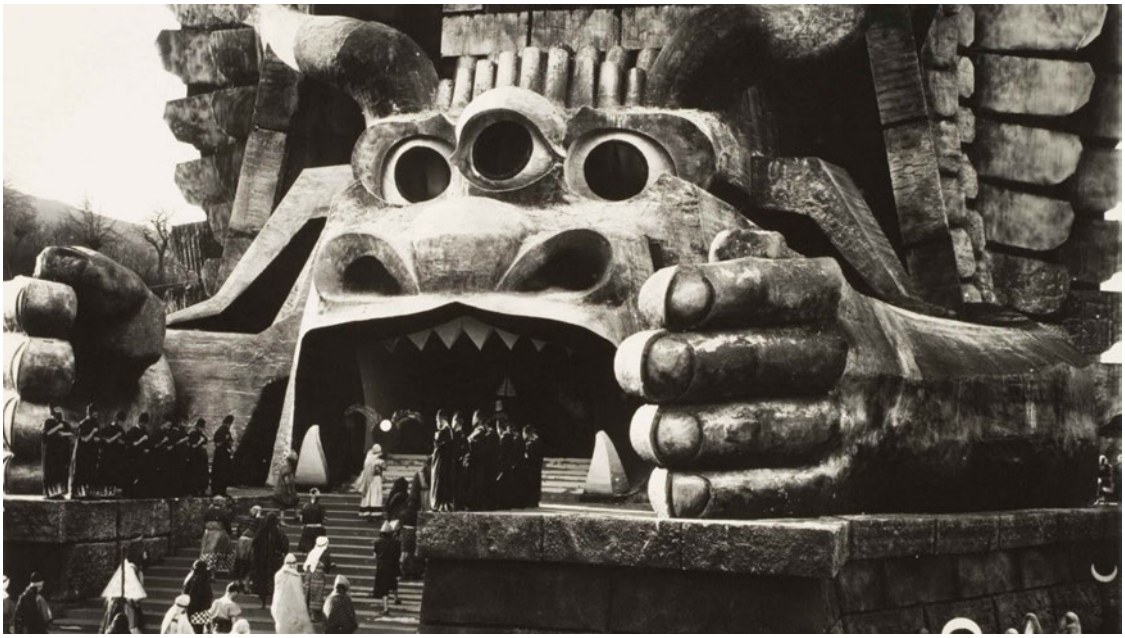

Figure 2.19. *Frame from the film film Cabiria (Giovanni Pastrone, 1914).*
Source: Own elaboration using the original material.

Figure 2.20. *Frame from the film Intolerance (D. W. Griffith, 1916).*
Source: Own elaboration using the original material.

Due to the increasing difficulties of filmmaking, art directors gradually took over the position of production designers, and their assistants inherited the position of art directors. While the former were in charge of the overall design of the film, the latter were responsible for managing the art department's budget and supervising the set construction process. This has remained the case to this day in large-scale productions, although the line between the two professions is blurred. When both professionals are involved in a project, the art director is the one who carries out the ideas of the production designer with the help of his or her team. However, it is not uncommon for the production designer and the art director to be the same person, especially on smaller productions. Other works from the 1920s that stand out for their art direction are *The Ten Commandments* (Cecil B. DeMille, 1923) (Fig. 2.21) or *Metropolis* (Fritz Lang, 1927) (Fig. 2.22).

Astonishing audiences with art direction was becoming more and more challenging. Wilfred Buckland was a role model who managed to astound the audiences of the time. He is credited with pioneering advances in lighting techniques, the development of architectural sets and the use of miniature sets. His first work was in *The Squaw Man* (1914), by Oscar Apfel and Cecil B. DeMille. For his part, William Cameron Menzie was the first person to be called a production designer for his work on *Gone with the Wind* (Victor Fleming, George Cukor and Sam Wood, 1939). It should be noted that one of Spain's most important art directors was Gil Parrondo, who died in 2016. He participated in more than two hundred films, and collaborated in works such as *Lawrence of Arabia* (1962) and *Doctor Zhivago* (1965), both directed by David Lean. Parrondo won four Goya awards; the last one was for his participation in *Ninette* (José Luis Garci, 2005). He also won the Oscar for best art direction two years in a row: in 1970 for *Patton*, and in 1971 for *Nicholas and Alexandra*, both directed by Franklin Schaffner.

Figure 2.21. *Frame from the film The Ten Commandments (Cecil B. DeMille, 1923).*
Source: Own elaboration using the original material.

Figure 2.22. *Frame from the film Metropolis (Fritz Lang, 1927).*
Source: Own elaboration using the original material.

2.4.2. Basic concepts of art direction

In the first stage, the art director reads the literary script and makes a breakdown with notes regarding the period, spaces, textures, colors and everything concerning the visual aspect. The script breakdown consists of a breakdown by sets, actual locations and all props for the sets, locations and characters. This helps to plan everything that may be needed, both for the story itself and for the budget. It is the guide that the entire art department should know. The decoration or setting is all the props distributed in the set or location. This includes furniture, carpets, objects to hang on the walls, window treatments, lamps, books, etc. It is all the decoration that is displayed to create the atmosphere and make the place believable. The script gives some guidelines to get an idea about the decoration and the period. Keep in mind that the set can be influenced by the aesthetics of the art director, the lighting of the director of photography, the color grading, the digital effects and the director's own vision or style.

We can differentiate between three main types of props, depending on the use of the objects (Martin, 1977; Bordwell and Thompson, 1994). Emphatic props, also called *attrezzo*, are objects that are indispensable for the development and understanding of the action or the behavior of the characters. Character or hand props are the objects manipulated by the characters on stage, but without dramatic charge. And stage props are objects that, as an integral part of the set, remain on stage all the time. Regarding the first type, emphatic props are all the objects that have a dramatic function on the space or on the characters, as opposed to hand or stage props, which are only part of the setting. Sometimes there is confusion between costumes and props. In the case of glasses, for example, if they appear on the character, they are a costume element. But if the character takes the glasses out of a drawer and puts them on while the shot is being filmed, it is a prop. As the borderline is often blurred, depending on each case, it is decided by the entire art department.

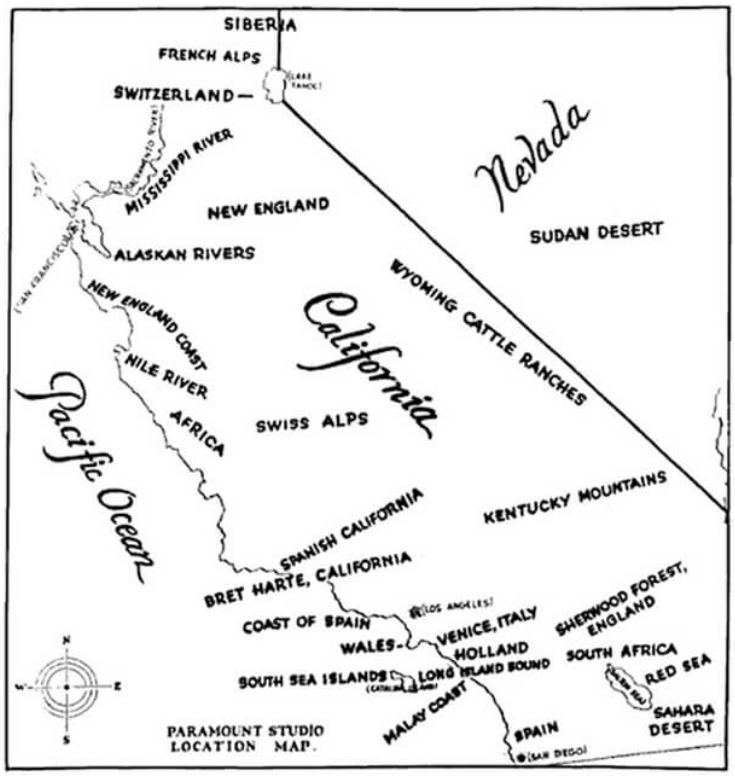

Figure 2.23. *Paramount Studios map for international shooting locations in California (1927). Source: Brilliant Maps (2023).*

Figure 2.24. *Frame from the film Letter from an Unknown Woman (Max Ophüls, 1948). Source: Own elaboration using the original material.*

Figure 2.25. *Frame from the film Das Cabinet des Dr. Caligari (Robert Wiene, 1920). Source: Own elaboration using the original material.*

Scenography is a cinematographic element that precedes filming. It is the sets, scenery and all the treatment that can be given to real spaces. The art director designs and supervises the sets, which are built by a set designer assisted by a series of assistants, carpenters and painters. Locations may be natural exteriors (Fig. 2.23) and interiors, which are altered only with minor touch-ups, or sets constructed in part or in whole, both on location and on set. The choice of space may arise from the need to faithfully reconstruct a city, such as Minsk or Vienna in *Letter from an Unknown Woman* (Max Ophüls, 1948) (Fig. 2.24), filmed in the Universal studios with models of the city; or Moscow in the aforementioned *Doctor Zhivago* (1965), filmed in Madrid; or from the need to create totally unreal or symbolic spaces as in *Das Cabinet des Dr. Caligari* (Robert Wiene, 1920), filmed entirely in the Lixie-Atelier studio in Berlin (Fig. 2.25).

2.4.3. The art department's organizational chart

The art director is responsible for directing his or her entire department within the audiovisual production. This is the person in charge of supervising the designs that will materialize in the shoot, dealing with suppliers, managing the logistics that affect their department, obtaining materials, controlling the budget, supervising the construction of sets or real locations, supervising the props, special effects, wardrobe, hairdressing, make-up, characterization, etc. The illustrator creates sketches, concept art and designs that are used in the preparation and production of a work, such as a storyboard. Different illustrators may be commissioned, dividing up the tasks, which are supervised by the art director; and the graphic designer creates all the necessary graphics, both those that will be seen on screen (symbols, books, posters, etc.) and the poster for the work itself, if there is no exclusive poster designer for this task.

Figure 2.26. *Model made for the film Blade Runner 2049 (Denis Villeneuve, 2017). Source: Obolo Studio (2024).*

On the other hand, the decorator is in charge of the decoration of the scenography spaces. Decoration includes props. He or she is also known as prop maker, since, although the elements have different dramatic levels, the same person is usually in charge together with his or her

assistants. The model maker creates studio models at a different scale from the real one of some natural or artificial element to recreate a space or element that will appear larger on screen. Models can be made of a space that will later be built larger, or models whose purpose is to appear directly on the screen (Fig. 2.26).

The chief carpenter is in charge of coordinating the construction, interpreting architectural plans, set design sketches and the placement of each set on location, together with carpenters, blacksmiths, painters, sculptors, gardeners, upholsterers, and all kinds of craftsmen experienced in different techniques, depending on the type of production. The set designer plans and creates on paper the three-dimensional elevations of the concepts, descriptions or conceptual drawings. He or she then directs the construction of the set. This person creates a space, putting on paper and on the set the essence of the place to be represented, which will be built by the chief carpenter and his or her assistants. The location manager looks for the ideal real locations for the audiovisual work. Once the locations have been found and managed, the art director visits the location to study it and assess the possible changes that would have to be made to the place if necessary, and if it has been definitively approved by management and production. And the draughtsman or draftsman makes detailed technical drawings to build the sets. This person designs precise architectural plans to scale based on the set designer's guidelines.

The costume designer adapts the costumes to the characters in the script. Depending on the complexity of the costumes, these will be rented or manufactured by tailoring and dressmaking companies. The costume designer must have training in fashion, painting, pattern making, drawing, etc. The costumes may be conceived in the sketches or concept art or afterwards, depending on the type of production. In this context, Edith Head (Fig. 2.27) was one of the most important costume designers in the history of cinema. On the other hand, the assistant costume designer controls the wardrobe of the artistic team during the shooting, providing assistance and drawing up a detailed inventory.

Figure 2.27. *The costume designer Edith Head. Photograph taken in 1948 by Dan Grossi. Source: Associated Press and Alamy Stock Photo (2023).*

The make-up artist is responsible for the physical appearance of the characters through characterization, according to the instructions received. He or she applies cosmetics and make-up to give the character's physical appearance. In the case of special effects make-up, prepares prostheses with materials such as latex or silicone, as well as creating elements such as wigs or false beards. He or she modifies the appearance of the face, simulates blood, deformities, scars, wounds, etc. Often, make-up that needs volume or must reproduce exact impressions is performed. Often this cannot be achieved with the basis of social make-up, and it is necessary to create different elements such as special make-up, prosthetics, masks, animatronics or hyper-realistic replicas of body parts, either by directly copying the performer or by modeling them if this is not possible, such as a newborn or an animal, for example. The difference between prostheses and masks is that prostheses are divided into several parts and only modify a small area.

Figure 2.28. *Milicent Patrick, special effects makeup artist behind Creature from the Black Lagoon (Jack Arnold, 1954). Source: The Aesthetics Film Club (2024).*

The hairdresser proposes hairstyles for each character, or the treatment of each character's hair, based on the script. Wigs and extensions can transform an actor or actress into the character. Hair is a critical element of the design. The reality of many period audiovisual productions has been poorly visualized because of insufficient or inaccurate hairstyles. For example, the haircuts of the male characters in *Spartacus* (Stanley Kubrick, 1960) look more like haircuts of the late 1950s than those of the Roman Empire (Fig. 2.29). Similarly, in *Doctor Zhivago* (David Lean, 1965), set during the Russian Revolution of 1917, actress Julie Christie does not wear a hairstyle according to that era, but to the 1960s (Fig. 2.30).

We consider that there are three key aspects that must be taken into account when dimensioning the hair and make-up work in the audiovisual world: technical mastery, its descriptive-artistic expression and the efficiency of its execution. When we speak of technical mastery, we are not only referring to the implicit knowledge required, but also to the knowledge that must be had, at least superficially, of the audiovisual world, since the makeup work and its final perception are linked to the result in front of the camera and the lighting. With regard to the descriptive-artistic expression, when faced with requests and needs, the make-up and hairdressing professional must take them into account and offer creative solutions involved in the narration and that reinforce the objectives, always having a certain margin of creative freedom in his o her field. And as for performance efficiency, in addition to great skill, the makeup professional must be as

efficient as possible in terms of speed. He or she must always strike a balance between a job well done, problem solving and speed of execution.

Figure 2.29. *Frame from the film Spartacus (Stanley Kubrick, 1960).*
Source: Own elaboration using the original material.

Figure 2.30. *Frame from the film Doctor Zhivago (David Lean, 1965).*
Source: Own elaboration using the original material.

There are also other professionals within this organization chart. The vehicle coordinator is the person who selects the appropriate vehicles for the action scenes. The gunsmith is the person who takes care of the repair and management of firearms or blanks. The special effects team is in charge of recreating scenes that cannot be obtained by natural means, such as a trip into space, a werewolf transformation, animatronics, an explosion, rain, snow, wind, tsunamis, etc. If done in postproduction, they would be digital visual effects (VFX), which we will discuss later.

2.4.4. The scenic space

The scenic space is the place where the actors and actresses represent their characters (Martin, 1977; Bordwell and Thompson, 1994). It is an essential element in the audiovisual code, since

the performers, as three-dimensional bodies, always need a space. Other additional elements of the scenic space, such as the set, props or lighting, are potential elements, but not essential. The scenic space has a practical and a symbolic function.

Thus, the scenic space is the place where the actors and actresses represent their characters, but it is also the place where the characters themselves are found. The scenic space is the space perceptible by the audience; and it is the fragments of scenery of all the scenographies that will be watched on the screen. That is to say, the scenic space is determined by the type of scenography and by the visualization through the camera's optics.

Under these aspects, each aesthetic corresponds to a different conception of the scenic space. For example, romantic space succumbs to the flashy in terms of color and the imagination of fantasy worlds (Fig. 2.31). However, expressionist space is based on the expressive deformation of reality (Fig. 2.32). In the case of symbolic space, it dematerializes the place in an atmosphere of unreality (Fig. 2.33). Naturalistic space, on the other hand, tries to imitate the world it is describing as much as possible. Thus, this more common typology prioritizes authentic details in set design, lighting and performance to evoke a recognizable, everyday world. This approach seeks to immerse the audience through verisimilitude, avoiding fantastic or stylized elements to emphasize the emotional connection with stories that could occur in real life, whether in urban, rural or domestic settings, thus reinforcing identification with the characters and their human conflicts.

Figure 2.31. *Example of romantic space in the film Charlie and the Chocolate Factory (Tim Burton, 2005). Source: Own elaboration using the original material.*

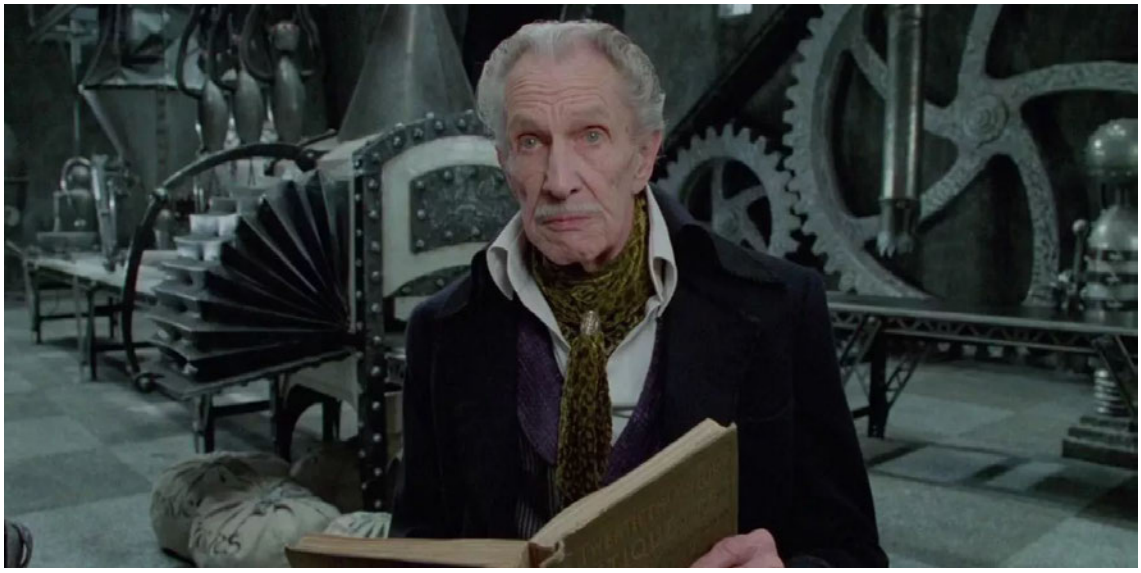

Figure 2.32. *Example of expressionist space in the film Edward Scissorhands (Tim Burton, 1990).*
Source: Own elaboration using the original material.

Figure 2.33. *Example of symbolic space in the film Dogville (Lars von Trier, 2003).*
Source: Own elaboration using the original material.

In this context, the decorative arts are the ornamental and functional works in wood, glass, ceramics, porcelain, textiles, lace, embroidery, etc. used in the scenic spaces. These works are carried out by professional people directed by the person in charge of each sector within the art department, the stage designer being the main coordinator, whose work will be agreed above all with the art director. Thanks to the different decorative arts, the scenography of the audiovisual work can be carried out. Thus, the scenography is all the visual elements that make up a staging in order to reproduce an atmosphere or create a climate. The types of scenography are diverse, and each has its own characteristics. These scenographies can be more or less realistic spatial recreations of fiction, but also non-fictional spaces (interviews, news programs, etc.). Scenography finds its references in reality, interpreting and synthesizing forms, models and systems of reality (Bordwell and Thompson, 1994).

Scenography is part of a particular sphere of the arts. Firstly, because during its development it has adopted characteristics and tools from other branches of art; and it has also reflected political and philosophical ideas and everything that can be expressed from a historical period. Scenography communicates from the first moment it is seen by the spectator. It continues to communicate to the extent that it is inhabited by the characters, and then continues to do so through the changes in lighting and the other objects that occur in the scenic space.

In general, objects give off common meanings for a particular audience. An element such as a Greek column can tell us about a specific place and a specific historical period. However, sometimes that sign is not necessarily placed there in order to refer us to a place, as it might contain other meanings that do not necessarily have to do with its historical and spatial nature. Thus, that Greek column would become a sign that is capable of communicating in itself, just as a crown represents royalty, a pointed arch represents a Gothic cathedral, and so on. Similarly, a sports car serves the same function as an old jeep. However, each is different because they communicate different information. All objects communicate from their essence, their function, how they are used and by whom. However, there are elements that currently refer to a single meaning, and that is why the art director's approach must take into account the way in which they communicate, both in terms of their anthropological significance and their subjective significance.

The scenic space can inform about the historical, geographical, social and cultural coordinates in which the character's action is framed. It constitutes a world in itself, with expressive possibilities. For example, the crashing waves of the sea, an empty tennis court or a garden with no characters can suggest the passing of time, a state of anger, a significant absence of someone, etc. The scenic space is a resource that can transmit psychological states of the characters, as well as define them. This is what is commonly known as dramatic space. For example, in *El laberinto del fauno* (2006), Guillermo del Toro wanted the private space of Captain Vidal to project the interior of his meticulous head, which worked like the gears of a clock (Fig. 2.34). And in the case of the aforementioned film *Letter from an Unknown Woman* (1948), Max Ophüls wanted to convey through space the emotionality of the awakening of love, as if these adult characters were two teenagers falling in love (Fig. 2.35).

Figure 2.34. *Frame from the film El laberinto del fauno (Guillermo del Toro, 2006). Source: Own elaboration using the original material.*

Figure 2.35. *Frame from the film Letter from an Unknown Woman (Max Ophüls, 1948).*
Source: Own elaboration using the original material.

Under these aspects, it should also be pointed out that scenic architecture is the art and technique of projecting, designing, constructing and modifying the space of the audiovisual work. It is directly connected with scenography, since the set designer is ultimately the architect; although it is true that the consensus and approval of the art director, the director of photography and the director is necessary, since any audiovisual work, although it has its own organization chart, is a team effort. Thus, scenic architecture has appeared in the audiovisual environment since the beginnings of cinema. The Lumière brothers did not tell stories in a narrative sense as we know it today, and the streets, houses and factories in their films offer a rather documentary vision. However, many filmmakers began very early on to film stories that required sets, such as Georges Méliès, Alice Guy, Charles Chaplin and Buster Keaton, among others.

Scenic architecture is not reality, it is its representation, and it is almost always present in the audiovisual image, whose only requirement is its dramatic functionality. The audiovisual work, therefore, proposes an imaginary world that has to pass for possible and plausible. However, plausible does not mean real. The global scenic architecture is mentally constructed through the union of unconnected fragments that give the sensation of spatial continuity, as if what is being seen were a fragment of reality. In practice, they are only fragmented images, that is shots joined together thanks to editing, with only what is necessary for filming being constructed beforehand.

We find a multitude of filmmakers for whom architecture does not play a subordinate role, but has an almost protagonist character in the audiovisual work. In these cases, stage architecture loses its ornamental character to project itself as a territory from which to build a poetics and an expressive character. In this sense, Walter Ruttmann's *Berlin, Die Sinfonie der Grosstadt* (1927) (Fig. 2.36) and Dziga Vertov's *The Man with a Movie Camera* (1928) (Fig. 2.37) are

two of the most representative films in the line of scenic architecture as protagonist. There are also filmmakers who profess a proverbial devotion to the city. Much of Woody Allen's work, for example, can be read as a declaration of love for New York, but in *Manhattan* (1979) his passion is accentuated from the opening monologue. And the deformities of modern architecture attracted the mordant and ironic gaze of French filmmaker Jacques Tati in a celebrated duet: *Mon oncle* (1958) (Fig. 2.38) and *Playtime* (1967) (Fig. 2.39).

Figure 2.36. *Frame from the film Berlin, Die Sinfonie der Grosstadt (Walter Ruttmann, 1927). Source: Own elaboration using the original material.*

Figure 2.37. *Frame from the film The Man with a Movie Camera (Dziga Vertov, 1928). Source: Own elaboration using the original material.*

Figure 2.38. *Frame from the film Mon oncle (Jacques Tati, 1958).*
Source: Own elaboration using the original material.

Figure 2.39. *Frame from the film Playtime (Jacques Tati, 1967).*
Source: Own elaboration using the original material.

Within scenic space and cinematography, an interesting concept is that of the visual metaphor. A visual metaphor is any image that projects a symbolic meaning in addition to the obvious one.

These are so recurrent in audiovisual language that many of them have become a cliche. One of the most commonly used visual metaphors is that of the typical couple who start kissing in an intimate situation and then see some spatial element different from them that suggests that the couple is having sex, as Alfred Hitchcock did in *North by Northwest* (1959) (Fig. 2.40). Another example is at the beginning of *2001: A Space Odyssey* (1968), a film in which Stanley Kubrick wanted to show a visual metaphor by contemplating the sun rising over the planet Earth and the moon, suggesting the enlightenment and evolution of terrestrials. Symmetry would mean order and beauty, as opposed to the disorder and violence of hominids (Fig. 2.41).

Figure 2.40. *Example of a visual metaphor in the film North by Northwest (Alfred Hitchcock, 1959). Source: Own elaboration using the original material.*

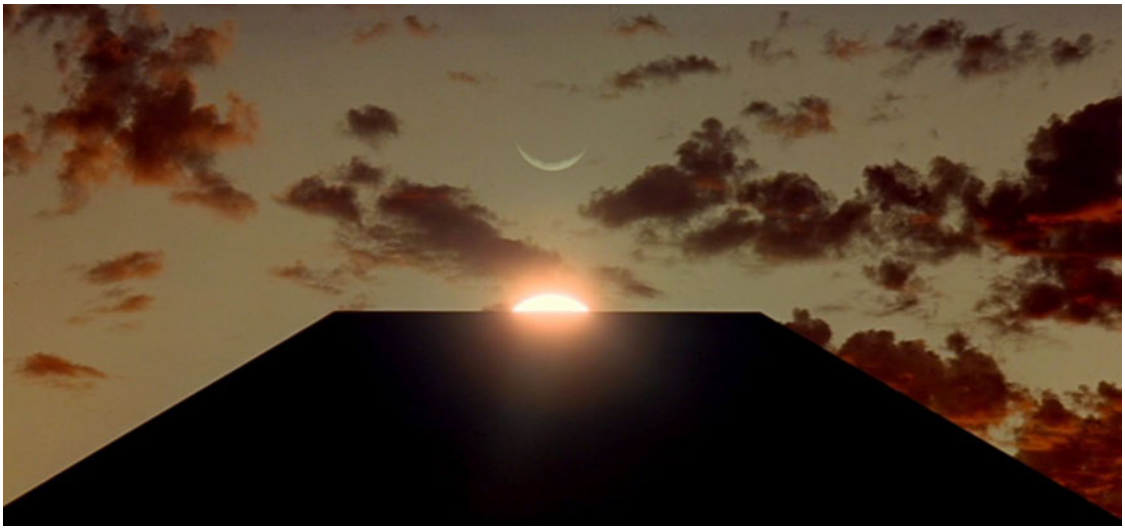

Figure 2.41. *Example of a visual metaphor in the film 2001: A Space Odyssey (Stanley Kubrick, 1968). Source: Own elaboration using the original material.*

Chapter 3. The sound

Sound actively influences the way we perceive the content of an audiovisual work. However, we are used to living in a largely invisible sound environment (Bordwell and Thompson, 1994, p. 292). Therefore, we usually say that we have seen a film, when in fact we have seen it but also heard it, with sound being relegated to a second level of accompaniment to the supposedly real basis of the work, which would be the moving images. For technical reasons, it is not possible to stop a film in an instant of sound, while it is possible to freeze a specific frame.

However, as the filmmaker Robert Bresson (1975, p. 12) pointed out, cinema is the writing of moving images with sound. In addition, sound was integrated into moving images several years after the invention of moving images; and there were detractors of sound in cinema, such as Charles Chaplin, who considered that it eliminated the great beauty of silence (Martin, 1977, p. 118); or Soviet filmmakers such as Serguéi M. Eisenstein, Grigori Alexandrov or Vsévolod Pudovkin, who believed that if sound was misdirected it could corrupt the true nature of cinema in its artistic approach.

Sound offers a different way of perceiving a film or any audiovisual work, and can clarify the meaning of the images, or on the contrary manifest a certain ambiguity. Therefore, a dialogue arises between the image and the soundtrack, which is made up of all those elements that the audience perceives sonically, including the music.

3.1. The arrival of sound in cinema

The arrival of sound in cinema, thus transforming it into an audio-visual media on a technical level, took place in the 1920s through various Hollywood companies, as was the case of Warner Bros., which began to expand and invest in sound technology, such as the Vitaphone system, where the sound of the film was recorded and reproduced through discs that were synchronized with the images (Bordwell and Thompson, 1994, p. 471); and after successful initial tests, the result was *The Jazz Singer* (Alan Crosland, 1927), considered the first feature film with synchronized sound in the history of cinema (Fig. 3.1) (Chion, 1982, p. 159), which allowed the gradual expansion of sound cinema.

However, it should be noted that before this milestone there were pioneering experiments that combined image and sound decades before their commercial consolidation. For example, Alice Guy, considered the first female director of fiction films, developed *phonoscènes* in the early 20th century using Gaumont's Chronophone system, which synchronized audio recordings with moving images. These short productions, often musical or comic, laid the technical foundations for sound integration in cinema, although their initial impact was limited by the technological restrictions of the time.

The viewing of works framed in what was later defined as the silent film stage was also accompanied by a relative sound experience, either through narrators or through live orchestral music (Bordwell and Thompson, 1994, p. 293); therefore, it was inevitable that image and sound would eventually be unified on a technical level. In this sense, given the need for sound to acquire notoriety and to be visually represented and perceived with images, Marcel Martin (1977, pp. 124-126) indicates what were the main contributions of sound before its appearance in the film industry:

- Greater realism: or rather, a greater impression of reality, since sound increases the authenticity coefficient of the image. However, it is not always reality that must be sought, but verisimilitude, because in most vehicle scenes, for example, when vehicles

are driving on the road, they sound unrealistic (the engine, the brakes, other vehicles on the road, etc., can hardly be heard).

Figure 3.1. *Premiere of The Jazz Singer on 6 October 1927 at the Warner Theatre in New York, whose poster alluded to the innovative Vitaphone system. Source: World History Archive/ARPL (1927).*

- Sound continuity: sound re-establishes the separate continuity of the images, as the soundtrack is less fragmented and can provide a continuous sound environment across the various juxtaposed planes. Thus, sound leads and anticipates the audience's attention within the images.
- Normal use of the word: with the advent of sound, written texts in intertitles, typical of silent films, were eliminated. This factor freed the image to a large extent from an explanatory function, in order to be able to delve into a more expressive value, without the need to show what can be said. Thus, it was no longer necessary to show everything, since the whistle of a locomotive, for example, makes it possible to suppress the vision of an entire station (Bresson, 1975, p. 76); functioning as a means of introducing a punctuation mark, the image was able to be used in a more expressive way (Chion, 1991, p. 45).
- Silence as dramatic value: with the arrival of sound, silence can strongly mark the dramatic tension of a moment. In this respect, the filmmaker Robert Bresson (1975, p. 43) pointed out that sound film had invented silence, giving it a new dramatic and expressive function. In parallel, there is also an analogy with the advent of color film, where black-and-white photography acquired a new expressive function (Bordwell and Thompson, 1994, p. 293).

- Ellipsis of sound or image: the duality between image and sound confers an elliptical value to the use of both bands in the audiovisual work, being able to omit situations. In this sense, and although it is an aspect more related to film editing, temporal or spatial ellipsis is understood as the act of skipping part of the real time elapsed in the story.
- The juxtaposition of image and sound as counterpoint: this can occur when the images tell something different from what the sound is telling, and can also offer a contrast or the creation of metaphors. Therefore, between images and sounds there must be a harmony of relations (Bresson, 1975, p. 97). Moreover, sound is not only an effective counterpoint to the image, but can also serve to link shots or scenes, as a transitional effect, as with music.
- Music: for Martin (1977, p. 130), music is the most interesting contribution that sound offers. As a set of compositions and musical effects that appear on the soundtrack, if the music is not justified by seeing in the images the source from which it comes, it constitutes a particularly expressive material.

In short, the advent of sound introduced a new way of perceiving and interpreting audiovisual works (Bordwell and Thompson, 1994, pp. 292-293), which has been shaped and refined over the years and with technical advances. Some aspects of this have been addressed on several occasions in the plots of various films, such as *Singin' in the Rain* (Stanley Donen and Gene Kelly, 1952) or *Babylon* (Damien Chazelle, 2022). Thus, sound is a fundamental element in the creation of a film, and should not only be an element that accompanies the images, but also offers a fundamental expressive dimension.

3.2. The characteristics of sound

The main characteristics of sound are level, tone and bell (Bordwell and Thompson, 1994, pp. 295-297). In relation to level, sound is the result of vibrations propagating in the air, which create the sensation of level or loudness. Thus, level is constantly manipulated in the audiovisual media. In this sense, it is common to listen to music and just when two people start a dialogue, the volume of the music decreases. The level is also related to the perceived distance, and the louder the sound, the closer it seems to be to us (first acoustic term), and other sounds can be heard further away (Bordwell and Thompson, 1994, p. 296). Thus, level refers to a quantitative measure that corresponds to the volume of the sound, that is if the level is low, the volume is low, and vice versa.

Tone refers to the low or high quality that a sound can contain, and is determined by its frequency, that is a high frequency implies a high tone, and if it is low the tone will also be low. In this context, frequency is defined as the number of times a sound wave strikes a fixed point during a given time. For example, in the famous shower scene in *Psycho* (Alfred Hitchcock, 1960), the music composer Bernard Herrmann obtained sound effects resembling human screams by using violins played at a very high tone (Bordwell and Thompson, 1994, p. 296). Thus, a sound containing a higher number of high-pitched frequencies will create a perception of greater alertness, causing greater tension in the audience (Chion, 1991, p. 21).

In terms of bell, when we say that a song has a sweet tone or that a person has a nasal voice, we are really referring to bell, which also allows us to differentiate a person from others by the way they speak (Bordwell and Thompson, 1994, p. 296). The manipulation of bell in the audiovisual media is constant, and can articulate fragments of the soundtrack; and at times, it can be very obvious or stereotypical or more subtle.

3.3. The dimensions of sound

The four dimensions of sound are rhythm, fidelity, space and time (Bordwell and Thompson, 1994, pp. 304-316). Rhythm implies a beat (stronger or weaker), a tempo and a scheme of accents, the characteristics of which are most recognizable in music, although they are also found in dialogue (alluding to bell) and sound effects. The sound rhythm can be combined with the music; or on the contrary, it can serve as a counterpoint, which will be determined by the editing. The close coordination between the movement of picture elements and sound is present, for example, in Walt Disney's early animated works, where the characters moved in sync with the music (without the need to be dancing), giving rise to the term *Mickey Mousing* when this occurs (Bordwell and Thompson, 1994, p. 304).

Fidelity refers to the degree to which the sound is faithful to the source we associate with it. In this sense, it is about meeting the audience's expectations in terms of the verisimilitude of the sounds. This does not imply that in the post-production phase sounds are recorded in the studio using the same elements that appear on screen, and it is possible to work with borderline sounds, which can also have a narrative function. For example, in *Monty Python and the Holy Grail* (Terry Jones and Terry Gilliam, 1975), the audience's expectations of sound fidelity are broken under a comic aspect by hearing an approaching horse galloping and then discovering that it is the noise produced by the shells of a coconut.

Figure 3.2. *Frame from de film Monty Python and the Holy Grail (Terry Jones and Terry Gilliam, 1975). Source: Own elaboration using the original material.*

In relation to the spatial dimension of sound, it is based on the fact that the space comes from a source. Thus, if the sound source comes from an element or character that is part of the space of the story (for example, the source can be seen and heard), it is called diegetic sound; otherwise, it is extradiegetic sound (Bordwell and Thompson, 1994, p. 307).

Occasionally, the diegetic space can be varied, making diegetic games in which the source is modified, mainly for narrative and expressive purposes. For example, in the spot *Elevator Precut* (2018), promoted by Coca-Cola, a famous person is locked in a hotel lift with one of the

people who work there. The music that the famous person listens to can be heard through his headphones (being a diegetic sound), but at a certain moment (Fig. 3.3), this music is transformed into extradiegetic sound, showing that from that moment on it comes from an imaginary place off, so the sound source changes. In this sense, although it seems that the sound is diegetic all the time, as the famous person unplugs the headphones so that they can both listen to the song at the same time, it continues until the end of the spot, when they are no longer together.

Figure 3.3. *Frame from the spot Elevator Precut (2018), just as the extradiegetic sound begins. Source: Own elaboration using the original material.*

As for the fourth dimension, the sound time may coincide with the time of the image, although not necessarily. The first case is defined as synchronous sound and the second as asynchronous sound. The fact that sound and image are synchronous is accepted as a supposed guarantee that we are dealing with the reality of life, in which sound and image are in principle synchronous within the limits of the speed of sound (Chion, 1982, p. 134).

Under these aspects, the coincidence of sound and image within the audiovisual story is called syncresis (Chion, 1991, p. 56). For example, in the aforementioned film *Singin' in the Rain* there is a creative use of asynchronous sound in the film premiere (within the plot itself) and the sounds are heard before their source is seen in the images. This temporal mismatch provokes laughter among the audience, as our understanding of the audiovisual story is based on the synchronization between images and sounds (Bordwell and Thompson, 1994, p. 313).

3.4. The elements of sound

Until we achieve what we know as the final mix of the soundtrack, the sound of an audiovisual work is also planned in three stages, in parallel to the work itself. Thus, before recording (pre-production), and on the basis of the literary script and the technical script, the people responsible for sound have to draw up a breakdown of those sounds or sound effects that will be necessary for the work. Therefore, part of these sounds (such as the actors' dialogues) will be recorded in the second stage (production), while other sounds (possible dubbing of these dialogues, music, etc.) will be developed and synchronized in the third stage (post-production). In this context, and not including silence, Bordwell and Thompson (1994, p. 298) indicate the existence of three elements within the soundtrack: dialogue (including voice-over), music and sound effects.

3.4.1. Dialogue and voice-over

Dialogue can be either scene dialogue or behavioral dialogue. Scene dialogue provides information about the thoughts, desires or feelings of the characters, whereas behavioral dialogue is futile conversations that contribute to the understanding of the characters, without showing us in depth who they are. For dialogue to exist, there must be more than one character in the action, either on or off the field, otherwise it is a monologue.

Dialogue allows the characters to be constructed in a particularly particular way, and this is a factor to be taken into account from the moment the literary script is written. In this sense, if each person in real life speaks in a different way, this reality must also be taken into consideration when writing the lines of dialogue of our characters. Therefore, the verisimilitude of a dialogue will depend on the character who speaks it (depending on his or her character, social class, age, etc.) (Bordwell and Thompson, 1994, pp. 298-299).

On the other hand, the voice-over is the sound whose source is not only absent in the image we see, but is also non-diegetic; that is, it is located in a time and place outside the situation directly evoked (Chion, 1991, p. 63). Likewise, Chion (1982, p. 27) also defines the voice-over as a disembodied voice that narrates, provokes and comments on the evocation of the past.

Thus, this voice comes from the figure of a narrator who narrates the audiovisual story, and this can be a character who is part of the story (internal narrator) or someone external or objective (external narrator), who is omniscient when he/she knows the totality of the events that take place in the story. This type of interior monologue (told in the first person or in the third person) allows nuances and subtleties to be expressed that images alone might not be able to reflect at a given moment in the audiovisual story (Martin, 1977, pp. 191-192).

3.4.2. Music

Music consists of the rhythmic combination of sounds in order to induce emotions or feelings in the audience, and is usually performed in the post-production phase, where it will be integrated into the soundtrack of the audiovisual work, together with the dialogues and sound effects. We have already said that, in relation to space, music can be a diegetic or extradiegetic sound, depending on the origin of its source (Bordwell and Thompson, 1994, p. 307); and in the creation of commercials, for example, the use of extradiegetic music is frequent, especially because of its connection with emotions.

In addition, many advertising campaigns make use of jingles, that is composed songs, as one of their central themes. In this sense, a theme song is a piece of music composed especially for an audiovisual work, giving it a characteristic element of identification, and which can be used as a link between characters.

The idea of the musical theme leads to the concept of the sound leitmotiv, which is a musical theme associated with some character, idea or element of the audiovisual work, and is therefore systematically repeated throughout the work (Martin, 1977, p. 264). It should be noted that there is also the visual leitmotiv, which is closely related to image systems, where an iconographic element is systematically repeated throughout the work. For example, a very popular visual leitmotiv appears in *The Godfather* (Francis Ford Coppola, 1972). Oranges appear in the film every time a scene associated with death takes place. In relation to the sound leitmotiv, this can coincide with the concept of theme music, and in audiovisual fiction it is often associated with popular characters, such as Darth Vader, Harry Potter or James Bond, as there is a musical composition associated with them.

It should be noted that music plays a major role as a factor of sonic continuity, both in material and dramatic terms (Martin, 1977, p. 124); and music can also acquire an expressive value in order to show a point of view. For example, the song *(I Can't Get No) Satisfaction* (1965) de The Rolling Stones became a generational anthem of an era, where dissatisfaction also included the United States, under President Kennedy, intervening in the Vietnam War. Thus, Francis Ford Coppola included it in *Apocalypse Now* (1979), a film set precisely in that historical moment, where American soldiers sing and dance to it in diegetic terms, thus marking the point of view of the film's director.

Figure 3.4. *Frame from the film Apocalypse Now (Francis Ford Coppola, 1979), during the sequence in which the song I Can't Get No) Satisfaction (1965) is played. Source: Own elaboration using the original material.*

3.4.3. Sound effects

Sound effects provide the sensation of a realistic environment where they are often unnoticed by the audience; however, if these effects were omitted, the silence would be disturbing (Bordwell and Thompson, 1994, p. 298). Sound effects, which are also part of the different soundtracks, can be recorded before, during or after the shooting of the film, and there are a variety of types, including the following:

- Ambient sound or wild track: this is the surrounding ambient sound that surrounds a situation or scene offering a sound atmosphere that does not arouse excessive curiosity in visualizing its source on the part of the audience, as it is a sound specific to the place. Ambient sound is one of the elements that, through its nuances, provides greater verisimilitude to the audiovisual work. Ambient sound is usually recorded as direct sound in the same location where the film was shot. It is advisable to record even the silence of the place itself, thus having enough material to homogenize the sound editing afterwards.
- Noises: we can differentiate between natural noises and human noises (Martin, 1977, pp. 126-127). Natural noises are those sound phenomena that are perceived in nature and are often integrated into the ambient sound. Human noises are further divided into mechanical noises (such as the sound of a vehicle or the footsteps of someone walking) and noisy words, which is the human sound background of dialogues that are not in the foreground and are not understood.
- Foley effects: are sounds created in a soundproof studio; they are sounds that recreate other sounds that were not captured during the filming of the movie. Sometimes foley

effects replace a particular ambient sound, or other sounds that disappear, for example, when dialogue is dubbed or recorded live, as they are often not captured directly from the original source.

- Digital effects: these are sounds created entirely by computer, or only part of these sounds have been captured and then worked on in the post-production stage (Bordwell and Thompson, 1994, p. 292).

Sometimes, the boundaries between the classification of sound effects can be ambiguous. For example, in the aforementioned case of Psycho, the screams obtained through the use of violins could be classified as music, but also as a sound effect; however, if it were a real scream, it could be articulated within a dialogue (Bordwell and Thompson, 1994, p. 296).

3.5. Microphones

Any sound recorded with a microphone at a short distance from the emitting source is what is known as a close-up sound, while sound recorded at a greater distance would be a general sound shot. Thus, it is common for a dialogue to correspond to a close-up, while the ambient sound is usually a general sound shot. In this context, a microphone is a device whose function is to transform sound information into electrical information (Solarino, 1993, p. 112). In this sense, it should be noted that when talking about sound in the audiovisual field, a more correct concept is that of audio, so sound and audio are not synonymous. We speak of sound when it has not been converted into an electrical signal, while audio is when the sound has been converted into an electrical signal, recorded by means of a microphone. Microphones can be wireless, boom microphones, USB microphones, lapel microphones (also known as *lavalier*), table microphones, etc., but practically all of them are characterized by a series of parameters (Solarino, 1993, pp. 114-120).

On the one hand we have sensitivity. This is represented by the minimum sound intensity that a microphone can reveal, so a low intensity will depend on the level of sound emission or the distance between the microphone and the source that emits it. On the other hand, we find dynamic, which derives directly from sensitivity. Dynamic is the difference between the maximum sound intensity, without distortion, and the minimum revealed by the microphone (Solarino, 1993, p. 114). In quantitative terms, the maximum sound intensity without distortion corresponds to a value of zero decibels (dB), and at lower intensities, with negative values (Fig. 3.5). Thus, a decibel is the unit of measurement of loudness, and is the smallest change in loudness level that can be appreciated by the human ear, while maintaining a uniform tone. Therefore, a high-sensitivity microphone generally also has high dynamic.

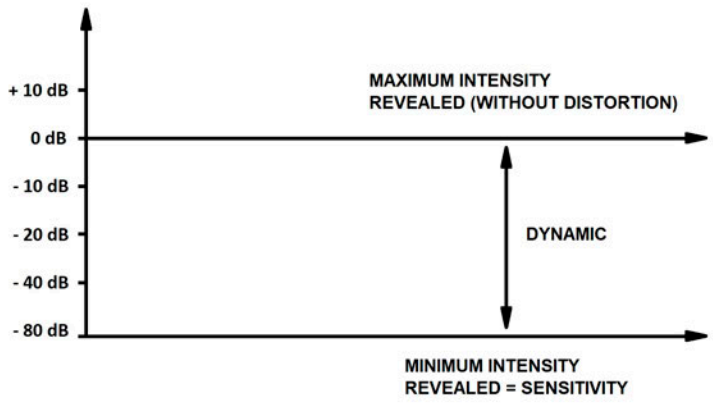

Figure 3.5. *Sensitivity and dynamic of a microphone. Source: Own elaboration, based on Solarino (1993, p. 114).*

Another parameter is fidelity and frequency response. This is the ability of a microphone to generate an electrical signal in a configuration as close as possible to the corresponding sound wave (Solarino, 1993, p. 115). Thus, a high-fidelity microphone has to respond correctly to any sound stimulus, be it low-frequency sounds (low-frequency waves) or high-frequency sounds (high-frequency waves). In this sense, the audible frequency band is between 20 and 20,000 Hertz (Hz), the Hertz being the unit of measurement of frequency which is equivalent to one cycle per second. Therefore, a microphone offers higher fidelity the wider the band of frequencies to which it is able to respond (Solarino, 1993, p. 115). Another attribute is directionality. This is the sensitivity that a microphone can offer depending on the angle or direction from which the sound is coming. Furthermore, depending on the directionality there are different types of microphones. Some examples are the following:

- Omnidirectional microphone: a microphone that has the same sensitivity from all directions from which the sound is coming (Fig. 3.6). It is commonly used to capture ambient sound, as it captures sound in a non-selective way.

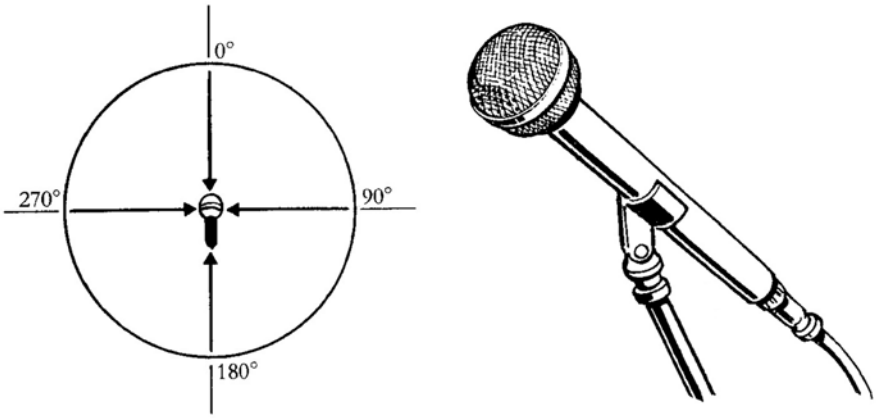

Figure 3.6. *Diaphragm and example of omnidirectional microphone. Source: Solarino (1993, pp. 117-118).*

- Cardioid microphone: a microphone with a higher sensitivity at the front and a lower sensitivity at the rear (Fig. 3.7). In other words, they are microphones that respond mainly to sounds coming from the front, being less sensitive to the sides and rear. They are commonly used for recording dialogues, interviews, etc.

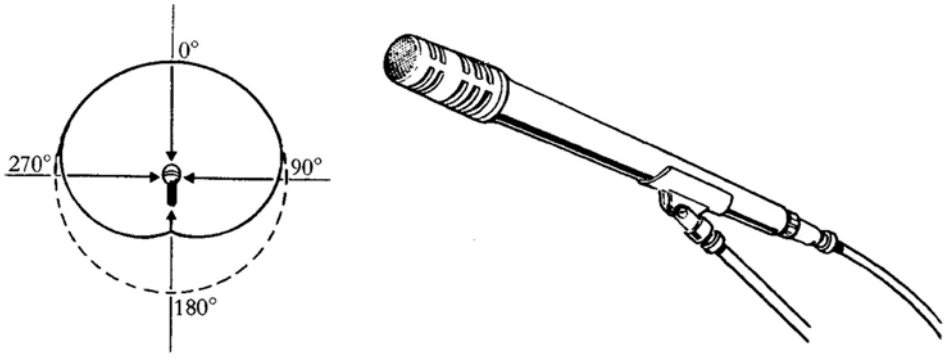

Figure 3.7. *Diaphragm and example of a cardioid microphone. Source: Solarino (1993, pp. 118-119).*

– Directional microphone: also known as supercardioid or superdirectional, this is a highly selective microphone, picking up only those sounds that arrive from the front, but with an angulation of no more than forty degrees (Fig. 3.8). This type of microphone is especially used to record a source in the foreground at a long distance. It is often used, for example, at sporting events, i.e. it is suitable for recording the sound of shots that do not allow a certain proximity of the microphone to the actor or actress in question.

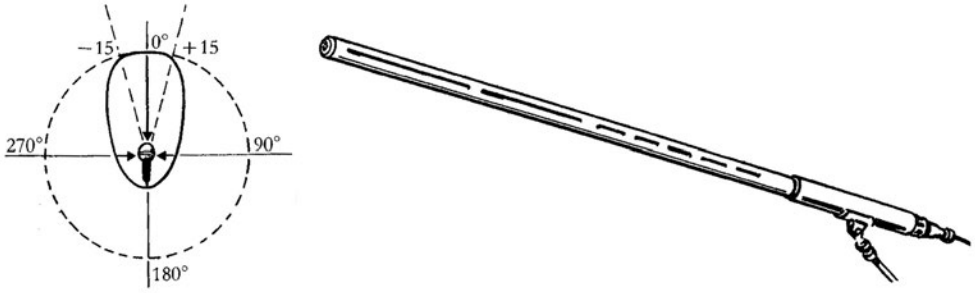

Figure 3.8. *Diaphragm and example of a directional microphone. Source: Solarino (1993, pp. 121-122).*

This categorization allows a brief approach to the basic principles of microphones within audiovisual communication, where we would find other classifications, such as the ultra-cardioid microphone, which is similar to the cardioid microphone but with a lower arc of sensitivity; or the bidirectional microphone, which responds in the same way to sounds coming from both front and rear, offering little sensitivity to lateral sounds.

Likewise, sound allows us to create unique moments that revolve around it, under a protagonist and emotional character, through the different elements that make up the soundtrack. Thus, its articulation offers multiple options that allow the message to reach the audience in a particular way, since sound, as a transmitter of emotions and feelings, allows it not to be an element solely relegated to the image as an accompaniment. Sound can function as a vehicle that offers new information and perception within the audiovisual story.

Chapter 4. Audiovisual editing

Audiovisual editing is the great contribution that cinema has made to the History of Art. The rest of the elements that make up a shot are pre-existent to the media itself: writing, framing, lighting, composition, sound, staging, etc. However, and although there is a previous glimpse through pictorial and photographic art, it is with the arrival of cinema that editing is established as a distinctive element with respect to the rest of the arts. Under this appreciation, there is no other art that offers an equivalent process, since editing makes it possible to select a complete unit (the shot), and totally alter its meaning and its possible impact by changing its duration and changing the position it occupies in relation to the other units (Sherman, 1992, p. 73).

The concept of editing has its origins in the field of engineering, in relation to the construction and assembly of machinery, transferring to the audiovisual field the idea that the pieces are the shots, whose design is carried out through the elaboration of the script; thus the material is manufactured during the filming according to these instructions, and in the editing it proceeds to its collation to also arrive at the finished product, which in cinema corresponds to a continuity of images and audios. Thus, the essence of editing lies in the organization of the shots of a work under certain conditions of duration and order during the post-production stage (Martin, 1977, p. 144); and editing is based on cutting, arranging and assembling the filmed material to create the final form (Sherman, 1992, p. 74).

4.1. The origins of audiovisual editing

The Lumière brothers, the fathers of the cinematograph, produced their first works by a simple process: they selected a subject and placed the camera still in front of the subjects, who carried out the action; for them, the cinematographic camera had only one advantage over the photographic camera: capturing movement (Reisz, 1958, p. 16). Nevertheless, some of their works could well have conveyed the same idea through a static image. However, in the Lumière brothers' short film *L'arroseur arrosé* (1895) there was for the first time a more conscious control of the fictional plot, and it went beyond capturing on celluloid what was happening in reality.

Thus, both the event and the way in which the action was presented showed an interest in attracting the audience's attention (Reisz, 1958, p. 16). In this context, we must also make visible the figure of Alice Guy, director of *La fée aux choux* (1896), considered one of the first fiction films. This short film is currently untraceable, but its remake of 1899-1900 has survived. In it, Alice Guy made an in-camera editing, the first in the history of cinema. In addition, Alice Guy also made *Sage-femme de première classe* (1902), in which she expanded the story of *La fée aux choux* and fragmented the actions into two different stages (Fig. 4.1).

The appearance of Georges Méliès marked a qualitative leap in audiovisual editing. Méliès came from the fields of mechanics, magic and prestidigitation. Considered the father of cinematographic special effects, Méliès introduced the idea of thematic continuity by means of a succession of isolated shots in *Cinderella* (Méliès, 1899), which was a breakthrough in relation to everything that had been done up to that time (Reisz, 1958, pp. 16-17). However, it was not a matter of continuity in the editing of actions, but of the acts that made up the work.

Thus, while the Lumière films depicted single events, Méliès incorporated a story told through episodes, similar to theatrical performances, but with the same limitations, since each scene was developed in front of a single set and a unit of time, as in the theatre. In other words, the scenes never began in one place and continued in another; the camera was always at the same distance

from the actors and actresses, facing the stage, static and out of the action, as if it were a spectator sitting in a theatre seat (Reisz, 1958, p. 17).

Figure 4.1. *In Sage-femme de première classe (Alice Guy, 1902) the characters leave one stage by opening a door and then appear on another stage, the action being fragmented into two different shots (and stages). Source: Own elaboration using the original material.*

Later, Méliès made other works where he did begin to fragment the actions through different scenarios, as was the case with *Le Voyage dans la Lune* (1902). Méliès also discovered a basic special effect while filming in the Place de l'Opéra in Paris; as Marcel Martin (1977, p. 156) relates, having stopped his camera for a few moments due to a mechanical malfunction, during the projection he noticed that a bus suddenly turned into a hearse; the latter had ended up taking the place of the former in front of the lens, while the camera was stopped. In this accidental way, Méliès discovered the *stop trick*; and through his continuous tricks and games of illusionism, the filmmaker opened up a new range of creative possibilities.

On the other hand, inspired by the photographer William Friese-Greene, a group of British authors began to experiment with editing by shooting on location or in simple outdoor studios, with George A. Smith and James Williamson standing out (Bordwell and Thompson, 1994, p. 455). The historian Georges Sadoul called this group the Brighton School (Martin, 1977, p. 37). In the case of George A. Smith, the filmmaker filmed for the first time a close-up, which was presented as a trick, seen through a magnifying glass, but favoring the mobility of the camera, as if it were the human eye (Martin, 1977, p. 37). Although this resource did not have a dramatic function, it was an innovative element, and was reflected in his short film *Grandma's Reading Glass* (1900). In the case of James Williamson, he was the author of *Stop, Thief!* (1901), the first audiovisual work on persecution themes, which also had a editing alternating between persecutors and persecuted (Martin, 1977, p. 147).

Although Brighton's precursors established the elementary conditions of editing, it was the American Edwin S. Porter who gave it a meaning, having detected its possibilities and developed them for specific purposes. Porter was one of Edison's first cameramen, and his ideas about the cinematographic media were in stark contrast to previously accepted practices (Reisz, 1958, p. 17). In this sense, Porter placed editing at the service of discourse, especially as an instrument for capturing the audience's attention. Two of his most important works are *Life of an American Fireman* (1903) and *The Great Train Robbery* (1903). With these short films, in whose stories more than one line of action ran in parallel, the meaning of a shot did not have a specific content, but could change depending on its situation in relation to the other shots (Reisz, 1958, p. 17).

For his part, David W. Griffith, the father of modern cinema, was one of the most representative pioneers in the development of film editing. In two of his fundamental feature films, *The Birth*

of a Nation (1915) and *Intolerance* (1916), Griffith combined the reality of the Lumière brothers, the illusionism of Méliès and the procedures of Porter to offer his greatest discovery: the order of the shots in a scene must be based on dramatic requirements. Therefore, one of Griffith's greatest merits was the discovery and application of different modes of editing that increased and enriched the possibilities of the cinematographic story (Reisz, 1958, p. 26). Some of Griffith's main contributions were the use of the wide shot to show large spaces where simultaneous actions take place, parallel editing to combine different narrative events, the application of close-up and detail shots for dramatic purposes, and the use of depth of field to provide more information in the shots (Reisz, 1958, pp. 24-26). It is worth noting that the idea of audiovisual editing between Porter and Griffith was different. While Porter usually shot the action in a wide shot, Griffith changed the position of the camera, demonstrating that this position played a key narrative role in creating effects on the audience through the cumulative impression of a series of components (Reisz, 1958, pp. 22-23).

To conclude this brief review, we will briefly mention the Soviet School, formed by filmmakers such as Lev Kuleshov, Sergei M. Eisenstein and Vsevolod Pudovkin, among others. This is a current of filmmakers and theorists who, influenced by Griffith's advances, contributed to developing the expressive function of editing through the juxtaposition or union of shots that could generate new meanings (Reisz, 1958, pp. 26-27). In this context, there are two opposing lines. On the one hand, Lev Kuleshov and Sergey M. Eisenstein justified the narrative and expressive advance of the plot through the dialectic or clash established between the shots (Reisz, 1958, pp. 28-29). For his part, Vsevolod Pudovkin focused more on the continuity between shots (known as Hollywood editing or invisible editing), systematizing the criteria that favored the imperceptibility of the cut through a perfect assembly of fragments, where editing contributed as the fundamental creative force (Bordwell and Thompson, 1994, p. 287).

4.2. Basic functions of audiovisual editing

Over the years, audiovisual editing has become perceptually integrated into the audience, favoring the development of audiovisual narrative. However, not everyone defended this idea, as was the case of the theorist and critic André Bazin, who argued that editing broke and falsified the spatio-temporal continuum of reality (Bordwell and Thompson, 1994, p. 288). Bazin developed the idea of depth composition, in which shots had to be conceived with a strong sense of spatial depth and resolve the various terms of activity that the camera would film (Sherman, 1992, p. 75). Nowadays, editing and depth composition are combined with each other, as doing without the former would be at odds with what the audience usually consumes, where editing is a necessary condition for developing any audiovisual work.

In addition to its narrative, semantic or artistic function, audiovisual editing fulfils a triple function: the creation of movement, rhythm and the idea (Martin, 1977, pp. 155-158). In relation to the creation of movement, this creation takes place under a double perspective. On the one hand, editing offers the appearance of movement, since a shot is made up of a succession of static frames in which the retinal persistence produces this sensation of dynamism, finding in the experiment *The Horse in Motion* (1878), by Eadweard Muybridge, one of the earliest cases (Fig. 4.2). On the other, the creation of movement in a broader sense, providing scrolling animations that have the appearance of spatial and temporal continuity. As for the creation of rhythm, rhythm refers to the succession of shots according to their length or duration ratios (which will depend on dramatic needs) and the size of each shot.

Therefore, the greater the variety of sizes in a scene or the shorter the duration between each shot, the greater the rhythm, since this is based on a question of metric and plastic distribution. Similarly, external rhythm is the cadence between shots that is controlled by editing; and internal rhythm is related to tempo, and consists of the cadence of a scene determined by its

level of activity within the scene. With regard to the creation of the idea, this is the most important function of editing as long as it responds to an expressive and not only descriptive objective. This creation consists of bringing together different elements to create a new meaning through their confrontation.

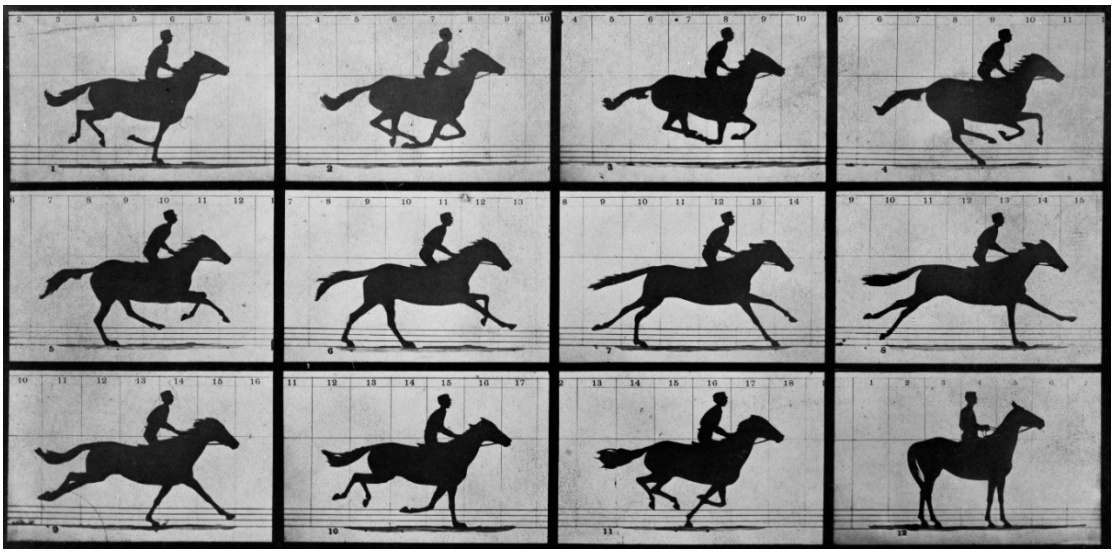

Figure 4.2. *The Horse in Motion (1878), one of Eadweard Muybridge's experiments based on retinal persistence. Source: Library of Congress Prints and Photographs Division (1878).*

4.3. Main elements of editing

Editing is a three-stage process consisting of selecting the recorded material, arranging it, and establishing the duration (Reisz, 1958, pp. 46-47); it therefore focuses on the organization of the shots under certain conditions of order and duration (Martin, 1977, p. 144). Throughout this process, editing has to be able to preserve raccord, provide logical coherence of the story, narrative clarity, enhance expressive values, promote interest and action, and stimulate emotions. In order to carry out these tasks, audiovisual editing offers a series of elements.

4.3.1. The cut in audiovisual editing

The cut is the most commonly used punctuation mark in audiovisual editing, and consists of joining one shot with the next without any kind of effect between them (Bordwell and Thompson, 1994, p. 247). It is common for the cut to pretend to go unnoticed, without showing any kind of ellipsis. Under this aspect, ellipsis is the act of omitting part of the real time or space shown in the audiovisual story. Ellipses can be made between scenes or between shots, omitting actions by compressing time through audiovisual editing.

When the cut is made correctly without breaking the continuity between shots, the audience is not aware of this cut, as they have learned to accept it as a form of visual reality (Thompson, 1993, p. 52). Thus, the cut is usually used when the action is continuous, a change of impact is needed, or a change of information or place is generated. Likewise, we call jump cut or jumping cut the act of cutting inside a shot to subsequently join the two parts, resulting in an abrupt jump that transgresses continuity.

On the other hand, the cut in audiovisual editing is made up of six elements (Thompson, 1993, pp. 52-53):

- Motivation: audience expectations may be delayed or anticipated depending on how the cut is made, so there must always be a reason to make the cut.
- Information: if a new shot appears, it must always contain new information.
- Composition: obeys the audiovisual language, and each shot must have a reasonable shot composition or framing.
- Sound: can provide a unifying sound environment, so ideally there should be some form of continuity or sound development.
- Camera angle: ideally, both the framing and camera angle should change at least two scales of framing and thirty degrees of angle between each shot.
- Continuity: provides an effect of unnoticed transition between one shot and the next by cutting before or after an action; therefore, the movement or action must be evident and similar in the two shots to be shown together.

It is worth noting that when the cut becomes visible and can transgress continuity and show an ellipsis, it is called a cut jump, which acts as an interruption of the transition from one shot to the next (Thompson, 1993, p. 53).

4.3.2. Transitions

In addition to the cut, there are also different types of transitions between one shot and the next. For example, fade out is especially used to show ellipses in which a significant change is established between sequences, and is usually done using the color black, where a fade out gradually darkens the end of a shot to black, while a fade in brightens it from black (Bordwell and Thompson, 1994, p. 247). Chaining, on the other hand, briefly overlaps the end of one shot, which fades out, with the beginning of the next. Although it also often offers spatial or temporal ellipses, the fade-out separates the sequences, while the chaining and the cut connect them (Katz, 1991, p. 325).

With the use of wipe, one shot replaces the previous one with a dividing line or other geometric figure or optical effect-which moves across the screen. We also find overlapping as a sound transition effect. In this sense, overlapping is the joining of two shots by anticipating or delaying the sound corresponding to the second shot.

In the case of freezing, it consists of stopping the movement of the frames that make up a shot in one of them in particular, remaining exposed on the screen in a continuous way, being able to accentuate a particular situation. The whip pan can also represent a transition. Recall that when a pan is extremely fast, it is called a whip pan (Bordwell and Thompson, 1994, p. 495). Thus, the whip pan can also be used as a transition effect between shots, scenes and sequences.

As for multiscreen or/and split screen, it is not exactly a transition, but it is used to join images that would otherwise be seen in separate shots (Katz, 1991, p. 326). Multiscreen or/and split screen can be applied according to the dramatic needs of the audiovisual storytelling (Martin, 1977, p. 79). Although there are other types of transitions, such as the match cut, the smash cut or diegetic elements, the concepts presented here are based on the most commonly used resources in audiovisual editing.

4.4. Types of editing

When studying the different typologies of audiovisual editing, it should be noted that there are mainly two groups (Martin, 1977). On the one hand, we have narrative editing, oriented towards narration, which consists of bringing together shots, according to a logical or chronological sequence, with the desire to tell a story. On the other hand, we have expressive editing, aimed at expressing or conveying ideas, feelings or values for their own sake. Therefore, the aim of expressive editing is to provoke a direct and precise effect through the encounter of two or more images. Furthermore, within each type of editing there are different sub-typologies.

4.4.1. Narrative editing

The objective of narrative editing is to relate an action; that is, to develop a series of events that allow the relationship between shots, scenes and sequences, considering the work as a significant totality. Under this aspect, there are mainly four subtypes of narrative editing, which are differentiated from each other by a fundamental element: time; that is, the successive order, the relative position of the events in their natural casual series, without a fixed date in each one of them. These are linear editing, inverted editing, alternating editing and parallel editing (Martin, 1977, pp. 168-171). In the first case, linear editing is the most common, and designates the organization of an audiovisual work that contains a single action presented through a series of scenes that maintain a logical and chronological order, normally based on the classic structure of an audiovisual story.

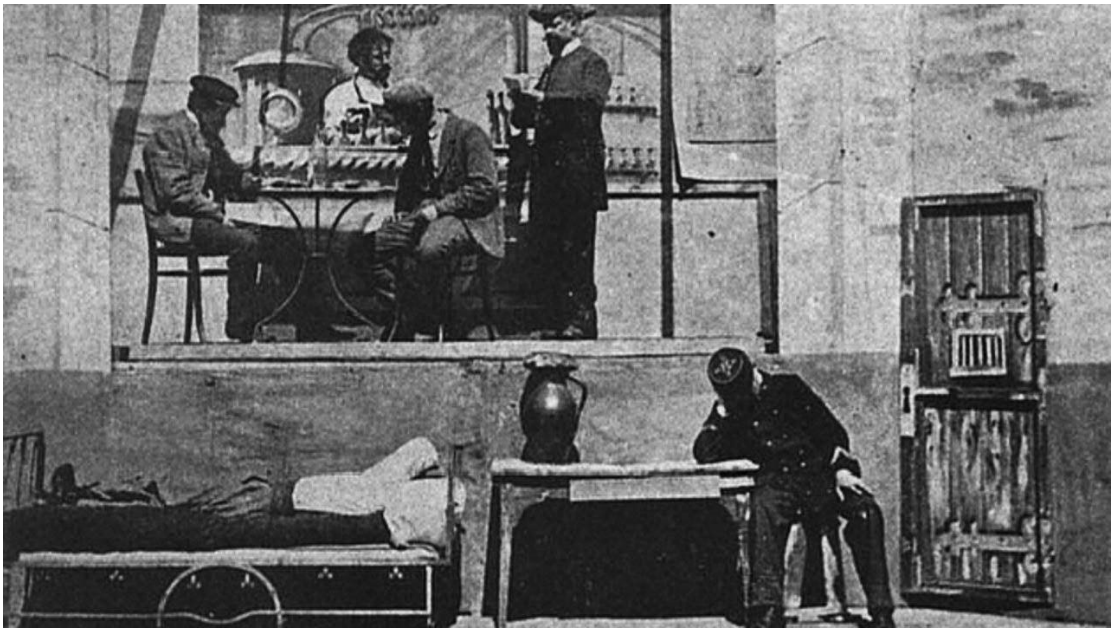

Figure 4.3. *Example of one of the first flashbacks in the history of cinema in the short film Histoire d'un crime (Ferdinand Zecca, 1901). Source: Own elaboration using the original material.*

In the case of inverted editing, this type alternates the chronological order of the story in favor of a highly subjective and dramatic temporality, jumping freely from the present to the past or the future. Both the visualization of moments in the past (flashback) and moments in the future (flashforward) are processes of temporal manipulation, which can have a narrative purpose (narrating an event that has happened or will happen) or a psychological purpose (remembering an event that allows us to define the characters or the situation). In addition, when the narration of past events is so extensive that it covers a large part of the plot, it is called *racconto*. In the

case of the flashback, one of its first appearances in the history of cinema took place in *Histoire d'un crime* (Ferdinand Zecca, 1901), a short film in which a series of flashbacks appear on the wall of a cell through one of the first cases of multiscreen (Fig. 4.3).

Alternating editing, also known as cross-cutting, is based on the strict contemporaneity of two or more juxtaposed lines of action happening at the same time but in different places, and finally converging with each other. The most canonical example is the scheme of the pursuer and pursued scenes, as in James Williamson's aforementioned case, where one line of action is that of the pursuer and the other line that of the pursued, which spatially coincide at the end.

Finally, in parallel editing, two or more lines of action are developed, without their necessary contemporaneity or convergence, and through the intercalation of fragments belonging alternately to each of them, so that a meaning emerges from their confrontation. This type of editing is characterized by its indifference to time, as it can bring together events that are not occurring at the same time, whose strict simultaneity is not necessary for their juxtaposition to be demonstrative (Martin, 1977, p. 171).

4.4.2. Expressive editing

With the use of expressive editing, the idea that is generated in the audience has no relation to the idea represented by any of the isolated shots. In this case, editing ceases to be a means and becomes an end (Martin, 1977, p. 144). Expressive editing had its heyday with the aforementioned Soviet School, and Eisenstein called it more globally as editing of attractions. Thus, there are mainly two subtypes of expressive editing, where the juxtaposition of shots is not dictated by the need to tell a story, but also by the intention of provoking a psychological shock in the audience. These subtypes are rhythmic and ideological editing (Martin, 1977, pp. 160-165).

Rhythmic editing is based on a metric aspect in relation to the length of the shots, which is determined on the basis of the degree of psychological interest that their content can arouse. Depending on what we wish to transmit under a psychological dominance, the use of long shots will offer a slow rhythm, while shorter shots will offer a fast rhythm. In addition to the metric aspect, the rhythm is also conditioned by plastic aspects with the camera movements or the movements of the characters or the typology of framing; thus, a succession of close-ups, for example, can help to maintain the dramatic tension.

Regarding the ideological editing, in this type, on the one hand, a relational aspect is distinguished, which designates the relationships between shots to communicate a point of view, a feeling or an idea; and on the other hand, it fulfills an intellectual function, since it creates meaning relationships between characters, elements or events, with special attention to visual metaphors. This type of editing (also called intellectual or conceptual editing) is based on juxtaposing a series of shots to offer an abstract concept that does not appear present in any of the shots independently.

It should be noted that the types of editing may change depending on the bibliographic sources that we consult. In the same way, we find other types of editing, such as the American editing, which describes in a summarized or expanded way the most important events that have happened during a period of time; or the analytical and the synthetic editing, which pay more attention to their fragmentation than to their narrative or expressive purpose. Thus, the analytical editing, also called external editing, is carried out through small, short-term frame shots, trying to contribute to the emotional, psychological and expressive tension; and synthetic editing, also called internal editing, is carried out using large-scale shots with depth of field (normally using a sequence shot), trying to obtain a more complete or broader view of reality, without analyzing the events from close up.

Chapter 5. Audiovisual postproduction

We have already indicated that in every audiovisual project there are three stages, called pre-production (from the creation of the idea to the day before the start of filming), production (of the filming itself) and postproduction (the entire process that takes place after the filming until the finished audiovisual work is obtained, before it is distributed). However, these stages should not be conceived independently, as they are interconnected. Pre-production and production must take into account which processes will best optimize the results and facilitate postproduction. In addition, the postproduction team begins its work even before filming begins (Bordwell and Thompson, 1994, p. 18).

During postproduction, the material resulting from the shooting is modified, fulfilling the functions of combination, adjustment, construction and correction. In combination, different combinatory alternatives of the recorded material are proposed to obtain different results. With adjustment, the material is adjusted in time, since an audiovisual story is narrated during a specific time. As for the construction, the final audiovisual story is built from shots isolated from each other. In relation to correction, possible recording errors are corrected as far as possible, as well as the chromatic and sound treatment of the work.

Before the advent of digital format in the 1990s, material was recorded on magnetic tape or celluloid film, the negative of which had to be developed in the laboratory prior to the editing process (Bordwell and Thompson, 1994, pp. 4-5). For this reason, development was integrated into postproduction. Nowadays, with a few exceptions, we work in digital format. Thus, postproduction is the set of processes carried out on a filmed material: editing, the inclusion of other visual or sound sources, subtitling, voice-overs, etc.

In addition, audiovisual postproduction also includes motion graphics, color correction, visual effects and sound, which we will study next. That is to say, this stage encompasses editing in its traditional sense, but includes the generation of visual and sound effects, animations, graphics, labels, etc. that are incorporated, modified or replace the materials resulting from filming. Therefore, postproduction is a work of integration in a single support that starts from a heterogeneous raw material (shots, audios, graphics, animations, etc.).

5.1. Motion graphics

The term graphics refers to graphic design. However, when applied to audiovisual expression, a more appropriate concept is motion graphics, coined by John Whitney in the 1960s, since it refers to graphics that are in motion (Betancourt, 2020, p. 147). That is, motion graphics integrates graphic design and illustration, but working with moving images and texts, which are usually accompanied by audio, and whose purpose is to convey specific information following an overall aesthetic line within the audiovisual work.

5.1.1. The origins of motion graphics

At the beginning of the 20th century, a series of artist-animators, influenced by artistic avant-gardes such as Futurism and Dadaism, entered the world of motion graphics. Some of these authors were Hans Richter, Viking Eggeling, Oskar Fischinger, Walter Ruttmann or Len Lye. They experimented with the new technologies of the time using, for example, the first cinematographs, applying techniques that gave prominence to abstract forms together with their relationship with sound (which was even reproduced live), and their articulation through time.

Thus, these artists provided a series of resources, which were the basis of future creations (Herráiz Zornoza, 2009, pp. 63-66):

- Experimentation: through experimentation, they developed multiple techniques that allowed them an important advance in motion graphics (and in audiovisual narrative, in general); for example, drawing directly on celluloid, as Oskar Fischinger or Walter Ruttmann did.
- Narration: they altered the rules of traditional narration, offering new resources and alternatives that gave rise to other audiovisual expressive forms.
- Abstraction: they expressed emotions through abstraction (therefore, some of their works are considered audiovisual poems), where elements such as shape, color, animation or audio had a fundamental role.
- Synchronization: motion graphics merged with audio became indivisible resources, since all visual elements moved in a synchronous way, which offered greater intensity, drama and emotional force.

In addition to other outstanding artists, such as Norman McLaren or Martin Lambie-Nairn, one of the most important figures is Saul Bass. Influenced by Bauhaus aesthetics and Constructivism, he was one of the pioneers of motion graphics language, unifying graphics, real image, typography and audio in the same language and with an explicitly communicative intention (Braha and Byrne, 2011, pp. 49-50). In addition, Saul Bass was the first to introduce electronic images in his creations, specifically from images generated by John Whitney who, in turn, developed the first pre-infographic images.

Saul Bass worked for several advertising agencies and audiovisual production companies, creating logos, posters, credit titles and opening sequences (Fig. 5.1) (Braha and Byrne, 2011, pp. 49-50). Regarding the credits and opening sequences (that Bass made them evolve from informative pieces to artistic pieces), Bass stated that they should provide the audience with all the necessary information, in an attractive and summarized way, so that they would be ready to start watching the film (Braha and Byrne, 2011, p. 29). In the style, the main and most differentiating characteristic is the synthesis, working with abstract (basic figures and flat colors), scarce and metaphorical elements that, to the rhythm of the music or in a static way, provoke emotions related to the work.

Figure 5.1. *Frames from the opening sequences elaborated by Saul Bass for the films The Man With the Golden Arm (Otto Preminger, 1955) and Vertigo (Alfred Hitchcock, 1958). Source: Own elaboration using the original material.*

5.1.2. The elements of motion graphics

Motion graphics uses its own language, which is mainly composed of four elements:

- Graphic image: in visual communication, the smallest unit of signification is the visual sign as graphic image, which is articulated at a perceptual level; and according to its nature, this sign can be voluntary or involuntary, coded or uncoded, connotative or denotative, etc. In addition, there are three levels of classification of images: representation (an analogy arises between the image and what it represents), symbolism (visual detail is reduced to the irreducible minimum according to an arbitrary code) and abstraction (elements are reduced to the minimum expression, but without following an arbitrary code) (Herráiz Zornoza, 2009, pp. 149-152).
- Typography: Yael Braha and Bill Byrne (2011, p. 73) point out that different typographies allow the transmission of ideas through the shape of each letter, since each typography has its own personality, which is manifested through visual weight, proportion and detail. Therefore, each typography tells a story. Furthermore, in motion graphics, typography must have the possibility of movement, as the transformations of typography, its appearance and disappearance bring new meanings to the whole audiovisual work (Herráiz Zornoza, 2009, p. 168). In its formal integration with the image, some of the common techniques are formal integration (typography and image maintain relations of appearance), chromatic integration (typography has a harmonious relationship with the chromatic range or provokes contrasts), integration of movement (the animation of the typography accompanies the rest of the piece) and conceptual integration (typography is adapted to a formal, semantic and kinetic representation) (Herráiz Zornoza, 2009, p. 170).
- Movement: embodied through space and time, movement allows a static image and typography to become sequential (Herráiz Zornoza, 2009, p. 176). Under this aspect, the movement fulfills the triple function of dynamizing (it offers dynamism to the piece), conceptualizing (the movement is integrated in a context of visual elements and concepts) and creating identity to the work by reducing the types of movements, thus generating relationship and coherence (Herráiz Zornoza, 2009, pp. 185-186). One type of movement within motion graphics, for example, is found in animation, bearing in mind that motion graphics and animation are not analogous concepts, since the former aims to convey information, communicate or reinforce a message in the context of the production in which it is integrated (cinema, video games, advertising, etc.), while the latter has a narrative or artistic purpose in itself (Dinur, 2017, pp. 14-15).
- Audio: offers verisimilitude to the audiovisual graphic discourse, since it is difficult to keep the audience's attention if the image is not accompanied by audio (Herráiz Zornoza, 2009, p. 186).

5.1.3. The applications of motion graphics

Motion graphics are mainly applied in television, advertising and film, as well as being found in other media, formats and platforms such as video clips, video art, webisodes, video games, etc. Thus, and although the following elements can coexist indistinctly among the different forms of audiovisual expression (as is the case, for example, with intertitles), we will establish a classification that offers nuances in the different applications of motion graphics. On the one hand, we have graphics in audiovisual advertising. It is made up of a series of elements, among which are the following (Herráiz Zornoza, 2009, pp. 301-352):

- Graphic identity: logo and/or image of the brand or product, which usually appears at the end of the spot (sometimes together with the slogan).

- Slogan: a short text that summarizes and defines the main part of the message and/or the brand.
- Informative texts: they provide data or information about the product or service.
- Creative texts: unlike the previous ones, these texts or labels are a narrative and/or aesthetic element within the shot itself.
- Packshot: the product and the brand are shown static or with a slight internal movement at the end of the spot.

Figure 5.2. *Frames from a Peugeot (2018) spot with creative text, packshot and graphic identity (from top to bottom). Source: Own elaboration using the original material.*

Secondly, we find graphics on television. This graphic design has semantic qualities (a message reaches the audience) but also aesthetic qualities, so it works as an informative and persuasive support (Herráiz Zornoza, 2009, pp. 497-498). The visual identity of each television channel is reflected in its corporate identity (brand) and in all the audiovisual graphic expressions broadcast on that channel, so each channel has its own brand manual, which includes elements

such as logos, images, typographies for all types of texts, corporate colors and brand values (Herráiz Zornoza, 2009, pp. 498-501). In the television area, some of the existing graphic pieces are as follows (Herráiz Zornoza, 2009, pp. 423-426):

- Fly: channel logo permanently displayed, except when an advertising block is being broadcast.
- Header: this is the animated presentation accompanied by music that identifies the audiovisual piece or program through its graphic identity.
- Bumper: an audiovisual space that bridges the gap between the commercial space and the programming (back to advertising).
- Self-promotional bumpers: these are animated visual identity pieces of the channel itself, and are usually placed within the advertising block or between one program and another (Fig. 5.3).
- Label: allows us to identify the person who appears on the screen at that moment (or to add some kind of information). It usually appears at the bottom left of the shot.
- Bottom text: it is like the label but offers more information, placing the text in the bottom part of the shot.
- Infographics: graphics that allow data to be expressed in a visual form.
- Countdown: informs of the time remaining to resume the programming.
- Crawl band: it can appear at any time during the emission, being located at the top or bottom of the shot and extending longitudinally.
- Pathfinder: consists of a brief graphic animation (or overlay) that is broadcast to promote the channel's own content.

Figure 5.3. *Self-promotional bumpers form La Sexta channel, created by Frankie de Leonardis. Source: Herráiz Zornoza (2009, p. 416).*

Finally, in third place, we have the graphics in the cinematographic media, which is composed of elements such as the following:

- Credit titles: In the early days, credit titles served to protect the film against illegal copying, with only the name of the producer and/or director appearing next to the title at the beginning of the work (Fig. 5.4). Nowadays, they consist of a list of all the people who have participated in the audiovisual work. Thus, the credit titles together with the posters form the packaging of a film, with opening sequences, where the production and distribution companies, the title of the film and the main crew appear; and closing credits or roll credits, where all the technical and artistic crew are listed (Braha and Byrne, 2011, pp. 8-9).

- Intertitles: these are texts with dialogues and narrative descriptions typical of silent films (Fig. 5.4). It should be remembered that intertitles largely disappeared with the advent of sound films, whose advantages included the normal use of speech (Martin, 1977, p. 125). Nowadays, however, intertitles may appear occasionally to provide information, especially of an elliptical nature.
- Brand image: if films are conceived as a marketing product, they must have a graphic identity that represents the style and tone of the work, allowing its genre to be identified.

Other pieces of audiovisual graphics in the cinematographic field are the animated logos of the production companies (graphic identity), as well as other elements such as subtitles or texts announcing *The End* of the film, which frequently appeared in classic cinema.

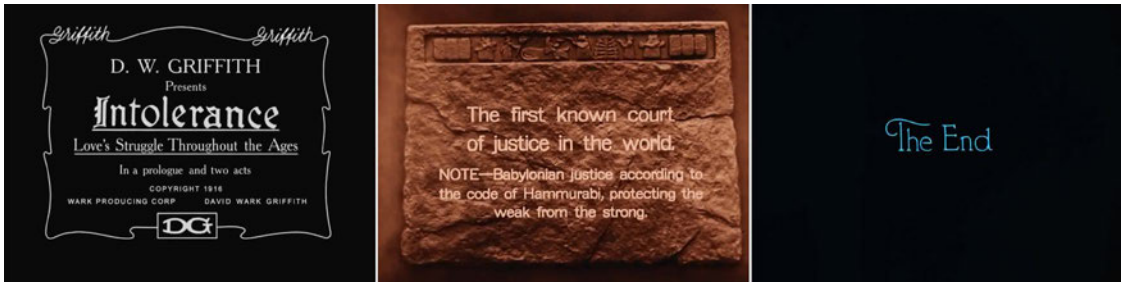

Figure 5.4. *Frames from the aforementioned film Intolerance, released in 1916, with opening credits, intertitles, and a text announcing The End (from left to right). Source: Own elaboration using the original material.*

5.2. Basic concepts of color

Color is a visual perception, not a property of objects. In the context of audiovisual postproduction, we must address color correction, which is the process by which colors are adjusted, enhanced or completely changed to achieve the desired appearance of the audiovisual story (Clark and Spohr, 2002, p. 214). To do this, different concepts belonging to color theory will be defined (Braha and Byrne, 2011, p. 123):

- Primary colors: they are composed of red, green and blue (RGB).
- Secondary or complementary colors: each color that, when added to a primary color, produces white light; these are cyan (complementary to red), magenta (complementary to green) and yellow (complementary to blue).
- Tertiary colors: colors created by mixing a secondary color with its adjacent primary color.
- Additive synthesis: formation of colors of light (called color light) displayed in the visible spectrum from the combination of the primary colors (RGB). Thus, blue and green give cyan; blue and red give magenta; red and green give yellow; and the three primary colors together give white light (Fig. 5.5) (Braha and Byrne, 2011, p. 119).

  The color light is used for example when working in front of a computer screen or recording a video with a camera. In relation to the visible spectrum (Fig. 5.6), the human eye recognizes a visible spectrum of seven colors: red, orange, yellow, green, cyan, blue and violet (the colors of the rainbow), so that colors below red (infrared) and above violet (ultraviolet) are outside the visible spectrum of the human eye (Braha and Byrne, 2011, p. 113).

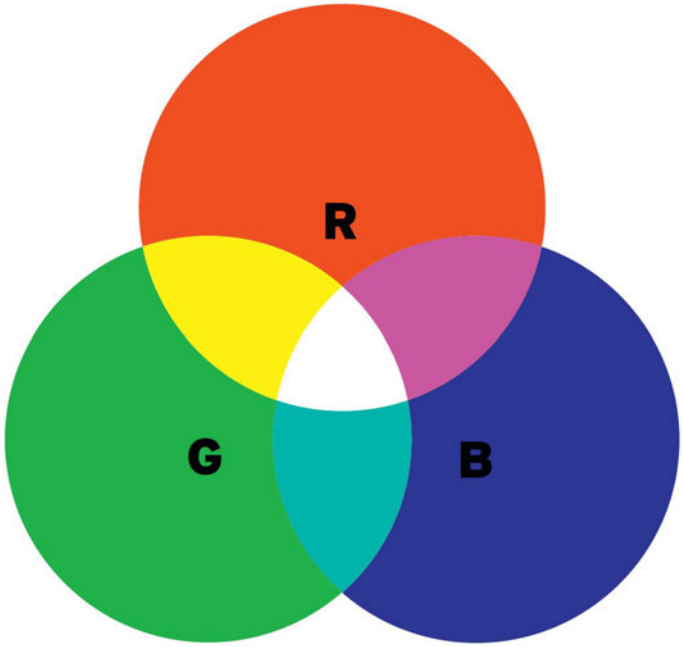

Figure 5.5. *RGB color system. Source: Braha and Byrne (2011, p. 119).*

Figure 5.6. *Visible spectrum of the human eye. Source: Braha and Byrne (2011, p. 114).*

– Subtractive synthesis: formation of colors through the subtraction of colors from white light. Being colors based on light reflected from pigments applied to surfaces (pigment color), it is the system commonly used in the fine arts.

  Two common subtractive systems are those whose primary colors are red, yellow and blue (RYB); and those whose primary colors are cyan, magenta, yellow and white (CMYK), the sum of which gives the color black (Fig. 5.7) (Braha and Byrne, 2011, pp. 119-120). Thus, pigment color is used, for example, when painting on a canvas or printing a color image.

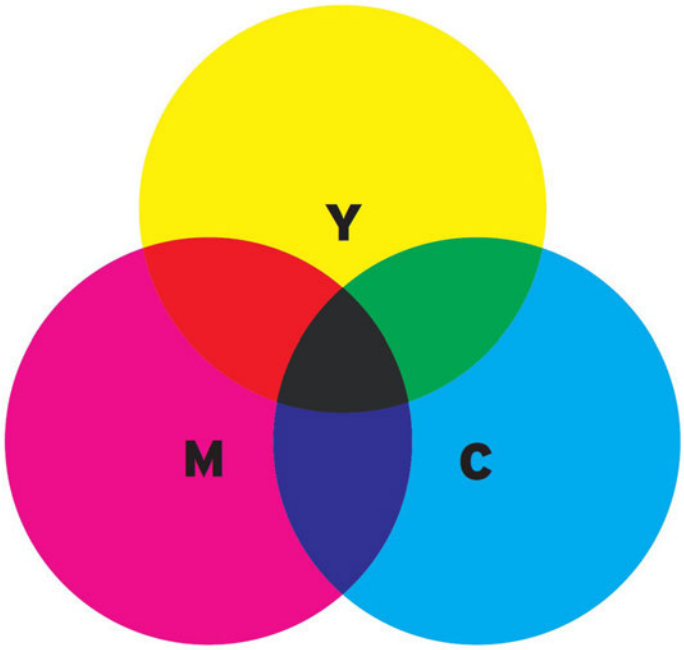

Figure 5.7. *CMYK color system. Source: Braha and Byrne (2011, p. 120).*

On the other hand, the colors possess three basic properties, known as HSB system (Fig. 5.8) (Braha and Byrne, 2011, p. 124):

- Hue: property that distinguishes one color from another in the spectrum; the terms hue and color are often used interchangeably, although they are not the same.
- Saturation or intensity: property determined by the predominance of gray and the purity of the hue. Highly saturated colors are bright and vivid, while less saturated colors are duller because they contain a greater amount of gray.
- Brightness or value: property determined by the amount of black and white, generally identified as the lightness or darkness of a hue. A darker value is created by adding black, and a lighter value is created by adding white.

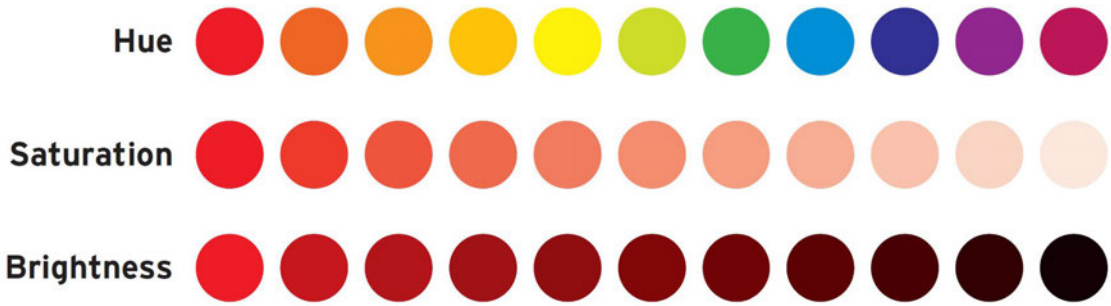

Figure 5.8. *Example of HSB system. Source: Braha and Byrne (2011, p. 120).*

5.2.1. Main color schemes

Color schemes or palettes are polychromatic groups of colors that offer an aesthetic idea, among which the following stand out (Braha and Byrne, 2011, pp. 124-125):

- Achromatic scheme: literally means without color, presenting very low saturation values; therefore, it uses white, gray and black, being a chromatic modulation known as grayscale (Fig. 5.9) (Braha and Byrne, 2011, p. 124).

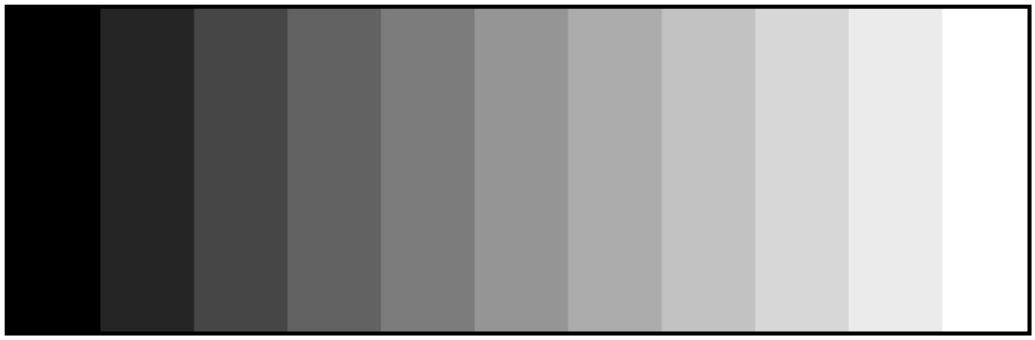

Figure 5.9. *Example of grayscale. Source: Own elaboration.*

- Monochromatic scheme: literally means one color, and is based on the use of a single tone together with its shades (Braha and Byrne, 2011, p. 124). For example, the Valencian painter José Segrelles (1885-1969) was known as the painter of blue tones, a style he had previously developed in works for brands such as Packard. In the 1930s, his particular blue monochromatism became famous even in New York, and the "Segrelles' blue" shade was even in demand in the fashion world.

Figure 5.10. *Example of "Segrelles' blue" in his painting The War of the Worlds. Source: MAKMA (2015).*

– Analogous or adjacent scheme: is the combination of three colors adjacent to each other on the chromatic circle. The middle color is usually the dominant color, the second a supporting color and the third is used as an accent color. As a result, it offers a sense of visual cohesion and harmony (Braha and Byrne, 2011, p. 125). In the spot *Dior J'adore: The New Absolu* (Romain Gavras, 2018), for example, gold is the main color, the orange tone appears in support (especially on the skin of the characters), and brown is used as an accent, being the three colors of the product packaging.

Figure 5.11. *Example of analogous or adjacent scheme in the spot Dior J'adore: The New Absolu (Romain Gavras, 2018). Source: Own elaboration using the original material.*

– Complementary scheme: combination of two colors exactly opposite in the chromatic circle. Complementary schemes can be obtained by using pure tones or their shades, and if two complementary colors are mixed, we obtain gray. The temperature difference provides a sense of visual contrast (Braha and Byrne, 2011, p. 125).

Figure 5.12. *Frame from the television series Blue Eye Samurai (Michael Green and Amber Noizumi, 2023), showing a complementary scheme. Source: Own elaboration using the original material.*

– Triadic scheme: is composed of three colors located equidistant from each other on the chromatic circle. As in the complementary scheme, this scheme or palette offers visual strength based on contrast, but using three different tones. When two of the colors are very close to each other (same range), the contrast is reduced and it is called a broken scheme (Braha and Byrne, 2011, p. 125).

Figure 5.13. *Example of triadic scheme in the film The Neon Demon (Nicolas Winding Refn, 2016). Source: Own elaboration using the original material.*

– Tetrahedral scheme: is composed of four colors, two pairs being complementary. If they were connected with lines on the chromatic circle, a rectangle would be obtained. Occasionally, one of the colors may be predominant over the rest. It is similar to the complementary scheme, but using four tones facing each other (instead of two), offering a wide variety of contrasting colors (Braha and Byrne, 2011, p. 125).

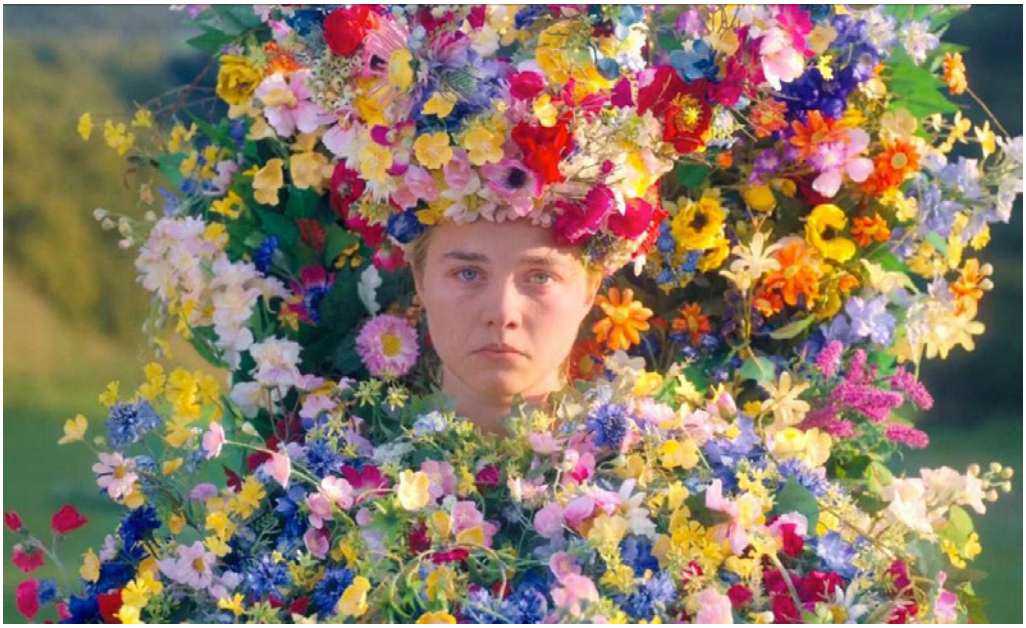

Figure 5.14. *Example of tetrahedral scheme in the film Midsommar (Ari Aster, 2019). Source: Own elaboration using the original material.*

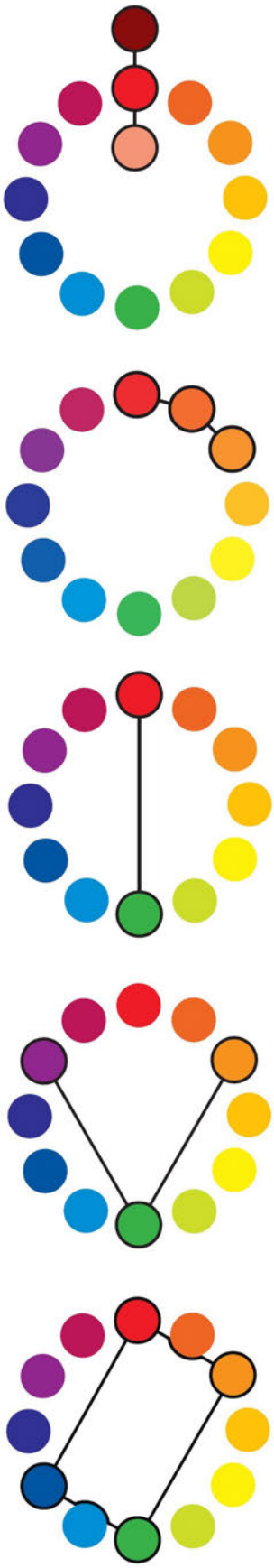

Figure 5.15. *Monochromatic, analog, complementary, triadic and tetrahedral scheme (from top to bottom). Source: Braha and Byrne (2011, pp. 125-126).*

In addition, there are other possible combinations. For example, chromatic discordance occurs when combining very different colors that do not fit into one of the traditional schemes; associative color is the one that represents an idea or concept within the audiovisual story or is associated with one of its characters; and transitional color appears with chromodynamics, where one color is altered or substituted by another throughout the plot, and can be applied to a concept, a character, etc.

Figure 5.16. *Example of chromatic discordance in the film Pleasantville (Gary Ross, 1998).*
Source: Own elaboration using the original material.

Figure 5.17. *Example of chromatic discordance in the film Sin City (Robert Rodríguez and Frank Miller, 2005).*
Source: Own elaboration using the original material.

Figure 5.18. *Example of chromatic discordance in the film Rocketman (Dexter Fletcher, 2019). Source: Own elaboration using the original material.*

Figure 5.19. *Example of chromatic discordance in the film Schindler's List (Steven Spielberg, 1993). Source: Own elaboration using the original material.*

5.2.2. Color in the audiovisual media

Although the beginnings of the cinematographic, television and advertising media were achromatic, there were filmmakers who already in their beginnings colored almost all the frames of their works in search of a more realistic feeling (Georges Méliès, Alice Guy, etc.). However, color does not necessarily seem to offer greater realism in images, unlike sound (Martin, 1977, p. 124). These early procedures to achieve color images were additive methods, such as the hand-coloring of each frame or the processes of tinting and toning, which consisted of dyeing the celluloid with different uniform colors, which had a half realistic and half symbolic function: blue, for the night; yellow, for night interiors; green, for landscapes; and red, for fires and social revolutions (Martin, 1977, p. 75).

However, satisfactory results came with subtractive processes, such as Technicolor's Dye Transfer in the 1930s. Thus, the first audiovisual works made entirely in color were the short

film *Walt Disney's Silly Symphony: Flowers and Trees* (Burt Gillett, 1932) and the film *Becky Sharp* (Rouben Mamoulian, 1935) (Fig. 5.20) (Martin, 1977, p. 75). As for the television media, we had to wait until 1969 to be able to see color television, and even 1970, because although there were means to broadcast in color, television sets were still unaffordable for the average pocket (Herráiz Zornoza, 2009, p. 74).

Figure 5.20. *Frames from Walt Disney's Silly Symphony: Flowers and Trees (Burt Gillett, 1932) and Becky Sharp (Rouben Mamoulian, 1935). Source: Own elaboration using the original material.*

Nowadays, color correction in the audiovisual media is a process that consists of equalize, correcting and balancing the color of each shot that needs it using specific software such as DaVinci Resolve or Adobe Premiere Pro. Its objective is to correct the imperfections of the original material or to achieve a certain look at a more global level. In addition, within this correction there are two sequential processes:

- Color correction: is to equalize the different shots to each other in order to maintain continuity and integrate possible visual effects. It is carried out by correcting color (temperature, white balance, dominants, etc.), in addition to adjusting luminosity (exposure, brightness, contrast, etc.) (James, 2009, pp. 18-19; Clark and Spohr, 2002, p. 26).
- Color grading: consists of chromatic grading with an artistic, dramatic or narrative functionality, whose objective is to reinforce the idea that is intended to be transmitted through color in the work (Braha and Byrne, 2011, p. 36). In this second phase, Look-Up Tables (LUTs), which are cross-platform files that accurately describe a given color setting, are often used (Dinur, 2017, p. 165).

Figure 5.21. *Example of color grading in the film Mad Max: Fury Road (George Miller, 2015). Source: Amila Manchanayake (2017).*

5.2.3. Color psychology

Color psychology is a field of study that is aimed at analyzing the effect of color on human perception and behavior. What we see of an object does not depend only on matter. Neither

does it depend on the light, but it also involves another condition, which is our perception of that element. Eva Heller (2004)) conducted a study on the psychology of color where she established a relationship between colors and feelings, determining the following:

- Color has a symbolic value.
- Color is not only an ornament or decoration.
- Color increases or reduces the expressiveness of an audiovisual work.

  Color can create a suitable atmosphere for the message to be properly conveyed.
- Colors convey meanings, so they must be known and used according to what you want to communicate.
- It is important to distinguish between perceived color, when the term is used in the subjective sense (individual perception), and psychophysical color, when used in an objective sense (visible radiation).

Learning what each color can convey opens more doors when communicating visually, allowing to add colors in the scenery, props or costumes, in addition to working them in the secondary color correction during postproduction stage; for example, with the intention of inspiring the desired emotions globally or in that scene of the work. In the audiovisual environment many works stand out where color has been used to add a new psychological and narrative dimension, without delegating it to attract attention only by its chromatic contrast. However, color can follow a global idea if it is worked from the beginning in an audiovisual work. The following are some examples from the audiovisual media.

Figure 5.22. *In the film The Last Emperor (Bernardo Bertolucci, 1987), warm colors are used in the interior world (top), while cold colors are used in the exterior (down). Source: Own elaboration using the original material.*

Figure 5.23. *In the film The Sixth Sense (M. Night Shyamalan, 1999), the color red indicates the presence of the other world over the real one. Source: Horror Losers (2019).*

Figure 5.24. *In the film Pastoral: To Die In The Country (Terayama Shūji, 1974), when the characters are shooting a film, color is used in an unrealistic way (top), while reality is presented in an achromatic way (down). Source: Own elaboration using the original material.*

Figure 5.25. *In the film Friday the 13th (Sean S. Cunningham, 1980), the color red is used throughout the plot as a warning of danger. Source: Own elaboration using the original material.*

Figure 5.26. *In the film Metropolis (Shigeyuki Hayashi, 2001), each zone of society shown uses a different color scheme, which is presented in each of these. Source: Own elaboration using the original material.*

Figure 5.27. *In the film Perfect Blue (Satoshi Kon, 1997), the color red is associated with insanity. Source: Own elaboration using the original material.*

Figure 5.28. *In the film Paprika (Satoshi Kon, 2006), the color red is associated with the world of dreams. Source: Own elaboration using the original material.*

Figure 5.29. *In the film The Florida Project (Sean Baker, 2017), the bright, saturated colors awaken a childlike feeling; as if the color scheme had been chosen by children. Source: Own elaboration using the original material.*

Figure 5.30. *In the film Men (Alex Garland, 2022), the color green is associated with the search for a new life, as opposed to its red-tinted past. Source: Own elaboration using the original material.*

5.3. Visual effects (VFX)

Next, we will mention some of the main visual effects that exist in audiovisual communication. For this reason, it is important to differentiate between special effects (FX) and visual effects (VFX). FX are mechanical tricks and effects that are performed before and during filming, and VFX effects are created in the postproduction stage. Both disciplines were born practically with the appearance of the cinematographic media (with artists such as Georges Méliès, Segundo de Chomón or Willis O'Brien), since in its beginnings the cinema itself was considered a magic trick in itself.

Thus, within FX we can include traditional and prosthetic make-up, animatronics, scale models, miniatures, environmental effects (rain, snow, fire, etc.), rear projections, forced perspective, etc. VFX, on the other hand, are computer techniques that allow, for example, the creation of entirely digital images which can cover the entire shot (in the early days, they were only applied to small details). Thus, among the VFX we find some processes such as the following ones:

- Animation: as a technique, it can be completely digital (VFX) or traditional (FX). Traditional animation is carried out by manual creation and recording frame by frame, finding different techniques such as stop-motion (an inanimate object with volume is recorded using materials such as clay or plasticine, capturing its movement frame by frame), animated drawing (on paper or another type of surface, without volume), pixilation (a variant of stop-motion), rotoscoping (drawing directly on a real reference previously filmed) (Fig. 5.31), or cutout animation (Herráiz Zornoza, 2009, pp. 179-180). In the case of digital animation (Fig. 5.32), is obtained from the interpolation of key frames, which are marked on the element to be animated using specific software such as Adobe After Effects or Autodesk Maya, among others (Brinkmann, 1999, pp. 99-100; Dinur, 2017, p. 81). As for animation and its contribution to the advertising area, it is a tandem that has fed back on each other since its beginnings. The advertising media has boosted the experimentation of animation, while animation has offered new approaches to audiovisual advertising, both in their aim of attracting the audience, although with different objectives.

Figure 5.31. *Frame from the film Cool World (Ralph Bakshi, 1992), in which rotoscoping was used. Source: Own elaboration using the original material.*

Figure 5.32. *Frames from a spot for Hendrick's Gin (2018) made in digital animation. Source: Own elaboration using the original material.*

– Matte painting: in its beginnings, this was developed during filming, but nowadays it is usually a postproduction technique. Thus, this process was born as a technique consisting of drawing elements on a glass surface (glass painting) where the characters were superimposed (Mattingly, 2011, p. 26). That is, it consisted of a background painted as realistically as possible to superimpose elements that were integrated into a single shot. Currently, matte painting is done digitally in postproduction, but if it covers the entire surface of the shot it will no longer be a matte painting, but a 3D virtual environment (Brinkmann, 1999, pp. 56-57).

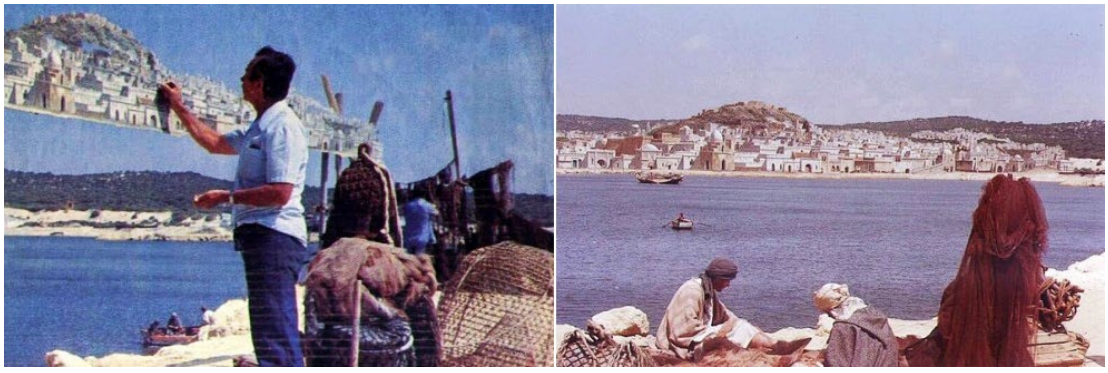

Figure 5.33. *Emilio Ruiz del Río was one of the most representative international figures in the use of matte painting (in this case, glass painting). Frames from the documentary feature film El último truco. Emilio Ruiz del Río (Sigfrid Monleón, 2008). Source: Own elaboration using the original material.*

– Computer Generated Imagery (CGI): this technique takes place when the image is created entirely from specific hardware and software (Dinur, 2017, pp. 8-9). It is commonly accepted that *Futureworld* (Richard T. Heffron, 1976) (Fig. 5.34) was the first film to use CGI; and this film was the sequel to *Westworld* (1973), directed by novelist Michael Crichton. Likewise, the first works to use entirely CGI combined with live action for the first time were *Tron* (Steven Lisberger, 1982) (Fig. 5.35) and *Young Sherlock Holmes* (Barry Levinson, 1985) (Fig. 5.36). In the case of *Tron*, in fact, more than fifteen minutes of computer-generated animation combined with the film's characters were shown.

Figure 5.34. *Frame from the film Futureworld (Richard T. Heffron, 1976).*
Source: Own elaboration using the original material.

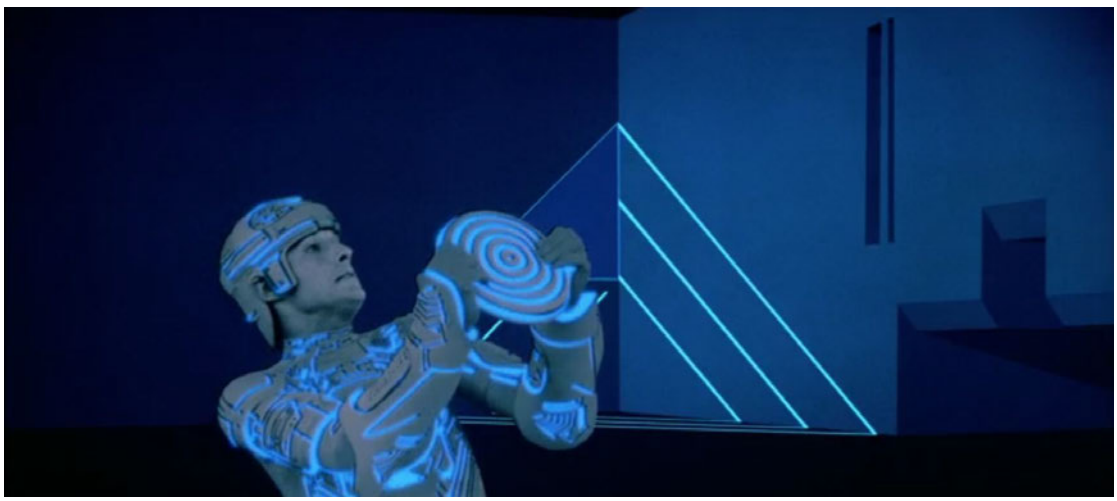

Figure 5.35. *Frame from the film Tron (Steven Lisberger, 1982).*
Source: Own elaboration using the original material.

Figure 5.36. *Frame from the film Young Sherlock Holmes (Barry Levinson, 1985). Source: Own elaboration using the original material.*

– Chroma key: a technique that replaces a homogeneous background of a saturated primary color (usually because it is less present in the human body) with another background (Clark and Spohr, 2002, p. 319). For example, we can use green (Fig. 5.37) or blue (Fig. 5.38). In this other background a real image or a 3D virtual environment will appear; and when recording the chroma key it is important that its color does not appear in the rest of the elements of the shot, since when replacing this color with the background, those elements of the same color will also be affected. Nowadays, thanks to its transparency possibilities, the chroma key can also be used to hide or erase elements that appear as support or base, without being applied only to the background (Dinur, 2017, pp. 52-53).

  As an evolution of the chroma key, Stagecraft technology is based on a space consisting of a real floor and several LED panels with a minimum resolution of 4K (Render Nodes), in which a 3D recreated stage is displayed in real time and synchronized with the camera movements (Fig. 5.39). Thus, if the camera moves, the stage reacts in terms of its perspective.

Figure 5.37. *Application of a chroma key with green background. Source: Eran Dinur (2017, p. 57).*

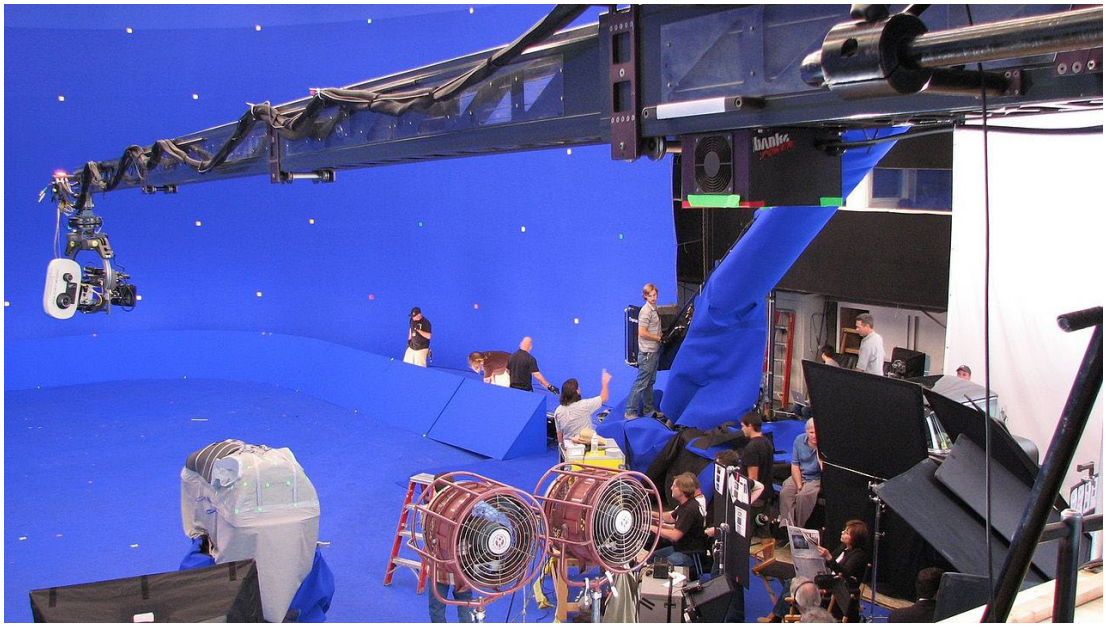

Figure 5.38. *Application of a chroma key with blue background in the film The Spiderwick Chronicles (Mark Waters, 2008). Source: Wikimedia Commons (2007).*

Figure 5.39. *Application of Stagecraft technology in the television series El eternauta (Bruno Stagnaro, 2025). Source: Infobae (2025).*

– Motion capture (MOCAP): this technique allows to digitally capture the movements of actors and actresses, including their facial expressions, through three-dimensional location information points. These data points are then used to animate the movements of a virtual character in exactly the same way. In the past, effects such as the aforementioned rotoscoping were used to achieve a similar effect (Dinur, 2017, pp. 81-83). The animated film *Sinbad: Beyond the Veil of Mists* (Alan Jacobs and Evan Ricks, 2000) was the first work to make full use of this technique (Fig. 5.40).

Figure 5.40. *Frame from the film Sinbad: Beyond the Veil of Mists (Alan Jacobs and Evan Ricks, 2000). Source: Own elaboration using the original material.*

Figure 5.41. *Use of motion capture on a virtual character. Source: Weta Digital (2013).*

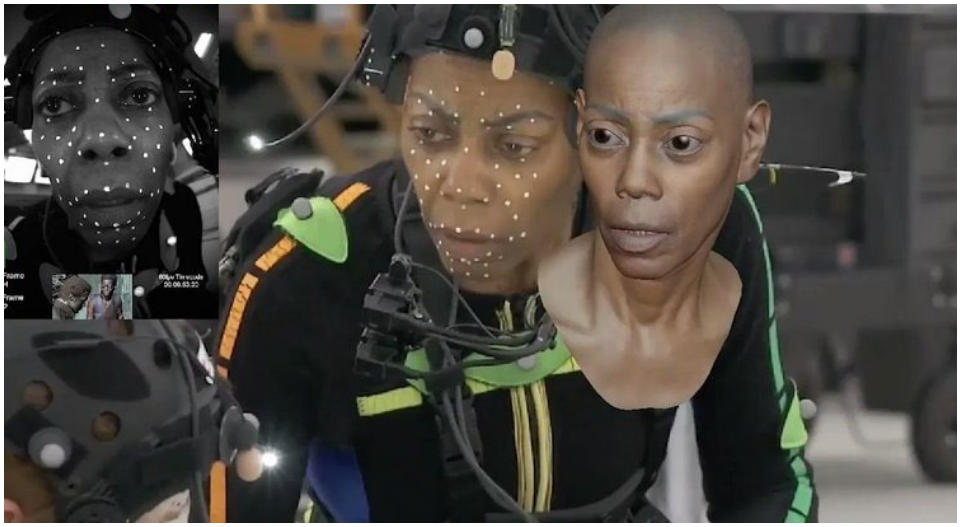

Figure 5.42. *The actress Debra Wilson in the process of recording motion capture for a video game. Source: Brooklyn Comic Con (2021).*

– 3D display: since the birth of cinema itself, the possibility of providing it with the third dimension began to be considered to make it more real. It was known that the brain created the sensation of three-dimensionality by adding the two images it received through the left and right eye. What was missing was a technical solution that would allow these two images to be screened separately so that the brain could join them together. In principle, the first 3D film was *The Power of Love* (Nat G. Deverich and Harry K. Fairall, 1922). The audiovisual work, filmed with a stereoscopic camera, was not commercially successful. However, it was the real beginning of interest in 3D cinematography. The film is considered lost; and in 1923 it was re-released in 2D under the title *Forbidden Lover*, whose footage has also been lost. Another case is *Bwana Devil* (Arch Oboler, 1952), considered the first American color film to use 3D stereoscopic effects (Fig. 5.43).

Figure 5.43. *Premiere of the film Bwana Devil (Arch Oboler, 1952). Source: Boing Boing (2012).*

– M-Tecnofantasy: a technique developed by the Spanish inventor Francisco Macián between the late 1960s and early 1970s, in which images were manipulated by optical and chemical processes. It consisted of superimposing photographic film positives and negatives to alter their appearance by means of cropping, manual coloring and distortion effects. It transformed real images into stylized sequences, achieving an effect similar to comic strips or primitive digital animation. Macián applied this system in films such as *¡Dame un poco de amooor...!* (José María Forqué, 1968) (Fig. 5.44) or *Memoria* (Francisco Macián, 1976) (Fig. 5.45).

Figure 5.44. *Example of M-Tecnofantasy in the film ¡Dame un poco de amooor...! (José María Forqué, 1968). Source: Own elaboration using the original material.*

Figure 5.45. *Example of M-Tecnofantasy in the film Memoria (Francisco Macián, 1976). Source: Own elaboration using the original material.*

- Bullet Time: also known as frozen moment or flow motion, it is a visual effect that allows viewers to see extremely fast movements, such as the trajectory of a bullet, by slowing down time while the camera moves freely around the scene. This technique was popularized by the film *The Matrix* (Lilly and Lana Wachowski, 1999) (Fig. 5.46), although there are antecedents such as the film *Zotz!* (William Castle, 1962) (Fig. 5.47).

Figure 5.46. *Example of bullet time in the film The Matrix (Lilly and Lana Wachowski, 1999). Source: Own elaboration using the original material.*

Figure 5.47. *Example of bullet time in the film Zotz! (William Castle, 1962). Source: Own elaboration using the original material.*

– Morphing: is a digital image manipulation technique that creates a controlled animation between two different images, generating a series of intermediate states that give the illusion of transformation of one object into another. This technique uses software to digitize the initial and final images, establish common points between them and calculate the trajectories of each point to create the intermediate images. A pioneering example of the use of morphing took place in the film *Willow* (Ron Howard, 1988) (Fig. 5.48).

Figure 5.48. *Example of morphing in the film Willow (Ron Howard, 1988).*
Source: Own elaboration using the original material.

Although there are other VFX such as tracking, match moving, fluid simulation, rig removal or particle generation, we have mentioned some of the main ones, whose use is becoming more and more standardized in audiovisual media. Before the advent of VFX, moreover, various tricks appeared that today would be done in this way. For example, cinematographer Karl Struss used layers of color on the skin of actors and actresses, along with lighting and colored filters, to simulate the characters' transformations in real time. The effect only worked on black-and-white film, because if the tinted lenses were used on color film, the entire screen would appear red or blue. This effect was used, for example, in the film *Sh! The Octopus* (William C. McGann, 1937) (Fig. 5.49).

Figure 5.49. *Two frames from the same shot in the film Sh! The Octopus (William C. McGann, 1937). Source: Own elaboration using the original material.*

5.4. Sonorization

Sonorization consists of the treatment and editing of sound materials for the construction of the audiovisual story, where we find the following processes:

- Sound ambience: a treatment is carried out in relation to the audios that must be present in the soundtrack, creating an ambience at the sound level, since it is very likely that not all sounds were captured during the recording. Thus, the sound ambience provides the necessary global sensation of a plausible environment, being audios that are barely noticeable, but that allow the sound universe to be built (Bordwell and Thompson, 1994, p. 298).
- Dubbing: consists of replacing the original dialogue with an equivalent dialogue of better quality; or with another dialogue in a different language while maintaining lip-synchrony (Martin, 1977, p. 143).
- Mixing and mastering: the audio of the audiovisual story comes from the loudspeakers or headphones that the audience has, being the real sound sources; however, it is usually attributed to the fictitious sources of what is shown in the image, being a localization process where the mixing influences. Thus, the combination of all the audios takes place during mixing, when the volume, duration and tonal quality of each sound is precisely regulated. Therefore, the mixing is based on the combination of the different audios according to the levels that are considered appropriate (Bordwell and Thompson, 1994, p. 301).

Nowadays, sound recording is developed digitally, with specific software such as Adobe Audition, Avid Pro Tools or Audacity, in addition to the complementary use of digital audio workstations (DAW), which are computer platforms that include hardware and software and are specialized in recording, editing, design and sound processing functions. The most basic tools allow adjusting the pitch and volume of an audio track, while the most advanced systems can offer 3D equalizers (James, 2009, p. 21).

Chapter 6. Storytelling in interactive digital media

At the beginning of the 21st century, the advent of Web 2.0 allowed users to interact with each other, and media such as television, video games and the Internet began to merge thanks to content that had the potential to be disseminated on as many platforms as possible. This is a context that Henry Jenkins (2006, p. 2) coined as convergence culture, emphasizing the intersection between content, technological advances and interactivity. Under these aspects, Janet H. Murray (1997, p. 14) already warned at the end of the 20th century that computers were becoming more and more similar to video cameras, being ideal tools for storytelling. Today, it is inconceivable to create an audiovisual story (or any other kind of story) without the use of computer tools, where the active role of the user plays an increasingly important role.

Prior to the advent of the Internet, media had very defined functionalities; but after the digital revolution, content began to flow through various channels, leading to a convergence of content across multiple media and platforms, as well as the creation of new narrative paradigms, where there should be a cooperation between the traditional and the modern (Jenkins, 2006, p. 2). It should be noted that this convergence culture was anticipated prior to Jenkins by other authors, such as Jay David Bolter and Richard Grusin (1999), who used the concept of remediation, and argued that the convergence culture or media convergence was the mutual remediation of at least three important technologies: telephone, television and computer. Each of these technologies would be a hybrid of technical, social and economic practices, offering its own path to immediacy (Bolter and Grusin, 1999, p. 224).

On such convergence, Jenkins pointed out that it was a process that worked both top-down (company-driven) and bottom-up (consumer-driven). From this factor arises the participatory culture, where users (prosumers) are invited to actively participate in the creation and circulation of new content (Jenkins, 2006, p. 290). Under these aspects, interactivity can be differentiated from participation. Interactivity refers to the ways in which technologies have been designed to better respond to the user's reaction. The pre-structured interactive environment is not fixed, but varies from reading a book, watching a movie or playing a video game. On the other hand, participation is conditioned by social and cultural protocols. Conversations within a movie theater, for example, vary depending on the sociocultural context. In addition, participation is a more consumer-controlled activity, as opposed to interactivity (Jenkins, 2006, p. 133).

6.1. From hypertext to interactivity

In the new digital paradigm, authors such as Murray (1997) or George P. Landow (2006) define hypertext as a series of documents of any kind (texts, images, videos, etc.) that are connected to each other through links, creating fragments of information that allow the user a non-linear reading. Murray (1997, pp. 66-70) also defines these fragments of information or reading units as lexias. Thus, the integration in hypertext of different media through links results in multimediality. Hypertext challenges narration and linearity. Moreover, this non-linearity implies the rupture of conventions linked to concepts such as time, space, beginning and end.

However, hypertext is a phenomenon that, as an experimentation of new narrative forms, found its formulas before the arrival of the Internet. Thus, some of the first approaches that anticipate hypertext in literature are, for example, *The Life and Opinions of Tristram Shandy, Gentleman* (1759-1767), by Laurence Sterne, *Ulysses* (1922), by James Joyce, or various stories by Jorge Luis Borges. Likewise, books known as Choose Your Own Adventure became popular in the 1970s and 1980s. Their creator, Edward Packard, was influenced by the stories of Borges, creating narratives written in the second person (as if the reader were the protagonist) that

offered a relative freedom to make decisions and to vary the story with alternative endings. Subsequently, this type of explorative hyperfiction was consolidated, and various literary collections appeared in which readers could make decisions regarding different reading paths.

Hypertext was initially conceived by the engineer Vannevar Bush (1945), suggesting that the human mind works by association, since when it thinks of an idea it immediately jumps to the next suggested idea, and associative connections reach higher levels of meaning. Bush also invented the Memex, a precursor device to the Internet that allowed data to be stored for consultation with great speed and flexibility, as well as providing some interactivity to the user. Likewise, the term hypertext was coined in 1965 by information technology pioneer Theodor H. Nelson, defining it as a non-sequential writing interrelated in multiple directions (Nelson, 1965, p. 96). Bush's ideas inspired Theodor H. Nelson to develop Xanadu, a computer network that allowed the user to hyperlink different parts of a long text in a non-linear way, accessing the same document from different contexts. This is why hyperlinks using text are called hypertexts (Hagebölling, 2004, p. 14).

Regarding hypertext and its relation to interactivity, Jesper Juul (2005) considers that the Internet is not necessarily interactive, just as zapping with a television remote control is not necessarily interactive. A hypertext may function interactively at the discursive level, but it does not offer interaction at the narrative level. So, for example, whatever we do in an electronic or paper encyclopedia, the encyclopedia will not be modified. However, the user of a video game, for example, does not choose which parts of the story he wants to see, since he can create moments that did not exist before. On these aspects, Espen J. Aarseth called ergodic literature that interactivity which is confined to cybertext, which unlike hypertext requires more complex calculations in the textual code (Aasperth, 1997, pp. 62-65). In ergodic interactivity, the user influences what will happen with his or her actions, and is not only limited to selecting between different possibilities. Thus, Aarseth (1997, pp. 1-2) differentiates this more realistic type of interactivity from that where a non-trivial effort is required on the part of the user to follow the path or juxtaposition of events that are inscribed within the text. For her part, Murray (1997, p. 141) argues that the pleasure of acting in electronic environments is often confused with moving a joystick or activating a mouse, mainly due to the excessive and ambiguous use of the term interactivity.

On the other hand, video games designer Eric Zimmerman (2004, pp. 158-159) argues that interactivity should not be understood as an isolated or singular phenomenon, and can be combined in four possible ways:

- Cognitive interactivity: psychological, emotional, hermeneutic, semiotic, etc. interactions that a person can have with a content. It can happen, for example, when we read a book again after several years and discover that it is completely different from the book we remembered.
- Functional interactivity: functional and structural interactions with the content. This is a total interaction experience based on aspects such as analyzing the graphic design or the appearance of a book.
- Explicit interactivity: consists of interaction in the strict sense of the term. With this interactivity, an open participation takes place, such as clicking on non-linear links in a hypertext novel, following the rules of a game, etc.
- Metainteractivity: this is based on cultural participation beyond the experience of a single piece of content. The most common example comes from fandom culture, in which fans appropriate, reconstruct and disseminate content on a massive scale. This is what is known as UGC (user-generated content).

These four modes of narrative interactivity are not four distinct categories, but four overlapping forms of participation that can occur in varying degrees, and most interactive activities

incorporate some or all of them simultaneously. Therefore, what is usually understood as interactive is category three, that is, the explicit interactivity (Zimmerman, 2004, p. 159).

6.2. Interactive digital media

The boom in the supply of media content, boosted by the appearance of cable television and satellite dishes in the 1980s, gave rise to the fragmentation of audiences in a context that Umberto Eco (1986) defined as the transition from paleotelevision to neotelevision. From that moment on, there was a paradigmatic shift from a television with a certain number of channels (originated in the 1960s) to a fragmented offer of content according to each type of audience. The multiplication of channels, privatization and the rise of new technologies gave rise to this neo-television, where the boundaries between fiction and information were not as well defined as in paleotelevision (Eco, 1986, p. 119).

Thus, as Carlos A. Scolari (2008, pp. 225-227) points out, neotelevision unveiled itself to its audience by opening its technical device of enunciation, allowing viewers to see the newsrooms, the microphones or the cameras with which the programs are recorded; and where the explicit presence of the viewers changed the codes of conduct, accentuating the glances at the camera and the interaction with them (Fiske, 2009, p. 42).

Then came the Internet, which was installed in homes and in users' devices, accompanied by the digital revolution of 1990 and interactive communication, giving rise to a third stage of television. Its continuous rearticulation can be circumscribed within a process that Roger Fidler (1997, p. XV) defined as mediamorphosis, that is, the transformation of the media, generally as a result of the complex interplay between perceived needs, political and competitive pressures, and social and technological innovations. Scolari (2008, pp. 225-227) defines this third and current stage as hyper-television, the result of the hypertextual fruition of an audience accustomed to digital, individual, fragmented and interactive consumption (in addition to the so-called digital natives), offering hybrid contents.

Parallel to the hyper-television, the most representative example of interactive digital media can be found in video games, which are one of the main cultural industries of today. It is a media born in the mid-twentieth century, although in the beginning they were not accessible to all audiences, remaining in laboratories and universities. However, in the 1970s *Computer Space* (Nolan Bushnell and Ted Dabney, 1971) (Fig. 6.1) appeared, the first video game designed for commercial purposes, and whose creators founded Atari a year later (Baer, 2005, p. 9).

Nowadays, digital media are the ideal container through which interactive content is disaggregated under the principle of hypertext. However, as Murray (1997, p. 104) points out, digital narratives in their beginnings abused excessively the possibilities of hypertext digression and its playful characteristics of simulation. However, as this mode of expression has reached a certain maturity, it has acquired greater coherence. Likewise, Murray (1997, p. 109-193) defines three characteristics or aesthetic principles of interactive digital narratives:

- Immersion: the pleasurable experience of moving into a highly elaborate and plausible fictional space, regardless of what the fantasy is like.
- Acting: the power to develop meaningful actions and see the results of our decisions and choices.
- Transformation: the ability to modify the environment and the characters, being able to shape the work.

These characteristics maintain the pleasures of classic linear media, but they are also unique (Murray, 1997, p. 193), converging with Aarseth's (1997) proposal of ergodic literature, since

the user can influence the interactive content with his actions. Therefore, the interactive narrative should allow the user to decide between different alternatives, as well as to actively transform the narrative.

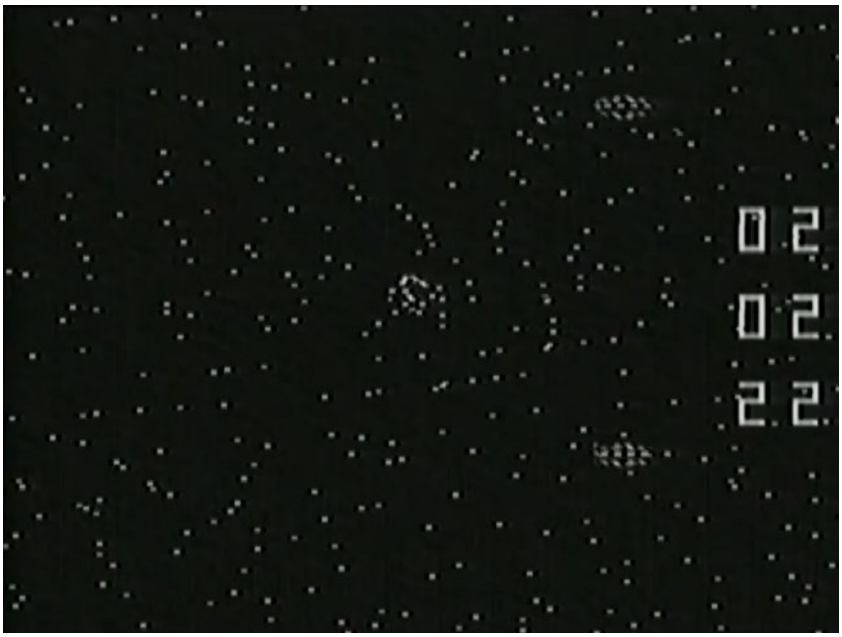

Figure 6.1. *Frame from the video game Computer Space (Nolan Bushnell and Ted Dabney, 1971). Source: Own elaboration using the original material.*

In contrast to linear media and their classical structures, Heide Hagebölling (2004, p. 3) points out that the most important properties of interactive digital media lie in their non-linear structuring of content, the different way of accessing information and the interaction between the user and the content. Concretely, the author argues that these properties develop under ten characteristics (Hagebölling, 2004, p. 3):

- Non-linearity and spatial orientation: content transmitted interactively is organized in a segmental and non-sequential manner. The principle of linear alignment is replaced by tree structures or more complex geospatial coordinates.
- Nodes: classic acts are replaced by nodes, which represent building blocks made up of complex units of information that can comprise tasks and instructions, and where each node can potentially be connected to any other node.
- Hypermedia structures: allow highly individualized and user-controlled access, which is essential in open and continuously growing systems, as is the case with the Internet.
- Navigation: the user is provided with instruments that facilitate orientation, generally visual or acoustic signs that can be recognized through specific actions.
- Interface: the user's activity is developed through different interfaces, such as traditional devices (keyboard, mouse, touch screen, etc.), or through voice recognition and eye tracking.
- Interactivity: access to content is based on interaction with a machine using the appropriate interface. Thus, the type of interface, its complexity, data volume or internal programming are key factors in determining the degree of user interaction.
- Individual reception and action: interactive contents are normally received by a single user, with some exceptions; therefore, choices, repetitions, jumps, interruptions and

subjective time are some of the most essential features that distinguish individual communication from linear communication, which is usually more group-based.

- Multimediality and intermediality: interactive contents are open to the combination of different media. For example, existing interactive multimedia programs in museums often take on complementary intermediate functions, either to provide a more detailed explanation of museum exhibits, or to illustrate its contents in more detail.
- Network and virtual expansion: unlike classic media, hyperlinks offer not only the potential exchange between users, but also collaborative production, where individual communication joins group communication.
- Hybridization: the development of interactive digital media opens up more and more opportunities, whose combination with classic or stand-alone media gives rise to a hybrid media, mutually benefiting from their specific advantages.

Interactive digital media differ greatly from classical narrative media. As Hagebölling (2004, pp. 1-2) points out, the way they structure their form and content, as well as the strategies they employ to convey it, are subject to their own rules and particularities. Nevertheless, they adhere to principles that on the one hand derive from the most diverse narrative traditions; but on the other hand, these must be continually reinvented. Thus, among the distinctive features of interactive communication, it can be stated that this type of works break with linear narrative, being subject to completely different regulatory principles (Juul, 2005, pp. 163-196). Therefore, interactive structures are more complex, as they individualize the act of perception, while at the same time addressing large groups of users.

6.3. Types of interactive narrative structures

In classical audiovisual narrative we find four main types of structures, which can be combined with each other. On the one hand, we have the linear structure. This is the classic three-act structure, in which the audience adopts a passive role from the beginning to the end of the narrative. An example of linear structure can be found in the film *Dead Poets Society* (Peter Weir, 1989), which develops its plot from the arrival of professor John Keating to the final impact on the students, without temporal alterations. This would also be the case of other films such as *The Texas Chain Saw Massacre* (Tobe Hooper, 1974) (Fig. 6.2) or *Gravity* (Alfonso Cuarón, 2013), which narrate in a linear way the survival of the main characters, maintaining a continuous progression of events The second case is the non-linear structure, which is based on inverted editing.

Thus, the order in which the story is told does not coincide with the order in which it happened, resorting to resources such as flashbacks or flashforwards (Martin, 1977, p. 168). An example is found in the film *Pulp Fiction* (Quentin Tarantino, 1994), where several stories are narrated in a non-chronological and intertwined way (practically all of Tarantino's filmography preserves this type of structure); or in the film *X* (Ti West, 2022), which begins with a flashforward and narrates the past events that occurred until reaching the situation we watch at the beginning of the film (Fig. 6.3).

The third case is the circular structure, which occurs when an aspect of the beginning of the plot is repeated at the end. That is, it follows the same pattern as the linear structure with the exception that at the end of the narrative there appears some motif coinciding with the beginning (not in the sense of beginning with a flashforward). An example is given in the film *Winchester 73* (Anthony Mann, 1950), where the rifle sets the pattern of the script itself, passing from hand to hand until it reaches the initial starting point. Fourthly, we have the interactive structure. In this structure, the narrative develops through the user's decisions, finding different possibilities (multilinearity) or paths to choose from. Therefore, it is a hypernarrative in which

the user has to detect the structure, the various lexias, and must also decide how to move from one lexia to another.

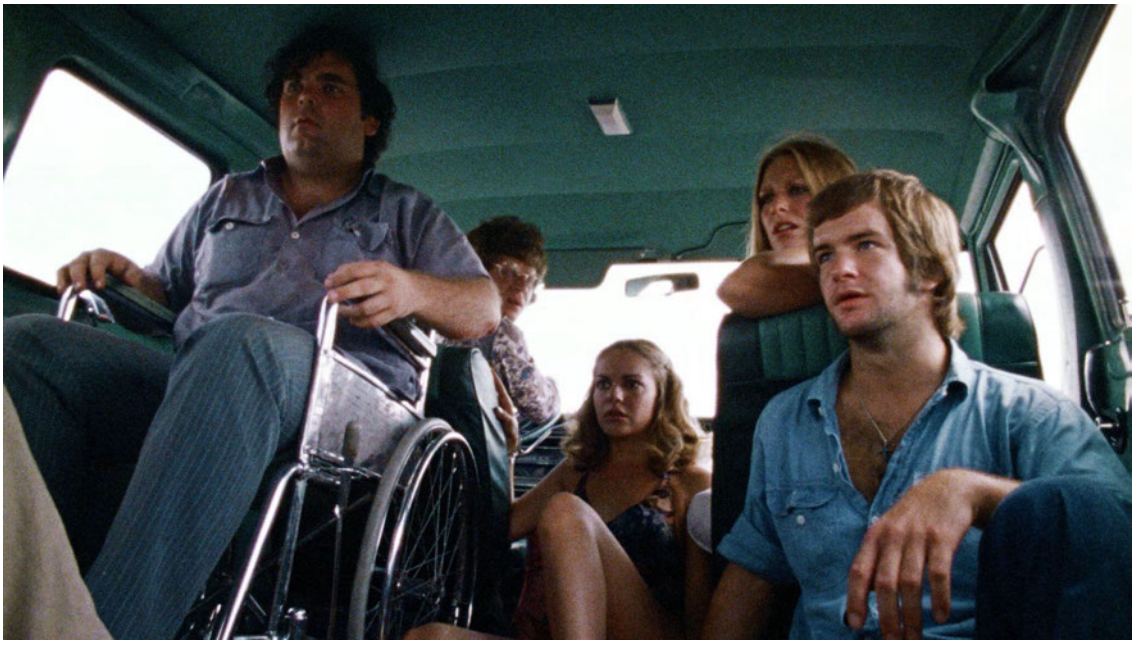

Figure 6.2. *Frame from the film The Texas Chain Saw Massacre (Tobe Hooper, 1974), with linear narrative structure. Source: Own elaboration using the original material.*

Figure 6.3. *Frame from the film X (Ti West, 2022), with non-linear narrative structure. Source: Own elaboration using the original material.*

Once the main narrative structures have been defined, within the interactive structures Ian Schreiber (2009) proposes several typologies, based on the theoretical corpus of video games designer Chris Bateman (2006). First, we have the linear interactive structure. This structure arises from the traditional linear structure, where the user's path is controlled and pre-established (the story is always the same), always finding the same beginning, development and

end. Under this aspect, Schreiber (2009) points out that linear interactive stories have the advantages of being able to apply traditional narrative techniques and better control every aspect and manageability of the story. However, due to the lack of decisions, the gamified feeling is less and a personalized experience is not produced. An example can be found in the horror short film *Mule* (Guy Shelmerdine, 2016), whose interactivity is based exclusively on an immersive virtual reality experience (Fig. 6.4).

Another case would be related to the film *The Nun* (Corin Hardy, 2018). It is a horror film that tells the story of a priest and a novice sent by the Vatican to a cloistered abbey in Romania to investigate the suicide of a young nun under strange circumstances. It is a spin-off of the film *The Conjuring (The Warren Files)* (James Wan, 2013), a saga to which other film titles belong. As part of the advertising campaign for the release of *The Nun*, an interactive trailer entitled *The Nun: Escape the Abbey 360* (2018) was developed. This trailer could be viewed on YouTube with a 360-degree view and optionally in 3D, in which the user moved the screen to explore different corners of the abbey while the camera was moving, without stopping, following a pre-established route. Under this aspect, the user could only modify the angle of vision of the camera, experiencing a journey through a gloomy space.

Figure 6.4. *Frame from the short film Mule (Guy Shelmerdine, 2016), with linear interactive structure. Source: Own elaboration using the original material.*

Secondly, we have the branched interactive structure. This works in a hierarchical and exponential way, since the more options there are, the greater the volume of content to be created. Thus, the narrative starts from a common beginning, but gradually begins to bifurcate, being able to experience different endings (Bateman, 2006). Thanks to the ability to make decisions, Schreiber (2009) points out that the user's feeling is one of complete control. This structure has the advantage of being interactive in the aspect of controlling the story and its ending. Thus, Schreiber (2009) indicates that if it includes a sufficiently large number of options and its options cover all the things a user would want to do, the narrative will respond credibly to any number of user decisions. On the downside, this is an economically expensive structure to develop, as more content must be produced (the totality of which is unlikely to be experienced by the user), losing some control of both the story and the user. An example is *Panzer Chocolate* (Robert Figueras, 2013), considered the first Spanish interactive and transmedia film, which has five different endings (Fig. 6.5). Under this aspect, it should be

noted that transmedia narratives are developed through different media and platforms in a structured and coherent way, where "each medium does what it does best" (Jenkins, 2006, pp. 95-96). Thus, it is not a matter of telling the same story in different media, but of expanding it (as in this example) under a meta-interactive perspective (Zimmerman, 2004, pp. 158-159). Another example is *Last Call* (Christian Mielmann, 2010), the first interactive film via mobile phone. It was a production in which an attempt was made to break the fourth wall, which separates the audience from the audiovisual work. To participate, viewers submitted their mobile phone number to a database before the film was screened in the cinema. During the screening, any member of the audience could receive a call from one of the characters, making decisions about which path to take.

Figure 6.5. *Promotional still from Panzer Chocolate (Robert Figueras, 2013), considered the first interactive and transmedia film made in Spain. Source: Catalonia Film School (2014).*

Thirdly, we have the interactive structure of parallel paths. In this type of structure the user can make decisions in the same way as in the branching structure, but there are certain events that she or he will be forced to experience, regardless of what has been chosen beforehand (Bateman, 2006). Its main advantage is that there is greater control over the main plot, forcing the user to witness certain moments. However, we must structure each narrative line well to avoid the feeling of repetition in the user. In addition, this structure can convey a certain idea of linearity, so it has the disadvantage of losing a bit of the gamified feeling. An example is *Kinoautomat* (Radúz Cincera, Ján Roháč and Vladimír Svitácek, 1967), considered the first international interactive feature film. In the film, the audience could choose between two different scenes during nine different moments of the film, but always finding the same ending.

Next, the fourth type is the interactive thread structure. This structure responds to stories that are further divided into smaller plot blocks that may or may not intersect (Bateman, 2006). Its main advantage is that there can be multiple stories happening at the same time with different beginnings and developments that the user would have access to. As a disadvantage, designing this structure is complicated, since if the events happen in any order its experimentation would lack narrative sense. Therefore, it must be designed in such a way that access to certain events

takes place only when it makes sense to do so (Schreiber, 2009). An example is the video game *As Dusk Falls* (Caroline Marchal, 2022), which offers a fragmented narrative where decisions alter the fate of multiple characters in different timelines. Plot threads are interwoven through time jumps, allowing connections between seemingly unconnected events to be explored. Its design avoids narrative chaos by synchronizing key points that maintain coherence.

Figure 6.6. *Frame from the video game As Dusk Falls (Caroline Marchal, 2022), with interactive thread structure. Source: Own elaboration using the original material.*

The fifth type is the dynamic interactive structure, in which several micro-narratives appear, each with several nodes or potential entry and exit points, connecting in a network. Thus, the exit point of a micro-narrative may lead to its end or to another micro-narrative. This type of structure has the advantages of the interactive structure of parallel paths, but without a linear narrative arc. Thus, each micro-narrative functions independently and has its own options; and the overall sum of micro-narratives acts as a larger branching or parallel path narrative. However, the user must experience the content many times to learn about the totality of paths, and it is the most experimental structure of all (Bateman, 2006; Schreiber, 2009). An example is *Façade* (Michael Mateas and Andrew Stern, 2005), a video game based on artificial intelligence that produces or renders 3D virtual environments in real time and in a personalized way for each user (Fig. 6.7).

For his part, Andrew Prosser (2014, p. 323) also points out two other types of interactive structures that complement those mentioned above. On the one hand, the concentric interactive structure. In this structure, the user starts at a shared center of operations (such as a map or menu) and interacts through the different parts of the narrative, but always returning to that starting point. That is, it is a structure circumscribed around a central point that leads to different entry points of the narrative, and even if the user decides which path to take he or she will always return to this center of operations (Prosser, 2014, p. 323). This is a simple structure to design, although more limited in its explorative aspect.

The second case is the fishbone structure. This structure arises from the linear structure, which runs through its core, but allows the user to deviate and explore secondary stories, although always returning to the main point. It is a structure where more interaction can be added than is offered in a classic linear narrative (Prosser, 2014, p. 323). An example is the classic video

game *The Secret of Monkey Island* (Ron Gilbert, 1990), which integrates side quests always returning to the main point (Fig. 6.8).

Figure 6.7. *Frame from the video game Façade (Michael Mateas and Andrew Stern, 2005), with dynamic interactive structure. Source: Own elaboration using the original material.*

Figure 6.8. *Frame from the video game The Secret of Monkey Island (Ron Gilbert, 1990), with fishbone structure. Source: Own elaboration using the original material.*

6.4. Interactive advertising

In this section we will briefly analyze the interactive advertising on the Internet, whose characteristics are adaptable to audiovisual advertising. Digital technology has transformed the advertising, both in form and content. In this sense, the Internet has become one of the most effective advertising media as a provider of interactive data between the source or sender and the receiver, where in addition when a user shares a viral video, she or he does not only share the content, but also the possible advertising messages included in that content (Hasret, Boyraz and Erdoğan, 2015, p. 25). This is a process of hypermediation that has reshaped the languages of traditional media (Scolari, 2008, p. 225). Professor John A. Deighton (1996, in Hasret et al., 2015, pp. 27-32) argues that interactivity in advertising is based on addressing the target obtaining its reaction and recall, taking into account three aspects within this process:

- Active control: in traditional television, the spots interrupt the content without the audience's prior approval, and therefore they change channel to avoid the ads. On the Internet, however, the user does not have to do anything to avoid the ads: if the user is interested, he can click on the banner to get more information, but he can also ignore it. Thus, the user controls his experiences based on his preferences and decisions. However, Internet advertising is becoming more and more intrusive.
- Bidirectional communication: The Internet offers the opportunity to obtain instant feedback in an implicit way, consisting of measures such as analyzing the time a user spends on a website. In addition, there is also a more explicit feedback, where actions such as accepting the sending of newsletters or filling in a form can be found. Regarding this type of bidirectional communication, Sally J. McMillan (2002, p. 165, in Hasret et al., 2015, p. 29) defines it as looking from the eyes of the audience. Sandra Moriarty, Nancy Mitchell and William Wells (2012, p. 102, in Hasret et al., 2015, p. 29) point out that the application of interactivity in advertising changes the positions of sender and receiver, where the sender is the new receiver and the receiver is the new sender.

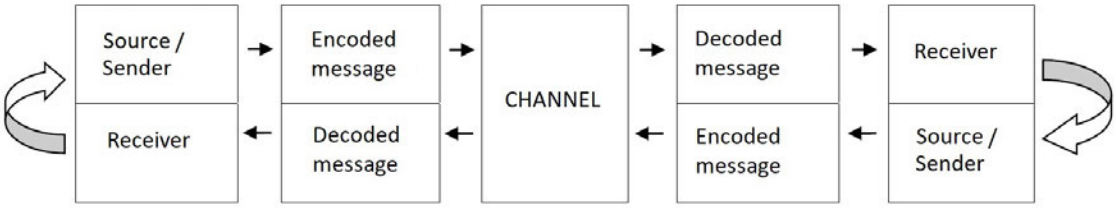

Figure 6.9. *Interactive communication model. Source: Own elaboration based on Hasret et al. (2015, p. 29).*

- Synchronization: unlike traditional media, the Internet allows communication to be more synchronized. For example, if keywords are entered in a search engine, results can be obtained in less than a second, in addition to achieving more immediate feedback from the audience. All this added to prompts in artificial intelligence supports such as ChatGPT, Perplexity, etc.

Nowadays, surfing the Internet and watching television (especially due to the rise of streaming platforms) are convergent activities from the target's point of view, so the market is trying to create new participation frameworks (Murray, 1997, p. 263). Under this observation, new entertainment and exhibition formats provide new advertising styles to advertisers. For example, advertainment, advergaming, in-game advertising or viral advertisement are different modes of advertising communication that in turn become interactive environments, where, for

example, a user does not only play an advergame, but also interacts with the advertising campaign itself (Hasret et al., 2015, p. 33).

The video game *Zool* (George Allen, 1992), for example, is a very particular case of in-game advertising (Fig. 6.10), programmed to be played on different platforms (Amiga, Game Boy, Super Nintendo, etc.). *Zool* was named after its protagonist, a kind of space ninja conceived to compete against the SEGA company's Sonic character. As for its plot, this side-scrolling platform video game was for a single player, who through the character had to go through seven levels eliminating different enemies fighting with a boss at the end of each level. However, although this project appeared to compete as a quality product, during its development cycle it faced economic problems. Finally, *Zool* was sponsored by Chupa Chups, the well-known candy brand founded in the mid-twentieth century, appearing continuous references in the videogame in a very explicit way.

Figure 6.10. *Two frames from the video game Zool (George Allen, 1992), an in-game advertising case. Source: Own elaboration using the original material.*

Figure 6.11. *Frame from the video game Chex Quest (Mike Koenigs and Dean Hyers, 1996), an advergame case. Source: Own elaboration using the original material.*

Another case is the video game *Chex Quest* (Mike Koenigs and Dean Hyers, 1996), a first-person shooter (FPS) advergame developed by the company Digital Café in order to promote Chex brand cereals (Fig. 6.11), being the first video game in history to be included in cereal boxes as a prize (Sloane, 1997, p. 26). *Chex Quest* was aimed at a child target, and the company started from the ideas of the popular video games of the *Doom* franchise, but reducing the graphic violence. It was a project that significantly increased the cereal brand's sales, as well as winning several awards and recognition for its advertising effectiveness. Since then, *Chex Quest* has become a saga that has given rise to several sequels, also gaining a very active fan community that has developed numerous projects in different media and platforms structured around that universe.

Thanks to the interactivity of online advertising applications, today's target is included in their content. This is a different model from the traditional one, as the audience increasingly socializes online (specifically through social networks such as TikTok or Instagram), and results in virtual communities being considered important for advertisers (Hasret et al., 2015, p. 40). In this sense, the audience shares online their own experiences with their own expressions, so digital media that allow them to share them and offer entertainment arouse greater interest on the part of advertisers to be used as vehicles for interactive advertising.

Chapter 7. Transmedia storytelling

Nowadays, transmedia narratives are firmly established in our media environment. Jenkins (2006, pp. 95-96) defined transmediality as a phenomenon in which the elements that constitute a narrative are systematically expanded across multiple media (digital and traditional), offering a unique user experience, where ideally, each platform should contribute by enhancing its own characteristics to the development of that narrative. Therefore, the enjoyment of the totality of content should be better than the sum of its parts.

Jenkins' various contributions allowed transmedia narratives to be the subject of study within the academic field, narrowing their definition in relation to concepts of the same semantic field but with different nuances, such as crossmedia, multiplatform content, commercial intertextuality, hyperseriality, etc. Similarly, Jenkins (2006, p. 21) coined the concept of transmedia storytelling to refer to a new aesthetic that responded to media convergence, which is based on the notion of constructing fictional narratives under the sum of partial narratives distributed by different media and platforms. In this sense, although Jenkins focused on fiction, transmedia narratives would encompass much more than fiction itself.

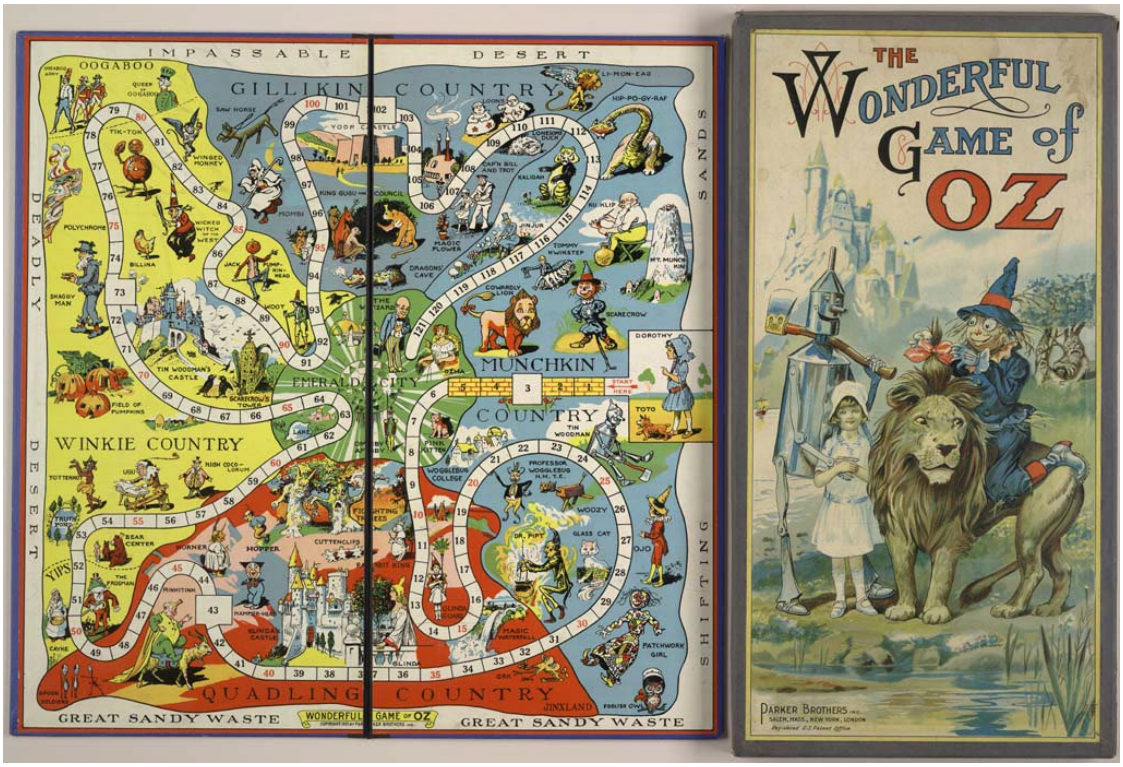

Figure 7.1. *The Wonderful Game of Oz board game from 1921, by Parker Brothers. Source: Library of Congress (1983).*

7.1. The origins of transmedia storytelling

When it comes to finding early transmedia manifestations, Freeman (2014) identified *The Wonderful Game of Oz* board game (Fig. 7.1) and a Tarzan puzzle as two transmedia examples from the analog era, published respectively in the 1920s and 1930s. *The Wonderful Game of Oz*

was a promotional product that derived directly from Baum's classic novel. As for the puzzle, Edgar Rice Burroughs developed and sold several of these games with the Tarzan design that, in addition, connected with the radio serials that at that time starred the character, linking them, in turn, with other similar contents that were gradually expanding his narrative world (Freeman, 2014, p. 45). Both the board game and the puzzle would make up two strategies that, in the same way, succumb to the precepts of a marked commercial character to promote narrative content.

These two examples allow us to observe that in order to speak of transmediality it is necessary to have an intertextual or transtextual relationship between the contents that constitute a narrative, but it is not enough. Transmediality does not only consist of transferring content from one medium to another, since it is also necessary to build a consistent and plausible fictional world or universe, which will be expanded through multiple platforms and formats. In this context, the use of new technologies is also necessary not only for its creation, but also for its reception and participation by users.

7.1.1. Intertextuality

Intertextuality appeared in the critical discourse at the end of the 1970s, becoming a natural phenomenon of any literary analysis, especially through authors such as Mijaíl Bajtín and Julia Kristeva. We refer to it in its formal and analytical aspect, since as a practice it has existed since antiquity, and without forgetting the previous work of authors such as Curtius or the Russian formalists (Jakobson, Tynyanov, etc.). Kristeva introduced the term intertextuality replacing the previous concept of intersubjectivity coined by Bajtín (1978), defining it as the textual interaction that takes place within a text, which is the absorption and transformation of another text, influencing the text itself, its author and its receiver (Kristeva, 1969, pp. 84-85).

For Bajtín (1978), moreover, dialoguism explains that the dialogue present in the Renaissance novel between the author (referring discourse) and the characters (referred discourse) does not conform to dramatic dialogue, but to a particular dialogue towards the novel, developed under a certain monological appearance. It was this configuration that Kristeva (1969, p. 206) called intertextuality (through dialogue), present in a possible text or signic code between the subject of the enunciation and the subject of the utterance. The author also pointed out that intertextuality designated textual productivity and transposition of one or several sign systems into another, materializing in the different levels of the narrative and actancial structure of any text (Kristeva, 1974, p. 74). Intertextuality, therefore, alludes to the infiltration of some texts into others; that is, to the relationship between texts.

Roland Barthes (1977), on the other hand, considered intertextuality as the basic condition of any text, reflecting on textual reconstruction-deconstruction, based on the exchange of texts, in which every text is an intertext, a new weaving of previous quotations, whether conscious, unconscious or secret. Barthes defined the text as a chamber of echoes, pointing out that everything had already been read, the texts resonating with each other, so that intertextuality should not satisfy the seminal study of a text, since this new text is the intertext of another text.

7.1.2. Transtextuality

Gérard Genette (1982, pp. 10-28) developed five typologies of transtextual relations. In short, the first is intertextuality itself, defined as the relationship of co-presence between two or more texts. The effective presence of one text on another in an eidetic and frequent manner is differentiated under different nuances. Thus, we find intertextual relations of explicit co-presence (quotation and reference) and implicit co-presence (allusion and plagiarism). The

second type of transtextual relationship is paratextuality, which are the elements that orbit around the text, providing it with an environment, such as the cover or the table of contents of a book (whether physical or digital). The third type of transtextuality that Genette classified is metatextuality, which deals with the relationship of one text to another text through critical analysis or commentary. Genette then defined the fourth type of transtextuality as hypertextuality, a model to which he devoted most attention, being the relationship linking a text B (hypertext) to an earlier text A (hypotext). This relationship can be simple or more indirect, based on imitation or filiation.

Within hypertextual relations, Genette includes parody and pastiche. Parody is the semantic or thematic modification of a text with an ironic character, while preserving its style. Pastiche, however, does not consist in the derivation by transformation of a text to give it a new meaning, but in the imitation of the style that an author leaves impregnated in her or his texts, independently of the theme, using the same techniques that are applied to collage. Finally, Genette defined the fifth type of transtextuality as architextuality, being an abstract, mute and implicit relationship that articulates, at most, a paratextual mention.

This is a taxonomic relation of genres and sub-genres, classifying texts according to their common characteristics, since they are not in themselves obliged to declare their generic quality, since the novel is not explicitly designated as a novel, nor the poem as a poem, being factors that guide the expectations of the users.

7.2. Transmedia storytelling by Henry Jenkins

In his blog post entitled *The revenge of the origami unicorn: Seven principles of Transmedia Storytelling (Well, two actually. Five more on friday)* (2009), Henry Jenkins proposed seven characteristics that when found within a narrative content result in transmedia storytelling:

- Spreadability vs. drillability. The emergence of social media platforms in the Web 2.0 environment has boosted the symbiotic spreadability of the narrative, while drillability has a close relationship with engagement, which is conditioned by the ability of a narrative to attract and penetrate the target audience. Thus, spreadability enhances the credibility of the narrative, while drillability connects with fans, who select what they are most interested in. When talking about the spreadability of a narrative, it is important to distinguish between strategic transmediality, which is born of careful planning, and tactical transmediality, which is dictated by the favorable conditions of the media ecosystem, and reacts to the inputs from the environment. For example, the literary universes of J.R.R. Tolkien, J.K. Rowling or George R.R. Martin were not conceived as transmedia projects, but circumstances and fandom have meant that they are now. In the case of Tolkien, it is worth noting that the author greatly expanded his Middle-earth universe, but always within the same media (maps, illustrations, etc.) (Fig. 7.2).

- Continuity vs. multiplicity. Continuity creates coherence and credibility in the narrative, avoiding dissociated products, while multiplicity establishes a rupture, allowing the development of alternative universes that enrich the heterogeneity of the transmedia content, as is the case with the Spider-Man character (Fig. 7.3). In this sense, Dena (2009) highlights the use of documentation or transmedia bible as a practice to generate continuity. Although there are differences between the transmedia bible of a television series, a film or a video game, it is documentation that helps to better understand the society, culture, rules, religion, geography, technology, aesthetic designs, character biographies, or any other information inherent to the narrative world (Dena, 2009, pp. 132-135). Continuity and multiplicity imply a coherence and logic with respect to the main narrative, complementing each other through different media where potential users could enter.

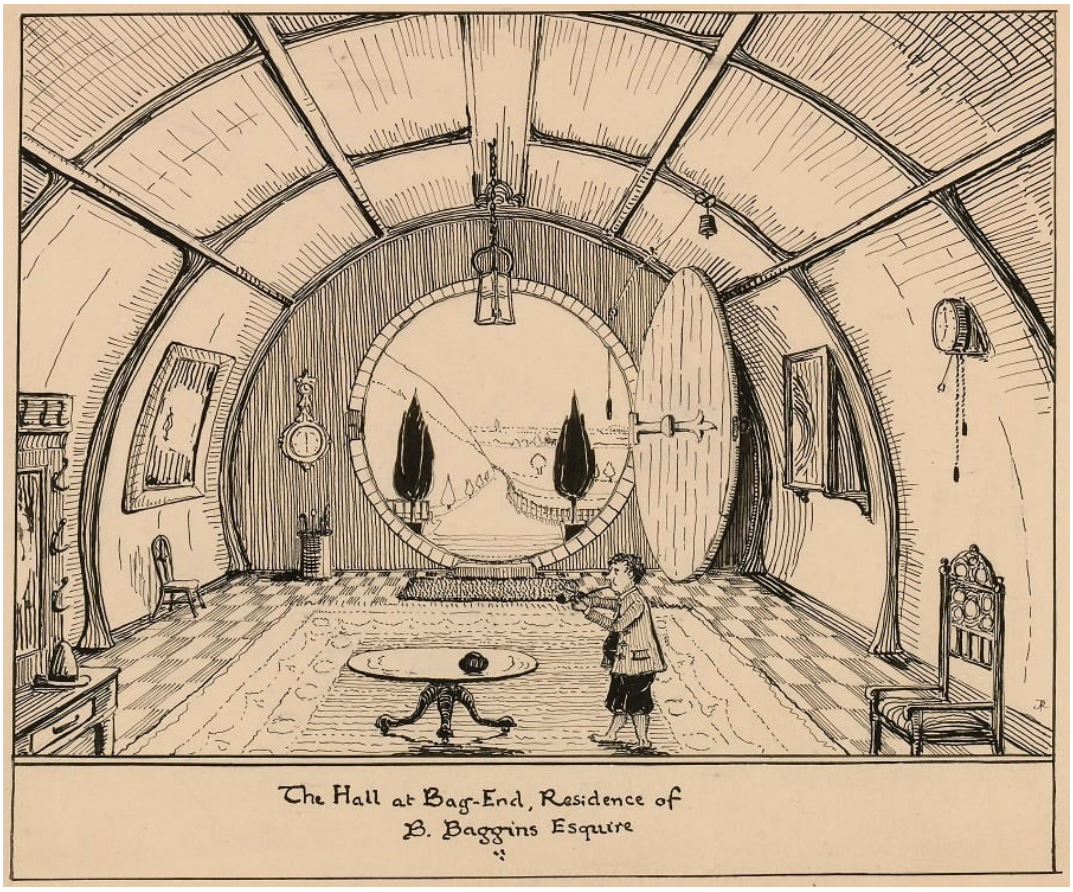

Figure 7.2. *Illustration by J.R.R. Tolkien for The Hobbit (1937). Source: Artnet (2022).*

Figure 7.3. *Frame from the film Spider-Man: Across the Spider-Verse (Joaquim Dos Santos, Kemp Powers and Justin K. Thompson, 2023). Source: Own elaboration using the original material.*

– Immersion vs. extractability. Immersion refers to the ability to immerse users in the narrative through immersive experiences, as in the case of theme parks (Fig. 7.4). Thus, transmediality is conceptualized as the construction of experiences between and across borders where multiple media and platforms come together. It is a storytelling format that combines with the participation, democratization, commercialization and promotion of content (fictional and nonfictional), providing emotional and immersive experiences that

flow dynamically in society. Regarding extractability, it is the procedure through which a fictional product is marketed in the real world. It is a property related to brand fiction, where iconic elements of fiction are reformulated as brands.

Figure 7.4. *Super Nintendo World theme park in Japan. Source: Datainfox (2020).*

- Worldbuilding. The more detailed, plausible and complex the narrative world, the more users will believe in it. This fictional world can encompass different characters and stories, as well as be found on multiple platforms. Henry Jenkins cites the case of Frank Baum and his World of Oz, as well as relating the construction of worlds to what Murray (1997) defined as the construction of credulity. In addition, consumers who are more engaged with transmedia content, track all the existing information through multiple media to get an accurate idea of that world (in terms of geography, time, etc.) and to know its narrative coherence (Jenkins, 2006, p. 95). Thus, the various dimensions, plausibility, and richness of detail of transmedia worlds are designed and represented in ways that are as important, intriguing, and compelling as their own characters and plots. Thus, for a work to become cult content it must be shown as a fully equipped world, but where the text cannot satisfy the desire to know everything and consequently the encyclopedic impulse does not stop. Among the many examples, Terry Pratchett's Discworld, adapted to different media and platforms, would be a case of worldbuilding (Fig. 7.5).
- Seriality. Seriality is related to the sequentiality of the narrative plot which, under a transmedia model, would expand hypertextually across platforms, where, remember, "each medium does what it does best" (Jenkins, 2006, pp. 95-96). Thus, different experiences are offered to users, as transmedia narratives are hyperserial in that they contribute to a more far-reaching experience than their stories provide individually and independently (Murray, 1997). This effect breaks the classic linear structures of monomedia narratives, producing strategic jumps, and what may be an omitted event as an ellipsis, for example, between two films, can manifest itself as an explicit story

through a video game, a webseries or a short film, as in franchises such as *The Matrix* (Fig. 7.6) or *Blade Runner*. As a result, companies implement very different content and strategies for the launch of what Jenkins calls the mothership, that is the initial narrative that functions as the starting point of a horizontally expanding macro-narrative design.

Figure 7.5. *Illustration of Terry Pratchett's Discworld, resting on the back of four elephants riding on the shell of a giant cosmic turtle. Source: 8luches X-wing/Flickr (2007).*

Figure 7.6. *Frame from the short film Animatrix: Final Flight of the Osiris (Andrew R. Jones, 2003), which narrates an event that occurred between the first two films of The Matrix franchise (1999-2003), by the Wachowski sisters. Source: Own elaboration using the original material.*

Figure 7.7. *Frame from the television series The Mandalorian (Jon Favreau, 2019), an example of subjectivity within the Star Wars universe. Source: Own elaboration using the original material.*

Figure 7.8. *Frame from the fan film Sonic (Eddie Lebron, 2013).*
Source: Own elaboration using the original material.

- Subjectivity. It is based on the existence of different points of view within the same narrative world, and usually occurs due to the crossing of multiple experiences of the characters (main and secondary), requiring the user to recompose the contents, derived from these heterogeneous subjectivities, which also allow transmedia productions to be more viable to develop (Fig. 7.7). Regarding the different points of view, if it is a strategic transmediality, it is advisable to design beforehand how they will be interrelated, since it is possible that users will consume them in different ways, with a base narrative initiated in a more widespread media (such as cinema or literature) that will be consumed by the more traditional audience together with the transmedia one, while the micro-stories (through mobile applications, webisodes, etc.) will have a completely transmedia audience.

– Performance. The performance alludes to the protagonism given to the audience, since transmediality requires that consumers are also producers of content, participating in its expansion. A classic example is the creation of fan films (Fig. 7.8). Consumers are guided by their desires, and the current form of consumption is not based on regulating those desires, but on generating the desired experiences and desires. In this context, the participation of consumers in transmedia environments has meant that they have also become producers of transmedia content, ceasing to be passive subjects (prosumers).

7.3. Transmedia branding

Transmedia branding is a phenomenon in which a brand hosts elements that are part of the same fictional world, which expand thanks to the participation of consumers. For this purpose, it is a property linked to other processes such as brand fiction, where fictional elements are reformulated as brands; branded content, which allows brands to renew the interest and attention of users; or diegetic merchandising, in which brands are placed within the diegetic framework of the show through products that are consumed or used by the characters themselves (Askwith, 2007, p. 141).

Diegetic merchandising tries to erase in a certain way the border between the fictional world and the real world, inserting unexpectedly among the purchasable products those that refer to fictional characters, institutions, places, etc. in a process of defictionalization (Barnes and Chryssochoidis, 2010). In the context of diegetic merchandising, we find pseudodiegetic merchandising, which would be products that do not appear in the narrative but come from or are directly related to it; and extradiegetic merchandising, which would include those products that explicitly explore the narrative by declaring their belonging to the fictional universe (Johnson, 2007, pp. 15-16).

Figure 7.9. *Transmedia branding in Hellboy franchise. Source: Own elaboration.*

Under these aspects, a cereal box from the *Star Wars* franchise, for example, would not be a case of transmedia storytelling, unless it contributed to the narrative itself. However, as Geoffrey A. Long (2007, p. 32) pointed out, it would be a transmedia articulation, but specifically transmedia branding. Transmediality, therefore, is not a form of branding, but branding is something that can be done with transmediality. In relation to these aspects, Long (2007, pp. 32-33) alluded to the *Hellboy* franchise (Fig. 7.9), a work initially introduced in 1993 through Mike Mignola's comics. Since then, the narrative world of the red superhero has found its way into films, novels, toys, video games, and a series of animated features, whose new creators (Guillermo del Toro, Neil Marshall, Christopher Golden, Tad Stones, etc.) were encouraged by Mignola to take their characters in new directions, causing some of them to die early in the movies and later in the comics, and yet not die in the animated works; or that there were certain inconsistencies in their relationships, without contributing positively to the fandom, and even proving detrimental to the understanding of the franchise as a whole.

7.4. Crossmedia

When it comes to narrowing the definition of crossmedia (or cross-media) narratives and marking its boundaries with respect to transmedia and other multiplatform content, there is some debate with relatively partial amendments. For example, strategic content specialist Jak Boumans (2004, p. 4) defined crossmedia based on the following criteria:

- Crossmedia involves more than one media supporting each other with their specific strengths.
- Crossmedia aims at an integrated production.
- Content is accessible on a variety of devices.
- The use of more than one media has to be compatible with a theme, purpose, story, etc., depending on the type of project.
- Crossmedia does not exist only because of the juxtaposition of different media, but its relevance is given when the common message spreads and interacts between the various platforms.

Another example can be found in Christy Dena (2009), who argues that a crossmedia narrative implies non-facultative knowledge of all media and platforms to understand the narrative, fitting them together like pieces of a puzzle. For his part, Aarseth (2006) considers that crossmedia depends on different techniques (storytelling, conceptual designs, video game development, etc.), the most important of which is business strategy, a factor that can hinder user participation. Under another perspective, Davidson (2010) states that crossmedia refers to those experiences that are articulated through multiple media, and that due to technological possibilities offer certain interactivity. On the other hand, Renó (2013) argues that crossmedia narratives refer to the repetition of the same message, which is adapted to different media, while transmedia narrative would produce different messages for different media.

As we can see, this series of definitions reflects to some extent the idea that crossmedia narratives imply a guided process that would require the need to experience a set of content, spread across different media and platforms, in order to understand the totality of a story as a whole. However, it can currently be a complex task to develop a narrative universe that can adhere to a controlled and guided expansion, as proposed with crossmedia, without fandom intervening at some point in that expansion and establishing content influences between the canon and the users.

Bibliography

Aarseth, E.J. (1997). *Cybertext: Perspectives on Ergodic Literature*. The Johns Hopkins University Press.

Aarseth, E.J. (2006). The Culture and Business of Cross-Media Productions. *Popular Communication, 4*(3), pp. 203-211.

Askwith, I.D. (2007). *Television 2.0: Reconceptualizing TV as an Engagement Medium*. Master Thesis. Massachusetts Institute of Technology, Dept. of Comparative Media Studies.

Baer, R.H. (2005). *Videogames In The Beginning*. Rolenta Press.

Bajtín, M. (1978). *Esthétique et théorie du roman*. Gallimard.

Barnes, S.J. and G. Chryssochoidis (2010). *From Fiction to Fact: Exploring the Defictionalization of Brands in Media*. AMA Summer Marketing Educators' Conference, Boston.

Barthes, R. (1977). *Rhetoric of the image. Image, music, text*. Hill and Wang.

Bateman, C. (2006). *Game Writing: Narrative Skills for Videogames*. Charles River Media.

Betancourt, M. (2020). *The History of Motion Graphics*. Wildside Press.

Blanco, D. (1989). *Semiótica del texto fílmico*. Universidad de Lima.

Bolter, J.D. and Grusin, R. (1999). *Remediation. Understanding New Media*. MIT Press.

Bordwell, D. (1985). *Narration in the Fiction Film*. University of Wisconsin Press.

Bordwell, D. and Thompson, K. (1994). *Film History: An Introduction*. McGraw Hill.

Boumans, J. (2004). Cross-media. *E-Content Report, 8*, ACTeN, Anticipating Content Technology Needs.

Braha, Y. and Byrne, B. (2011). *Creative Motion Graphic Titling for Film, Video, and the Web*. Elsevier.

Bresson, R. (1975). *Notes sur le cinématographe*. Gallimard.

Brinkmann, R. (1999). *The Art and Science of Digital Compositing*. Elsevier.

Bush, V. (1945). As We May Think. *The Atlantic Monthly, 176*(1), pp. 101-108.

Campbell, J. (2008). *The Hero With A Thousand Faces*. New World Library.

Chion, M. (1982). *La voix au cinéma*. Cahiers du Cinéma.

Chion, M. (1991). *L'audio-vision. Son et image au cinéma*. Armand Colin.

Clark, B. and Spohr, S.J. (2002). *Guide to Postproduction for TV and Film: Managing the Process*. Elsevier.

Davidson, D. (2010). *Cross-Media Communications: An Introduction to the Art of Creating Integrated Media Experiences*. ETC Press.

Deleuze, G. (1983). *L'image-mouvement. Cinéma I*. Minuit.

Deleuze, G. (1985). *L'image-temps. Cinéma II*. Minuit.

Dena, C. (2009). *Transmedia Practice: Theorising the Practice of Expressing a Fictional World across Distinct Media and Environments*. Doctoral Thesis. University of Sydney, Australia.

Dinur, E. (2017). *The Filmmaker's Guide to Visual Effects: The art and techniques of VFX for directors, producers, editors, and cinematographers*. Routledge.

Eco, U. (1986). *La estrategia de la ilusión*. Lumen.

Fidler, R. (1997). *Mediamorphosis. Understanding New Media*. Pine Forge Press.

Field, S. (2006). *The Screenwriter's Workbook*. Random House Publishing Group.

Fiske, J. (2009). *Television Culture*. Routledge.

Freeman, M. (2014). The Wonderful Game of Oz and Tarzan Jigsaws: Commodifying Transmedia in Early Twentieth-Century Consumer Culture. *Intensities: The Journal of Cult Media, 7*, pp. 44-54.

Gaudreault, A. and Jost, F. (2005). *Le récit cinématographique*. Armand Colin.

Genette, G. (1982). *Palimpsestes: La littérature au second degré*. Éditions du Seuil.

Hagebölling, H. (2004). *Interactive Dramaturgies: New Approaches in Multimedia Content and Design*. Springer.

Hasret, A., Boyraz, B. and Erdoğan, M.G. (2015*). Interactive Advertising Models: A Meta-Analysis*. Conference in International Institute of Social and Economic Sciences (Florence, Italy), pp. 24-42.

Heller, E. (2004). *Psicología del color*. Editions GG.

Herráiz Zornoza, B. (2009). *Grafismo audiovisual: El lenguaje efímero. Recursos y estrategias*. Doctoral Thesis. Polytechnic University of Valencia.

James, J. (2009). *Fix It in Post: Solutions for Postproduction Problems*. Elsevier.

Jenkins, H. (2006). *Convergence Culture: Where Old and New Media Collide*. New York University Press.

Jenkins, H. (2009). *The Revenge of the Origami Unicorn: Seven Principles of Transmedia Storytelling (Well, Two Actually. Five More on Friday)*. Retrieved from https://bit.ly/1ib6AvH

Johnson, C. (2007). TELE-BRANDING IN TVIII. The network as brand and the programme as brand. *New Review of Film and Television Studies, 5*(1), pp. 5-24.

Juul, J. (2005). *Half-Real: Video Games Between Real Rules and Fictional Worlds*. MIT Press.

Katz, S.D. (1991). *Film Directing Shot by Shot: Visualizing from Concept to Screen*. Michael Wiese Productions.

Kristeva, J. (1969). *Semeiotiké: recherches pour une sémanalyse*. Éditions du Seuil.

Kristeva, J. (1974). *La révolution du langage poétique*. Éditions du Seuil.

Landow, G.P. (2006). *Hypertext 3.0: Critical Theory and New Media in an Era of Globalization*. The John Hopkins University Press.

Long, G.A. (2007). *Transmedia Storytelling: Business, Aesthetics and Production at the Jim Henson Company*. Master Thesis. Massachusetts Institute of Technology, Dept. of Comparative Media Studies.

Martin, M. (1977). *Le langage cinématographique*. Les Éditeurs Français Réunis.

Mattingly, D.B. (2011). *The Digital Matte Painting Handbook*. Wiley Publishing.

McKee, R. (1997). *Story*. Harper Collins Publishers.

Metz, C. (1971). *Langage et cinéma*. Albatros.

Metz, C. (1974). El estudio semiológico del lenguaje cinematográfico. *Lenguajes. Revista de Lingüística y Semiología, 1*(2), pp. 37-51.

Mitry, J. (1987). *La sémiologie en question*. Cerf.

Murray, J.H. (1997). *Hamlet on the Holodeck*. Simon & Schuster.

Nelson, T.H. (1965). *A file structure for the complex, the changing and the indeterminate*. Association for Computing Machinery (ACM). 20th National Conference (Cleveland, USA), pp. 84-100.

Prosser, A. (2014). Getting off the straight and narrow: Exploiting non-linear, interactive narrative structures in digital stories for language teaching. In Jager, S., Bradley, L., Meima, E.J. and Thouësny, S. (Eds.), *Call Design: Principles and Practice*. Proceedings of the 2014 EUROCALL Conference (Groningen, The Netherlands), pp. 318-323.

Reisz, K. (1958). *The Technique of Film Editing*. Focal Press.

Renó, D. (2013). A Narrativa Transmídia e a "Desgovernabilidade" Jornalística. *Comunicacao e Sociedade, 34*(2), pp. 141-146.

Rodgers, S. and Thorson, E. (2000). The Interactive Advertising Model: How People Perceive and Process Interactive Ads. *Journal of Interactive Advertising, 1*(1), pp. 42-61.

Schreiber, I. (2009). *An Experiment in Game Design and Teaching*. Retrieved from https://gamedesignconcepts.wordpress.com/2009/07/

Scolari, C.A. (2008). *Hipermediaciones. Elementos para una teoría de la comunicación digital interactiva*. Gedisa.

Sherman, E. (1992). *Frame by Frame*. Íxia.

Sloane, M. (1997). Cereal Offer Provides Good Fun. *The Vindicator,* p. 26.

Snyder, B. (2005). *Save the Cat!: The Last Book on Screenwriting You'll Ever Need*. Michael Wiese Productions.

Solarino, C. (1993). *Cómo hacer televisión*. Cátedra.

Stam, R. (2000). *Film Theory: An Introduction*. John Wiley & Sons.

Thompson, R. (1993). *Grammar of the Edit*. Focal Press.

Zimmerman, E. (2004). Narrative, Interactivity, Play, and Games: Four naughty concepts in need of discipline. *First Person, 154*, pp. 154-164.