



**Palestine Polytechnic University**

**Deanship of Graduate Studies and Scientific Research**

**Master of Multimedia**

**Form, Movement, and Narrative in Hybrid Animation: The 2D/3D  
Interplay in Spider-Man: Into the Spider-Verse**

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*Thesis submitted in partial fulfillment of the requirements for the degree  
Master of Multimedia*

August, 2025

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### **Abstract (English)**

This research explores how hybrid animation techniques combining 2D and 3D visual approaches influence the storytelling elements and emotional impact in *Spider-Man: Into the Spider-Verse*. The research investigates how hybrid storytelling methods combine comic-book language with expressive motion and visual styles to transform traditional cinematic storytelling practices.

The qualitative research design used Erwin Panofsky's three-tier iconographic method, which was adapted through a "Post Iconographic Commentary" that integrated insights from Scott McCloud, Paul Wells, and Tom Gunning. The research analyzed eleven selected scenes through frame-by-frame examination across three analytical axes, which included form and movement, and narrative function.

The research shows that hybrid animation techniques function beyond visual effects to serve as meaningful tools for storytelling. The visual elements of halftones and RGB shifts, and collage textures represent identity fragmentation, yet asynchronous frame rates and smear frames and camera movement display emotional states while showing Miles Morales's developing self-awareness. The hybrid style in the film creates breaks in the plot to present symbolic moments of transformation and personal growth, and self-awareness.

The thesis contains five sections, which begin with the Introduction, followed by the theoretical framework, followed by methodology, then scene-based analysis with the findings, and conclude with findings discussion. The research provides a framework for analyzing hybrid aesthetics as narrative functions, which adds value to animation studies and shows how *Into the Spider-Verse* transforms digital-era cinematic storytelling.

**Keywords:** Hybrid Animation, 2D/3D Interplay, Visual Analysis, Narrative Structure

*Spider-Man: Into the Spider-Verse*, Animation Theory

## Abstract (Arabic)

تبحث هذه الرسالة في أثر تقنيات الرسوم المتحركة الهجينة، وخاصة التفاعل بين الأساليب الثنائية و ثلاثية الأبعاد، في تشكيل السرد والمعنى العاطفي في فيلم *Spider-Man: Into the Spider-Verse*. تنطلق الدراسة من سؤال رئيسي: كيف يُعيد الشكل الهجين صياغة أنماط السرد السينمائي عبر دمج قواعد القصص المصورة مع حركة الشخصيات التعبيرية واللغة البصرية المزينة؟ اعتمد البحث منهجًا نوعيًا يستند إلى نموذج إروين بانوفسكي للأيقونية ثلاثية المستويات، مع تطويره عبر "تأملات ما بعد بانوفسكي" التي تجمع رؤى ماكلويد وويلز وغانينغ. تم تحليل أحد عشر مشهدًا محوريًا باستخدام محاور: الشكل، الحركة، والوظيفة السردية.

كشفت النتائج أن الأساليب الهجينة لا تُعد مجرد تقنيات جمالية، بل أدوات سردية رمزية: فالعناصر ثنائية الأبعاد مثل *smear frames* و *RGB shifts* و *halftones* تُجسد تشظي الهوية، بينما تُظهر الحركة غير المتزامنة وإطارات التلطيح *smear frames* التحولات الشعورية وتطور الذاتية، وتؤسس العناصر الهجينة نقاط تحول سردية ومعنوية. تتكون الدراسة من خمسة فصول: الفصل الأول ويحتوي المقدمة انتقاليًا إلى الصل الثاني وهو الإطار النظري، يتبعه المنهجية، في الفصل الرابع يتم التطرق لتحليل المشاهد والنتائج، أخيرا فصل المناقشة والنتائج. وتبرز أهمية هذه الدراسة في أنها تقدم نموذجًا تحليليًا لفهم الجماليات الهجينة بوصفها آلية سردية، مما يوسع مجال دراسات الرسوم المتحركة ويؤكد أن *Into the Spider-Verse* يمثل نقلة نوعية في صياغة السرد السينمائي المعاصر.

### الكلمات المفتاحية:

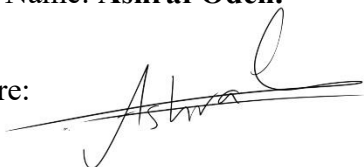
الرسوم المتحركة الهجينة، التحليل البصري، البنية السردية، نظرية الرسوم المتحركة

## DECLARATION

I declare that the Master Thesis entitled” **Form, Movement, and Narrative in Hybrid Animation: The 2D/3D Interplay in Spider-Man: Into the Spider-Verse**” is my own original work, and hereby certify that unless stated, all work contained within this thesis is my own independent research and has not been submitted for the award of any other degree at any institution, except where due acknowledgement is made in the text.

Student Name: **Ashraf Odeh.**

Signature:

A handwritten signature in black ink, appearing to read 'Ashraf Odeh', written over a horizontal line.

Date: 31/08/2025

## DEDICATION

I extend my heartfelt appreciation to my beloved family and my wife for their unwavering encouragement throughout my academic journey in Multimedia. My deepest gratitude goes to my esteemed supervisor, **Dr. Ramzi Turki**, whose guidance and support have been invaluable. I also wish to acknowledge my dear friends and colleagues whose presence and encouragement were a great source of strength during this endeavor. This work is dedicated with sincerity to every family member who stood by me and contributed to this achievement.

To all professionals and scholars in this field,

I present this modest contribution with respect and admiration.

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Lastly, I am especially grateful to all the participants who took part in my study and generously shared their experiences. Your contributions were essential to this work.

## List of Abbreviations

|       |                            |
|-------|----------------------------|
| 2D    | Two-Dimensional            |
| 3D    | Three-Dimensional          |
| CGI   | Computer-Generated Imagery |
| Mocap | Motion Capture             |
| TTL   | Through-The-Lens           |
| FPS   | Frames Per Second          |
| UV    | UV Mapping                 |
| RGB   | Red Green Blue             |
| IK    | Inverse Kinematics         |
| UX    | User Experience            |
| AI    | Artificial Intelligence    |
| VFX   | Visual Effects             |

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# CHAPTER 1: INTRODUCTION

## 1.1 Statement of Purpose

Since the beginning of human civilization, people have made attempts to visualize time and motion through pictorial representations. The Ur wall paintings from Mesopotamia show staged action sequences, and the winged bulls of Babylon received five legs to create an illusion of movement. The Egyptian murals used consecutive body positions to show both temporal progression and continuous action. The ancient civilizations of the Middle East developed visual solutions to represent motion before Greek artists made their contributions.

The development of motion representation techniques in history occurred through a series of progressive stages. The medieval period saw artists in religious and manuscript illustration continuously test sequential imagery, which led to essential developments for contemporary animation techniques. The zoetrope system during the nineteenth century organized previous motion studies into standardized mechanical methods for repeatable use. The development of animation history follows a progressive accumulation of techniques instead of a direct transition from ancient times to modern animation.

The research investigates hybrid animation techniques that combine two-dimensional (2D) and three-dimensional (3D) animation methods within a single frame or sequence. The animation technique of hybrid animation unites flat graphic components, including lines and halftones and cel-shading with three-dimensional volumetric models. The visual combination of different elements in hybrid animation systems directly affects both the storytelling elements and the visual movement patterns of animation.

The research investigates how hybrid animation techniques used as an independent variable affect the dependent variables which include form and movement and narrative. The research investigates how hybrid animation techniques create new storytelling methods through its visual combinations while producing meaningful effects on contemporary animation narratives.

## 1.2 Research Problem

The development of hybrid animation as a new creative and analytical field emerged from visual motion experiments that have existed for many years. The film *Spider-Man: Into the Spider-Verse* showcases its innovative style by uniting 2D and 3D elements during transformative sequences and fast-paced action scenes.

The primary research question examines how hybrid animation techniques influence the creation of meaning in animated films through their impact on visual structure, character movement, and storytelling elements.

## 1.3 Research Objectives

The primary objective of this study is:

To explain how hybrid 2D/3D animation in *Spider-Man: Into the Spider-Verse* constructs meaning across visual form, movement, and narrative during transformation sequences.

The secondary aims are:

- Show the visual grammar by which 2-D layers (panels, halftones, cel-shading) integrate with 3-D geometry to shape composition and color moods.
- Analyze how hybrid techniques modulate frame-rate, squash-and-stretch and camera path to express character emotion within the selected clusters.
- Evaluate how that same hybrid devices recalibrate pacing, tension, and character agency at key plot beats.

## 1.4 Significance of the Study:

The research fills an essential gap in animation studies because it shows hybrid 2D/3D visual techniques create more than technical advancements since they function as storytelling elements that build narrative meaning and emotional impact, and symbolic value. The research develops a methodological framework based on Panofsky's iconographic model to analyze moving images, enabling art-historical analysis to meet the requirements of animation theory for studying dynamic visual media. The research demonstrates that *Spider-Man: Into the*

Spider-Verse represents a pivotal point in modern animation because its mixed artistic style creates an essential connection between visual storytelling and character evolution and thematic content and audience participation. The research develops new analytical tools for animation and visual culture scholars while establishing cinematic storytelling as a hybrid art form that unites comic book grammar with digital animation movement.

On the practical side, the research contributes to the formulation of a practical guideline that animators and industry practitioners can rely on when integrating hybrid elements from the early stages of story writing, so that they become an integral part of the narrative structure and not just a formal addition. This opens the door to production methods that are more conscious of the integration between technology, aesthetics, and narrative.

## **1.5 Research Outline**

This thesis is organized into several key sections to achieve the stated aims:

- Chapter 1: introduces the research context, defines key terms, states the research problem, and outlines aims and methodology.
- Chapter 2: reviews the relevant literature on form, movement, and narrative function in animation.
- Chapter 3: details the qualitative methodology, including the case selection process and visual analysis framework.
- Chapter 4: presents findings from the frame-by-frame analysis of selected scenes.
- Chapter 5: discusses conclusions and offers directions for future research on hybrid animation practices.

## **1.6 Research Methodology**

The research conducts a qualitative case study analysis of eleven crucial transformation and action sequences from Spider-Man: Into the Spider-Verse through thorough visual assessment. The scenes were chosen out of 113 scenes in total. The research conducts an inductive interpretation of visual data through repeated scene-by-scene breakdowns instead of pursuing generalization.

The film's beat sheet guided the selection of scenes to find moments where narrative tension reached its peak or characters experienced significant transformation. The researchers conducted digital frame-by-frame playback to analyze each scene through the combination of still images and brief time intervals for detailed examination. The visual method applies Panofsky's iconographic model which starts with pre-iconographic form description before moving to iconographic motif interpretation and ends with iconological symbolic meaning analysis. The analysis expands through the addition of Scott McCloud's comic grammar principles and Paul Wells' expressive metamorphosis theory and Tom Gunning's cinema of attractions framework.

The study does not have audience data, yet its interpretive findings show how the hybrid form enables affective engagement and symbolic transformation and visual rhythm. The research adopts a qualitative method while using publicly accessible visual materials to set up a particular and defensible understanding of hybrid animation's meaning-making potential.

## **CHAPTER 2: BACKGROUND AND LITERATURE REVIEW**

### **2.1 BACKGROUND**

#### **2.1.1 INTRODUCTION**

Although 3D animation movies introduced a new, well-developed medium of animation, the use of 2D assets in those movies has remained a common practice to this day, with these assets often used to create a sense of depth and dimension in animated scenes (O’Hailey, 2015). These assets can be made with several different methods; they can be drawn by hand on paper and depicted with digital art. Or they can be employed to establish various environments and settings (Kivistö, 2019). As seen in this research, there is scarce literature on hybrid animation’s ability to push the boundaries of form, movement, and narrative in the production of movies that fall under the hybrid animation category. Another issue of concern relates to the ability to organize all the required processes associated with the creation of a final hybrid animation movie, known as the “pipeline.” This involves overseeing the general running of the film, including aspects related to form, movement, and narrative. These elements might be affected using 2D assets, but the qualitative and concrete way they affect hybrid animation moviemaking is still unclear.

Asraf & Idrus, (2020) explain that, over the recent past, more movies have incorporated both 2D and 3D animations in their making to enhance the quality of the final product and captivate audiences. In light of this, it has become significant for researchers to focus on several aspects of the production of these movies as well as the involvement of 2D assets in this process. Thus, this work is intended to contribute to those conceptual discussions and, for animation and multimedia students, and production teams interested in using these assets in their projects, offering recommendations for how and when they should practically employ them to achieve the best result. The following section will provide the needed information to familiarize the reader with the significant aspects and terminologies discussed in the literature review chapter.

## 2.1.2 TERMINOLOGY

### 2.1.2.1 ANIMATION STYLE (Form):

There are many types of animation in the media nowadays. Each type has its own style or a blend of two or more styles. According to the study by Chiu and Chang (2018), Animation styles can be divided into two main categories: visual style and Visual technique.

**Visual Style:** In the realm of visual arts, the term visual style is defined as: “Distinctive manner which permits the grouping of works into related categories.”). In other words, it refers to the differences in picture representation, such as abstraction and realism. Many factors can affect the visual style of the animation, including age differences, cultural and personal colors, and cultural and regional differences (Chiu & Chang, 2018). According to an earlier study, the author stresses that while animation styles constantly change, some people might use older styles to reference source material and achieve a retro style.

**Visual Techniques:** This term, also called animation forms, includes 4 major forms: Traditional animation, 2D animation, 3D animation, and stop-motion animation (Chiu & Chang, 2018).

2D Animation is a term that includes two main types according to the use of computers: traditional animation and Computer animation.

Traditional Animation is a term that refers to the process that usually contains, in its basic form, a light-box and papers. The light-box allows the animator to see the previous drawing, thus speeding up the animation process. This way of producing animation is also called paper animation. Other names of the same technique include hand-drawn animation, cel animation, and classic animation (Cavalier, 2011). Furthermore, three types of traditional animation, namely, full animation, limited animation and rotoscoping, each has its characteristics; full animation is time-consuming and requires a realistic and ultramodern performance. Limited animation, on the other hand, is more efficient since it leans towards emphasizing key actions with more straightforward picture performance. Lastly, rotoscoping is a technique where live-action footage of the required movement is prepared, then it is traced by cell or paper, where the target is a smooth movement with the fastest route (Cavalier, 2011). This method was dropped in the year 1990 and was replaced by computer-generated images (CGI) (Cavalier, 2011). Other names for the same technique include hand-drawn animation, cel animation, and classic animation.

## Computer Animation:

The roots of 2D animation can be traced back to the late 19th century with early experiments in motion picture technology. Pioneers like Émile Reynaud and William George Horner laid the groundwork for the development of animation through the invention of Zoetrope and Praxinoscope Figure (Frouzaanfar, 2024). However, Walt Disney and his studio truly revolutionized the medium, transforming it into a beloved form of entertainment. The 1920s and 1930s marked the golden age of 2D animation, with studios like Disney and Warner Bros producing iconic characters and groundbreaking films. This era saw the refinement of techniques like cel animation, and hand-drawn animation, and the development of distinctive animation styles such as the Disney style like *Steamboat Willie* (1928) and Warner Bros style such as *Looney Tunes* in 1930 (Frouzaanfar, 2024).



Figure 2.1 Image of Zoetrope and Praxinoscope

While the development of computer-generated imagery (CGI) challenged the dominance of 2D animation in the latter part of the 20th century, the art form has endured. Its unique aesthetic, known for its expressive hand-drawn charm, fluid movement, and timeless appeal, continues to captivate audiences (Rahman, 2023). Despite the rise of 3D animation, 2D is still a popular and versatile medium. Its lower production costs and ability to evoke a wide range of emotions through its nostalgic charm and artistic versatility make it an attractive and practical choice for many filmmakers and animators. Moreover, the resurgence of independent animation and the

growing popularity of Anime have contributed to the sustained relevance of 2D animation (Rahman, 2023).

### **3D Animation:**

3D animation is a technique that simulates a three-dimensional world using computer software to add depth to the traditional two-dimensional form. This evolution has developed from basic 2D images to create complex 3D renderings that simulate real-world physics (Huang, 2024). The evolution of 3D animation is due to significant advancements in computer graphics, which eventually paved the way for the emergence and growth of 3D animation as a prominent visual medium (Hurst, 1988).

Unlike its 2D counterpart, 3D animation involves the manipulation of virtual objects in a digital space. The origins of 3D animation can be linked to the first stages of computer graphics advancement in the mid-20th century. Early pioneers experimented with creating simple geometric shapes and animating them. However, it was only in the late 1970s and early 1980s that major progress occurred, resulting in the creation of more advanced 3D software (Lin, 2022). The 1990s marked a turning point for 3D animation, with the release of groundbreaking films like “Toy Story” (1995) Figure . This film highlighted the potential of 3D animation to create realistic and engaging characters and worlds. The success of “Toy Story” spurred rapid growth and innovation in the field, leading to its widespread adoption in film, television, video games, and advertising, shaping the landscape of entertainment across multiple platforms (Lin, 2022).



Figure 2.2 Image of the first 3d completed movie “Toy Story”

## Stop Motion Animation:

Stop motion animation is a technique that brings inanimate objects to life by capturing a series of still images, each with slightly various positions of the objects. When these images are played in rapid succession, it creates the illusion of movement (Farrokhnia et al., 2020). According to Puspita and Raida (2021), stop motion animation is a captivating technique that demands patience but results in unique movements, creating an engaging viewing experience.

Mao compares 3D animation and stop-motion animation, emphasizing the importance of human involvement in stop-motion techniques. The author investigates the possibilities of stop-motion animation techniques, examining the historical and technical elements commonly used by stop-motion animators (Mao, 2022). While early forms of stop motion can be traced back to the 19th century, it was in the early 20th century that the technique truly began to take shape (Maselli, 2018). Pioneers like Władysław Starewicz and Willis O'Brien were instrumental in developing and refining stop-motion animation. Starewicz experimented with animating dead insects Figure 2.2, O'Brien's work on films like "King Kong", pushed the boundaries of the technique.



Figure 2.1: O'Brien's film " King Kong", 1933.



Figure 2.2 : Starewicz first Stop-motion film, 1912,

The development of animation styles has undergone significant changes, blurring the conventional boundaries between cartoons and movies. The emergence of digital technologies has blurred traditional distinctions, leading to a reconsideration of animation's role in the history of film (Pierson, 2012). The 12 Principles of Animation, established at Disney Studios to guide animators in creating lifelike and engaging character performances, are widely regarded as the standard for quality animation (Bishko, 2007). However, applying these

principles without considering their effects on character movements, expressions, and interactions can restrict the authenticity and believability of character performances. The evolution of cartoon style from Disney to Hanna Barbera<sup>1</sup>, influenced by modern commercial practices, has changed how animators depict and convey movement in the genre (Bishko, 2007).

### **HYBRID ANIMATION:**

Hybrid animation, a technique that appeared by combining 2D and 3D animation styles, has recently been widely recognized for its innovative nature and unique visual language. It uses the strengths of both traditional 2D and modern 3D techniques to produce unique and stunning animations. For instance, DreamWorks' feature film "Spirit" utilizes both 2D and 3D production techniques within the same shot, blending traditional 2D animation with 3D sets and camera moves to overcome the challenges of perspective and lighting changes (Cooper, 2002; O'Hailey, 2015).

Furthermore, the success of hybrid animation can be seen in early DreamWorks and Disney studios films like "Beauty and the Beast" Figure 2.3, where 3D CGI environment as a background and 2d hand-drawn characters were used to create a seamless 2D/3D production pipeline, demonstrating the potential for cost-effective and visually stunning results (Madej & Lee, 2021). According to Kandinsky's abstract style theory<sup>2</sup>, which influences contemporary hybrid animation to elicit spiritual and emotional responses from the audience, the technique allows for the creation of abstract forms and emotionally charged narratives (Himdung, 2023).

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<sup>1</sup> Hanna-Barbera was a prominent American animation studio, founded in 1957 by William Hanna and Joseph Barbera. They are best known for creating iconic cartoon series like The Flintstones, Yogi Bear, The Jetsons, and Scooby-Doo

<sup>2</sup> Wassily Kandinsky, a pioneer and main influence behind abstract art, played a significant role in the early 20th century. Abstract art aims to eliminate the effect of reality on the subject, focusing on forms, colours, and shapes to create an impact and outcome (Nassar, 2021).



Figure 2.3: Beauty and the Beast, ballroom scene, Disney,1991.

### **Comic Books as a form of art**

Comic books represent a distinct artistic form that unites visual design elements with spatial composition techniques and symbolic abstraction methods. Comics achieve their aesthetic meaning through the strategic placement of drawn images together with lettering and empty spaces. According to Kukkonen (2013), comics build their pages through a structured system of panels and gutters and stylized marks which require active visual interpretation (p. 174). The artistic hybridity of comics enables them to function at both representational and symbolic levels. The expressive voice of the work emerges from drawing style, together with line choices and color palette selection, and halftone printing texture. Comics share similarities with painting and printmaking because they emphasize the physical qualities of drawing marks, which transform into essential elements of mood and rhythm, and form. Comics have developed their visual language through pop art and underground comix, and manga traditions, which established them as an artistic medium that combines formal experimentation with narrative expression.

## **2.2 LITERATURE REVIEW:**

### **2.2.1 Manipulating Form with Hybrid Animation.**

#### **2.2.1.1 Development of animation visual styles and overall aesthetics.**

We can trace the origins of animation and the animation styles back to the paintings made by prehistoric people on the walls of their caves, which represent objects and figures from their daily lives. Around the year 180 AD, Ting Huan, a Chinese inventor, created a device that is considered an early prototype of the zoetrope; however, experiments done by Peter Roget on the human eye's persistence of vision in 1824 laid the foundations for most forms of media we see today, laying the brick stone for cinema, television, and animation. Five significant eras further divide the history of animation, ending in the modern digital era (Cavalier, 2011). Walt Disney and Pixar, as pioneers, brought a revolution into the industry. Thus, the animation form reached new artistic and technical heights (Malarvizhi et al., 2024).

The 2000s proved CGI as the dominant force, but the 2010s brought back artistic flair to CGI while promoting various visual approaches. The 2018 release of *Spider-Man: Into the Spider-Verse* proved itself as a pivotal moment in animation history. The film's innovative visual approach demonstrated that CGI animation could create fresh visual effects that departed from the conventional "Pixar realism" style (Martínez, 2020). The animation techniques in *Spider-Verse* "rewrote the rules of animation" to achieve the most comic book-like effect in animated film history. The production team combined 3D computer animation with hand-drawn 2D details and comic-style graphics to create their visual style. The animation included halftone dots together with hatch lines and speech bubbles and onomatopoeia, and bold outlines, which made the comic book page come alive. The animation team used twos (12 fps) for character animation to produce a stylized motion jitter, which emphasized the impact between poses. The producers spent multiple years developing methods to merge computer-generated imagery with hand-drawn animation and comic book textures, which resulted in a painted effect for each frame. The unique visual approach, which no one had seen before, received widespread approval from both viewers and animation professionals. The film proved that CGI could exist independently from Pixar photorealism and Disney's fairy-tale aesthetics by showing its potential for unrestricted graphic innovation (Long, 2018).

### 2.2.1.1.1 Visual Style Role in Referencing Source Material:

The visual style of referencing source material, particularly in the context of comic books as seen in the animated movie *Spider-Man: Into the Spider-Verse*, is an element that significantly affects the interaction with the audience and the explanatory function. Comic books, primarily a textual mix of illustrations and words, provide a multilayered background for narration, unlike any other media type. Using elements of comics as samples of referencing source material contributes to a more complex approach, which in turn helps to impact the audience's emotions (Dimian et al., 2019).

The integration of graphic design elements and comics in animated films has led to a more fluid dialogue between the two fields. *Spider-Man: Into the Spider-Verse* merges style and form, blending illustration and comics to create a solid and unpredictable narrative. The film uses kinetic lines, graphics, and animation to emphasize expressions like surprise and the character's spider sense. Comic dialogue boxes, balloons, and onomatopoeias<sup>3</sup> link the nature of comics and film. Using error and glitch art effects conveys the characters' reality-breaking and deforming nature. The film's climax showcases a graphic elements explosion, showing diverse styles and techniques, breaking down dimensional and logical barriers in a dazzling final catharsis (Azorín Puche, 2019).

The Marvel Cinematic Universe is a comic adaptation that uses characters, costumes, and situations from comic books. *Spider-Man: Into the Spider-Verse* also has comic book elements, such as comic-like captions, speech balloons, and CMYK process halftone dots. The film industry often perceives comics as "storyboards ready for shooting," yet this perspective does not consider the unique elements of the comic adequately. Comics are self-contained narratives, making them easier to adapt to film. Graphic novels are easier than works to adapt to film as they come with an existing visual style, making it easier for film creators to tell the story visually (Callus, 2021).

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<sup>3</sup> Onomatopoeia is "the formation of a word from a sound associated with the thing or action being named, the formation of words imitative of sounds. Occasionally: the fact or quality of being onomatopoeic." (*Onomatopoeia, n. Meanings, Etymology and More* | *Oxford English Dictionary*, n.d.)



Figure 2.4 comic-like captions, Spider-Man: Into the Spider-verse 2018.

The film's narrative, which brings together multiple universes with distinct animation styles, challenges traditional concepts of realism in animation. By emphasizing fidelity to its comic book source material, the film adopts a transmedia approach to realism that enhances its narrative impact (Barbour, 2021). This groundbreaking visual style, coupled with its multi-dimensional storyline, contributes to the film's critical acclaim and success in bringing a fresh perspective to the Spider-Man franchise (Dimian et al., 2019).

After reviewing the literature, the researcher concludes that referencing source material through visual style, particularly in narratives inspired by comic books like Spider-Man, significantly influences sequencing, audience interaction, and the communication of deeper meaning. Using comic books' integration of pictures and text, the creators can then design stories that would appeal to the target groups and show emotional and even rational responses. Combining visual components with text creates a beautiful and visually appealing product and deepens the viewer's engagement and perspective on the transmitted information.

#### **2.2.1.1.2 Comic Book Elements in Animation**

To discuss the emergence of comic book elements in animation production, we must first show the elements used in comic book production. Panels, the primary part of a comic book page, are illustrations encircled by white space. They can appear in one or more instances on a single page, and their purpose is to propel the narrative forward by displaying an action or a speech bubble (McCloud, 1993). On the other hand, a speech bubble serves as a space for the comic character's spoken words, with its tail always pointing towards the speaker. We refer to the space between the panels as the Gutter and the row of panels as the Tier. An illustration that

spans more than one page of the comic book is known as a spread, while a full-page illustration that takes up the first page is known as a splash. Finally, there is the caption, a space used by the narrator and usually in the form of a box to describe further what is happening (García, 2012).

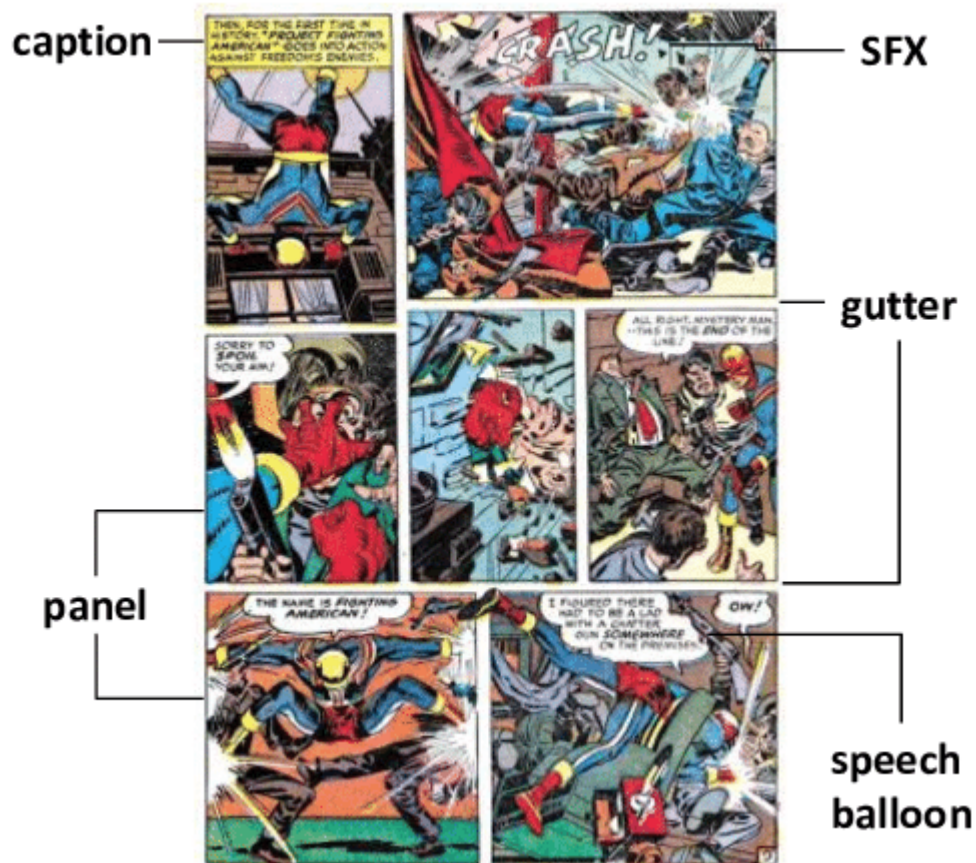


Figure 2.5 elements of the comic page

Comic books and animation share a common field of comparison, with the frame or cel in animation and the panel in comic books. Both describe a spatial field and are static structures that combine to simulate movement. In comic books, panels are visible, separated by gutters, and drawn together by the overall page structure. The reader fills in information gaps in the space between panels, creating a sense of continuity. The term “closure” describes the synthesis of panels with movement and narrative (Atkinson, 2009; McCloud, 1993). One must understand how these two media work closely together to incorporate features such as the paneling system used in comic books and speech bubbles while animating.

Graphic novels, comics, and cartoons use image symbols to maintain a coherent narrative, advance the story, and preserve the author’s concepts (Simonson & Timmermans, 2021). This

technique can transform the original work and even add the essence of motion and fluidity to the created animation. It is necessary to state that while the representations of time and space in comic panels are static and timeless, they can nevertheless express time as a key attribute of their representation and provide the audience with perceptive experiences peculiar to comics (Ndalianis, 2009). Animating these static images adds another dimension of temporal progression, elevating the audience's attention and interest to a new level.

It is possible to identify studies dealing with the technological context of comics, including the use of technologies in creating animation, as one of the developments in the area of comics research for computer science, where animation can help to improve visualization (Augereau et al., 2018). The advantage of animating comic books lies in how animators can convey narratives effectively, engage viewers' attention, and bridge the gap between static comic book images and dynamic animated storytelling. Understanding where viewer attention lies in comic panels, as shown in studies comparing Japanese comics (Manga<sup>4</sup>). American comics can guide animators in staging scenes to direct and enhance viewer engagement. This comparison helps animators understand cultural nuances and preferences, leading to a more immersive and compelling narrative (Cohn et al., 2012).

Comic book content adaptation is not only a matter of transferring the picture; it is also an understanding of taxonomy to signify the meaning in the other medium (Cantó, 2017). Semiotics clarifies the transformation of images and text from comic books into animated sequences that faithfully represent the original work and its intended meaning. Furthermore, 'literal closure' refers to how comic readers mentally connect panels to infer what occurs between them. This process is important in comics because transitions derive from time, place, and/or action breaks, forcing the reader to figure out what happens in between. The gaps between panels serve as connection spaces, allowing readers to continue the closure of the separated visions and discourses. As a result, readers can transcend the literal interpretation of the text and understand the connections among various aspects of a narrative. More generally, analyzing the concept of closure in comic book text is significant for understanding readers' engagement with visual text and coherence building from the assembly of scenes. This is because, through closure, readers actively take part in creating meaning, resulting in a gratifying

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<sup>4</sup> Manga is a style of Japanese comic books and graphic novels, typically aimed at adults as well as children.

reading experience. Similarly, animations can employ this strategy to maintain continuity between scenes and ensure a seamless transition from one to the next (Iyyer et al., 2017).

Scholars have acknowledged comic books as useful instructional tools for captivating pupils and communicating intricate ideas in a comprehensible manner (Hosler & Boomer, 2011). By incorporating comic book components such as panel grids and speech bubbles into educational animations, educators can augment the learning experience by merging visual and audio inputs to strengthen fundamental concepts. This teaching method will accommodate a wide range of learning preferences and support creativity and critical thinking abilities in pupils. Adapting comic book narratives into animation offers a unique chance to examine the convergence of visual storytelling genres and broaden the audience for original content. Through deliberate integration of comic panel grids, speech bubbles, and visual semiotics, animators can forge a direct and captivating connection to the original comic. For example, by keeping the use of speech bubbles and panel grids, animators keep the essence of the original comic while infusing dynamic movement and energy into the animation. By using the distinctive narrative structures and visual vocabulary of comics in the domain of animation, creators can create captivating and immersive stories that deeply connect with audiences across many platforms and genres.

#### **2.2.1.1.3 Comic Grammar and Sequential Logic in Visual Storytelling**

The comic grammar theory developed by Scott McCloud in 1993 explains how visual sequencing affects the way time progresses and emotions develop, and pacing unfolds. The static images create temporal flow and psychological resonance through the concepts of closure<sup>5</sup>, moment-to-moment transitions, and Emanata according to McCloud (1993). The author shows that comic panels function as more than action containers because they serve as instruments to control rhythm and audience inference, and engagement. The framework directly supports hybrid animation, which combines comic elements with cinematic form. The film *Spider-Verse* achieves its visual effects through floating panels and halftone textures, and graphic overlays, which follow comic page principles to show inner thoughts and emotional shifts, and symbolic transformations. Hybrid films that use McCloud's visual syntax can combine comic readability with emotional directness while preserving the spatial depth and motion of 3D animation.

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<sup>5</sup> Closure explains what happens in between the panels.

#### 2.2.1.1.4 Hybrid Animation and the Comic Book Aesthetic

Comic aesthetics and animation techniques have evolved, with films like *The LEGO Movie*, Figure 2.6 and *The Peanuts Movie*, Figure 2.7 integrating traditional style components. Pixar debuted a distinctive animated film in 2001, combining computer animation methods with hand-drawn embellishments and visual elements inspired by comic books. *Into the Spider-Verse*, a leap from Pixar's usual style, incorporates elements from both comic books and video games (Summers, 2019). Its goal is to avoid the 'uncanny valley' effect by adjusting the level of accuracy in its film adaptations. The film's distinctive visual aesthetic draws inspiration from the 'Silver Age' comics of the 1960s and employs artistic methods like Ben-Day dots and offset colors to provide a striking and theatrical look. This style of hypermediacy promotes the idea that spectators find pleasure in mediation, highlighting the narrative potential of innovative imagery. Unlike Pixar's methods, *Into the Spider-Verse* posits that the need to adapt drives technology, enhancing the adaptation process. This challenges the animation business, urging them to include current texts and aesthetics (Summers, 2019).



Figure 2.6: Poster for *Lego Movie*, 2014.



Figure 2.7: Poster for *The Peanuts Movie*, 2015

Animating comic books is beneficial since it puts into practice the ability to blend realistic imagery with elements such as superpowers, a common aspect of comic books in movies, with easier visualization (Demian & Fruchter, 2009). By their very nature, comics and animations differ due to their distinct methods of integrating images and texts, materials, and representation techniques. Comics are static and distinct, unlike animations that create the illusion of movement, leading to a distinct engagement with realism compared to movies. People appreciate both artworks for using diverse materials and techniques in their creations. Therefore, clarifying these media's weak and strong links is important for a transmedia approach.

Demian and Fruchter (2008) suggest the frame-by-frame technique as an effective way to translate the visual style of comic books into films, known as the comic book metaphor. In digital comic books, animation controls the viewers' attention and imitates the sequence of sequential art, thus improving the readers' experience. It produces lively effects that closely resemble the art of comic books, thereby increasing the diversity of options available. This aspect conveys action sequences, emotions, and character growth, captured in conventional comics through shifts from one panel to the next. Overall, animation improves the visualization and narration of the story while still adhering to sequential art principles (Tomaselli, 2015).

Animation in visual storytelling is a powerful instrument that helps to communicate and persuade the targeted audience through nonverbal communication methods (Sabri & Adiprabowo, 2022). Through animation, creators can bring stories to life, evoke emotions, and resonate with the audience in a manner that aligns with the essence of comic books. In addition, animations can help to better organize data and present it to viewers, especially scientific data and changes in the networks over time (Bach et al., 2016).

The incorporation of animated sequences in digital comics, including motion comics, signals a future convergence between comics and movies, paving the way for diverse interactive and new media experiences (Thon & Wilde, 2016). Such innovations are narrowing the gap between the conventional format of comic books and cartoons and paving the way for the development of new styles that consider the strengths of both the most popular types of comics. Furthermore, the expansion of the role of interactive components in comics, as seen in "game comics," supports the idea of the ongoing development of stories and their relationship with animated designs and holistic technologies (Thon & Wilde, 2016).

Specifically, in the realm of visual narration, animation fortifies the story by presenting the audience with captivating visuals. This visual enhancement not only captures attention but also enhances the emotional connection with the narrative (Y. Li et al., 2003). Narrative-driven features and game-based animations effectively clarify quantitative data and scientific concepts. These techniques make the data real, help build awareness, and make complicated information easy to understand and comprehend, so that there is entertainment and information for the viewers during the complete storytelling period. This approach emphasizes the importance of using animation to efficiently and appealingly present messages and events to viewers through kinetic concepts (Bakhtiary & Behzadi, 2023).

Furthermore, the creation of animations that focus on the non-verbal communication element provided an opportunity to develop works with different and more thrilling story plots in animation (Sabri & Adiprabowo, 2022). Thus, concentrating on the nonverbal component, animated films using visual narration can be more universal and inspiring than films shot in one or another language and represent a concrete plot to a comprehensible story. Such a shift to an inclination towards graphic visualization symbolizes the flexibility inherent in the animation genre to communicate narratives in a creative and uninhibited style (Sabri & Adiprabowo, 2022).

Within the realm of digital narratives, animation has proven highly effective as an instructional tool, particularly in educational settings (Min, 2022). Thus, digital storytelling, in conjunction with animation, can be considered an effective approach towards increased student involvement and learning achievements due to the strong appeal that such an approach holds to the students. This way, animations can effectively address multiple forms of learners' preferences, catering to visual, auditory, and kinesthetic learners. Using animations, educators can create engaging and interactive educational interventions that accommodate diverse learning styles (Min, 2022).

Thus, the researcher concludes that hybrid animation, when used to translate comic books into film, serves as a visually engaging concept that aligns well with the narrative techniques used in this genre of art. For instance, the use of frame-by-frame techniques in hybrid animation mirrors the sequential storytelling approach commonly found in comic books, enhancing the visual narrative experience for the audience. The use of animation in storytelling has significant benefits for visual communication. Animation not only conveys emotions, ideas, and information in an engaging and easily comprehensible manner but also enhances the retention of complex concepts through visual storytelling, making it an effective tool for communication

across various audiences and contexts. In this context, the integration of animated and comic book styles helps the storytellers simulate the cinematic representations that are traditionally associated with the comics' narratives, strengthening their postmodern sub-genre and expanding the possibilities of new media narratives.

### **2.2.1.2 Creating a Visually Engaging Experience:**

#### **2.2.1.2.1 Visual Style and Audience Immersion and Engagement.**

The aesthetic appearances in animation are another important aspect that affects viewers' engagement. Factors such as color, textures, rendering techniques, and the physical appearance of the piece of animation (overall aesthetics) all play a role in visual styles. From this perspective, researchers have explored the concept of low-poly visual style in 3D computer-generated animation. Aditya (2018) highlights that this approach can enhance production efficiency while delivering aesthetically pleasing content to the audience. Thus, avoiding photorealistic models, animators can build other distinctive environments to further deepen the audience's experience by creating an immersive narrative experience.

Furthermore, Aditya (2018) points out that the combination of low poly material and staging tech in animation not only speeds up the animation production process but also enhances the visual resources of the animation, thereby capturing the audience's attention. This combination of Kreidler's Taxonomy (which is part of a broader theory known as the cognitive theory, which mainly categorizes different types of meaning assigned by people to different objects) demonstrates that the use of style is essential in animation because it not only makes animations for narratives as impressive as visually pleasing but also because it can assist in making the tale engaging for viewers.

Koning et al. (2009) have proven that using basic visual signals for attention cueing in instructional animations positively affects students' learning outcomes. Thus, by purposely incorporating a focalized narrative such as an animated executive summary, animators can use simple visual cues like arrows, colorization, and dynamic contrasts. This keeps people's attention throughout the entire learning process. Moreover, as discussed by Sun (2022) There is the inclusion of animation special effects in films, which not only adds aesthetic appeal to the movie but also strengthens the audience's imaginative involvement. The enhancement of artistic expression results in a captivating visual encounter.

Furthermore, Garver et al. (2018) describe the role of visual aesthetics in manipulating the users' experience across a spectrum of different contexts, such as the game environment, where the design's tone intensely influences the player's feelings and interaction with the game world. Thus, integrating formal aesthetics with the playfulness of the desired target market will enable the audience's play tendency to be engaged, resulting in a meaningful experience.

Finally, the researcher assumes that it can be said that the role of visual style within animation is twofold and significant in its impact on audience isolation and activation. As a result, animators can tell engaging stories using low-poly graphics, scene arrangement, comic book elements, callouts for attention, and effects. The incorporation of various aspects of visuals and designs allows the animators to create a long-lasting stimulus for the audience and an improved form of engagement.

#### **2.2.1.2.2 Perspective Shifts and Layered Backgrounds for Visual Engagement**

In interactive experiences, dynamic visual elements such as perspective shifts and layered backgrounds can suggestively enhance the audience's engagement and learning based on filmmaking theories, El-Nasr (2004) proposes an architecture that dynamically adjusts camera, lighting, and character movements to increase audience engagement, incorporating techniques or animation principles such as anticipation, arcs, exaggeration, and follow-through. According to the same study by El-Naser (2004), these techniques would make an immersive experience for the audience. On the other hand, Barnes (2016) finds that complex animation in motion graphics, including dynamic virtual cameras and depth cues, can benefit viewers' understanding. In his study, he discovered that complex animation enhances information processing and efficiency among the audience and significantly improves comprehension and task performance. Thus, creating a visually engaging experience.

Objects such as perspective changes and animations in layered backgrounds are essential to get an aesthetically pleasing look. According to some studies, color contrast and the intensity of moving visual stimuli influence viewers' interest. In contrast, their impression is influenced by the scenario and style matching with the content, as noted by Xiang (2023). We can conclude that integrating animation into dynamic visualization techniques may significantly affect the user's mental burden when interpreting process models. The literature suggests that animation can aid in comprehending process models, thereby reducing cognitive load through principles and mechanisms such as the attention guide, which utilizes perceptual cues to guide focus

(Aysolmaz & Reijers, 2021). The Cel animation system systematically arranges the separated foreground and background elements, allowing animators to loop various walk cycles over different backgrounds (Fong, 2023). This technique enhances the animation process's efficiency and provides additional layers to enhance the presented narrative. Furthermore, the layering system in anime allows each depiction style to occur simultaneously, resulting in the stacking up of depths, which helps create the environment's richness (Nakagawa, 2013).

Understanding the relationship between space motion and texture performance is critical for visually appealing animation scenes. By studying creative techniques for animation scenes and delving into the layer concept, researchers have provided valuable insights into how to combine theory with practice to guide the creation of captivating animated environments (Yuan, 2018). Layers in animation scenes are critical concepts that help define spatial relationships, add depth, provide an element of dimension, and structure the scene. Thus, applying layers enables animators to reveal depth and dimension in animations, making the animations more pleasing to the eyes and a joy to watch for the audience. This integration of theory and practical application ensures that animation scenes are not only visually striking but also conceptually sound.

The researcher found that the analysis of literature sources concerning dynamic perspective shifts and layered animation backgrounds specifies the relations between graphics displayed and audience interest. By including dynamic elements such as a dynamic point of view, layered backgrounds, and innovative animation solutions, you can create compelling and engaging work that enhances the narrative experience in films. The constructive interaction of art and technology and kinetic and active imagery opens possibilities for producing engaging and revived aesthetic storytelling.

#### **2.2.1.2.3 Using Style Contrasts to Shape Emotion in Hybrid Films**

The use of both 2D and 3D styles when producing animated films (hybrid animation) presents specific possibilities for improving the aesthetic appeal of the picture and the degree of evoking the audience's emotions. This approach enables animators to incorporate the strength of both the media and produce effective pieces of art with a balance between artistry and efficiency. Therefore, if a director integrates 2D and 3D styles, he focuses on some moments, stressing them or important emotional experiences and using 2D or 3D techniques depending on the scene (O'Hailey, 2015). It also allows for developing genres for works created with unique style

depictions. This enhances the audience experience (Rippingale et al., 2019). This approach allows animators to use the possibilities and creativity of each technique while overcoming the limitations of others.

Consequently, the unconscious realm presents a distinct possibility for visual style appreciation through the kinetic approach in digital animation. This technique of alternating focus between the two styles is based on how the visual system guides our attention toward movement. The basic instinct that draws attention to visual movement can help investigate the relationships between diverse styles. By depicting style options as two distinct adjoining images, the motion of the model can independently direct attention to where the shapes of the two styles begin to diverge. By integrating different animation styles, animators can effectively convey a wide range of emotions and enhance storytelling. Attention regulation and monitoring are crucial aspects of cognitive processes (Wisetchat & Stevens, 2018).

The manipulation of attention through styles refers to switching between styles to highlight the stylistic aspects of 3D animation. The manipulation uses the motion parallax feature of the human visual processing system (Wisetchat & Stevens, 2018). The same study by Wisetchat and Stevens (2018) suggests that blending animation to smoothly transition between different animation styles is one way to contrast styles. This technique allows for a direct correlation between the dialogue and the character's facial expressions, enhancing the audience's understanding of the emotional context. On the other hand, animation artistic styles significantly affect a story by evoking and amplifying emotions, enhancing the narrative, using symbols and metaphors, and underlining main themes.

Background and character color saturation, and most importantly, the light they emit, can make something look cheerful or dark, and character design can express the show's themes without words through animations (Chiu & Chang, 2018). Everyone uses visuals in their videos, such as facial expressions and the speed at which an animation moves, to tell a story, distinguish one layer of the storyline from another, and create motifs. They also help with issues related to symbolism and/or metaphorical devices in the story's development, serving to make a point (Chiu & Chang, 2018).

Directors strategically employ various frame rates in the animated film "Spiderman: Spiderman: Into the Spider-Verse" to highlight specific scenes and emotional moments. In this way, the directors have succeeded in dramatically conveying their mood with the help of

different frame rates intentionally introduced into the picture (Teh et al., 2023). Note that the intentional use of different frame rates in this film creates an effect of time management in sequences that depict tension, actions, or deeper emotions. Moreover, the integration of hybrid animation techniques in “Spiderman: Into the Spider-Verse” involves blending traditional hand-drawn animation with computer-generated imagery to achieve a unique visual aesthetic that enhances the storytelling (Kivistö, 2019). This blending of animation styles not only enhances visual interest but also reinforces the thematic elements of the narrative.

### **2.2.1.3 Pushing the Boundaries of Animation Aesthetics:**

#### **2.2.1.3.1 Hybrid animation’s groundbreaking aesthetics.**

Hybrid animation can produce visually revolutionary aesthetics. Animators find it easier to integrate various aspects of media, all while following the usual financial constraints (O’Hailey, 2015). In its most general sense, hybrid animation is a form of multimedia that has the potential to develop aesthetics distinct from the miniature feel of tactile modelling while keeping the smoothness of computer-generated animation. Many technologies, including motion-controlled cameras, 3D printing, and augmented reality, integrate the creative aspects of hybrid animation (Rippingale et al., 2019). Despite its advantages, hybrid animation presents challenges for professionals in the field and university students. To better apprehend animation in the animators’ work, and especially in order to imagine the future of the animated and animated object, it is useful to think about the effects of animation within production as well as the benefits and potential of animation in the framework of industrial, economic, cultural, and technological networks (Faria & Peres, 2023).

Hybrid techniques are now widely used as more of the media content has shifted to the online environment. The interaction between 2D and 3D features offers many new creative solutions while creating design challenges concerning style compatibility and registration errors. Hybrid animation minimizes object animation challenges, reduces the need for excessive lines (line mileage), and thereby improves the potential for cost-effective production (Luntrararu et al., 2022). However, the overall use of the concept depends on factors such as visual targets, the organized skills of the teams, and budgetary issues. It also points out that hybrid animation will chart a course for future directions in animation production and industry practices (Faria & Peres, 2023).

Hybrid animation as an animated film presents an immense potential to experiment with aesthetics, thus providing opportunities for the constructive interaction of traditional and digital methods, interdisciplinary cooperation, and an expansion of the animated film's means of expression. Thus, by rounding together and borrowing from various sources, using syncretic methods, while applying technology and creativity in parallel, the animators produce outstanding visions on the canvases that can appeal to audiences' emotions and expand the potential of animation as an art.

#### **2.2.1.3.2 Spider-Man: Into the Spider-Verse uses hybrid animation to redefine conventional animation aesthetics.**

Spider-Man: Into the Spider-Verse noticeably altered the course of animation and merged elements of comic books with innovative approaches. Unlike comic book-themed works, the film's designers aimed for stylisation rather than hyper-realism, incorporating roughness and two-dimensional hand drawing (Dimian et al., 2019). The approach diverged from realism in the animation, aiming to create fidelity to the source instead of focusing on realism. The intention of using different frame rates for characters and universes also played a role in the picture's visual uniqueness and drove the narrative forward (Teh et al., 2023). Similarly, Spider-Verse could easily do this because it used different types of animation and a transmedia approach to give a fresh perspective to the superhero genre, successfully targeting today's audiences (Martínez, 2020). The film's production techniques bring about significant changes in production pipelines and processes, elevating the quality of animated films (Dimian et al., 2019).

It transforms the cinematographic language because it receives expressive drawings in addition to realistic elements; this adds depth to the feelings depicted in the film (Hestand, 2024). Therefore, by incorporating both forms of aesthetics, Spider-Verse can afford to make the world depicted in its film more realistic and, at the same time, more artistic to engage the viewer (Hestand, 2024). Animation relies on both these aspects to effectively convey information and emotions, a crucial skill when narrating a complex story (Karmakar, 2021).

Moreover, Spider-Man: Into the Spider-Verse, animated in style and format, gets to approach themes such as heroism, identity, and cultural diversity ideally and qualitatively (Munita & Durruty, 2017). We analyse the film's potential to build cultural references by comparing the

heroine's journey model with other shows and films. The global community constructs affiliation patterns through spin-offs (Munita & Durruty, 2017).

### **2.2.1.3.3 Visual Style and Form Limitations**

Visual form serves as more than a design preference since it restricts the functional capabilities of each communication channel. Every aspect within 2D animation requires manual artistic creation. Artists gain control over expression and exaggeration through this method yet must bear its expenses. Scene-to-scene maintenance of depth together with perspective and lighting effects proves challenging. The image stays flat. The movement of cameras through space and the creation of dimensional scenes becomes difficult. Chen and Zwicker (2021) explain that 2D design typically focuses on symbolic representation which delivers emotional impact but does not achieve realistic outcomes. The scene requirements for realistic environments and delicate character movements create challenges for this method according to Du (2021).

3D animation solves some of that. Spatial depth along with dynamic lighting and believable movement through rigged models can be achieved through 3D animation. The simulation of physics allows users to move cameras freely while they construct permanent virtual worlds. But it is not without limits. Most 3D pipelines depend on pre-made asset libraries and software presets which restrict the creative freedom of users. Everything starts to look the same. The uncanny valley effect occurs when 3D tries to achieve realistic appearance because it leads viewers to experience unnatural unease instead of immersion according to Li and Yi (2022). According to Meena and Soni (2024) rigid systems in character animation systems restrict free deformation and extension of characters which makes it difficult to create metaphorical movements that 2D animation achieves effortlessly.

Comics face a different set of limits. Because comics lack actual motion artists must use panel arrangement combined with drawing techniques and motion indicators like lines and words to indicate time and movement (McCloud, 1993). Artists gain flexibility through pacing and composition, but the work depends on reader interpretation. The reader must build their own mental connections for transitions and emotional rhythms. According to Iyyer et al. (2017) comics present less direct storytelling than animation. The absence of sound effects along with timing and movement coordination restricts the ability to achieve emotional depth and immersive experiences.

Each form has its strengths, but they also hit walls. The purpose of hybrid animation goes beyond style fusion because it addresses the deficiencies found in individual animation

techniques. The creators of Spider-Man: Into the Spider-Verse intentionally used this conflicting dynamic. The animation form unites 2D with 3D elements and comic art to create a flexible narrative structure that delivers dimensional effects while expressing emotions through both spatial elements and symbolic representations. These historical restrictions transform into essential storytelling elements.

## **2.2.2 The Power of Movement in Hybrid Animation**

### **2.2.2.1 Expressive Character Animation:**

Creating character animations is a complex process involving crafting movements to convey the character's emotions and personality accurately. Literature studies have underlined the contribution of face and body expressiveness for showing realistic emotions and stressed the value of these aspects for successful animated character depiction (Neff, 2014). The paper by Neff (2014) further explains that expressive character animation takes an important insight from the performing arts literature and links it to the actors and dancers where they used physical movements to convey certain emotions. And to be specific the author points that the key for successful deep emotional state is the proper translation of these real movements to virtual characters (Neff, 2014).

It is indeed challenging to transfer the performances done on stage by humans to the animated characters, but it is a method that is used to guide the movement qualities by using traditional acting and choreography, and this is done to ensure that the characters are not just moving but also a way to carry the feelings to the audience (Neff, 2014)

Hyde et al. (2014) pointed out that animation techniques help show the character's emotions and personalities through movement. The study is not essentially discussing the body movement or choreography, but it is considered important for my study in that it provides insight into the need to capture and animate a real-time facial movement that are natural but crucial to helping an animated character's dynamics and expressiveness. The study is testing the limits of applying exaggeration to characters in expressing emotions like anger, happiness, and sadness and relies on facial expressions and also vocal cues (Hyde et al., 2014).

Furthermore, on the same topic the literature has revealed that movement qualities are the key for good animation performances. For the characters to engage the audience, their movements should not only be technically sound but also have the ability to convey emotions and personality (Hayes, 2013). The study also explains that the movement can be simple, and yet expressive actions are important for the connection with the viewers to happen. The movement of the characters is not only about raw motion but how these movements can support how the story is being told. The study stresses the importance of timing for example the exercise of the bouncing ball is fundamental in ensuring natural and compelling character performances (Hayes, 2013).

### **2.2.2.1.1 Expressivity in Movement**

Animation requires expressivity in movement because it enables the transmission of emotional content and personal characteristics and storytelling intentions. Hybrid animation techniques that unite 2D and 3D methods offer extensive opportunities for expressive animation. The hand-drawn nature of 2D animation produces fluid movements which create organic spontaneity, but 3D animation provides exact control for both characters and environments to create realistic animations (Kivistö, 2019; O’Hailey, 2015).

Hybrid animation achieves expressive movement through motion extrema which requires animators to select essential poses that reveal important emotional or narrative details. Through motion editing applications, animators can use this technique to modify timing and spatial relationships which results in more expressive animations (Coleman, 2012). The implementation of Laban motion analysis in hybrid animation allows the conversion of detailed human movements into expressive character animations (Garcia et al., 2019).

### **2.2.2.1.2 Expressive Mutability and Metamorphosis in Animation**

Paul Wells (1998) introduced “expressive mutability” as the unique capability of animation to exceed physical boundaries through transformation and exaggeration. Animation allows characters and environments to transform their appearances through visual elements which depict psychological and emotional states. According to Wells the visual techniques of exaggeration and distortion function as emotional expression tools beyond their role as visual effects. The visual changes in hybrid animation during emotionally intense moments function to display inner turmoil and personal growth and ideological battles. The visual changes that occur to characters in battle or transformation scenes show their emotional development more effectively than verbal communication. The analytical framework of Wells directly applies to Spider-Verse sequences which show Miles Morales’s identity transformation and emotional growth through visual techniques such as motion changes and stylization and bodily transformations (Wells, 1998).

### **2.2.2.1.3 Differences in Animation Techniques Between 2D and 3D**

The fundamental distinctions between 2D and 3D animation methods require knowledge for successful hybrid animation production. The hand-drawn techniques used in 2D animation provide artists with complete artistic control and expressive capabilities. The manual process of 2D animation makes it both time-consuming and difficult to produce elaborate animations (Kivistö, 2019; O’Hailey, 2010).

3D animation depends on computer-generated imagery (CGI) to provide users with complete control over three-dimensional space which enables realistic lighting effects and textured visuals and camera movement capabilities. The organic quality of hand-drawn 2D animation often escapes 3D animation which results in reduced expressiveness in specific situations (Kim, 2023). Hybrid animation tries to merge the beneficial aspects of both animation techniques. The combination of 3D rendering with hand-drawn styles and 2D elements placed within 3D spaces creates enhanced visual interest and expressiveness according to Kivistö (2019) and O’Hailey (2015).

#### **2.2.2.1.4 Character Development Through Movement**

The development of characters through movement stands as a core element of animation because it reveals their personality traits and emotional states and their intended actions. Hybrid animation techniques which combine 2D and 3D methods enable creators to develop diverse expressive movements that match character requirements. The method of posing enables characters to display emotions and actions through body part arrangement. The use of traditional animation principles such as line of action and contrapposto in 3D animation enhances posing to create naturalistic and engaging character movements (Fonseca, 2015).

Hybrid animation benefits from motion capture technology which enables the conversion of real-world movements into digital characters to produce realistic and detailed performances. The technique shows exceptional effectiveness when depicting intricate emotional states and delicate character relationships (Coleman, 2012).

#### **2.2.2.1.5 Hybrid Animation: A Fusion of 2D and 3D for Enhanced Character Movement**

The fusion between the two techniques in hybrid animation allows for enhanced character movement that is both emotionally resonant and visually innovative. It bridges the gap between the artistic flexibility of hand-drawn animation and the immersive depth offered by computer-generated imagery.

According to Kivistö (2019), hybrid animation enables 3D sequences to be made with the stylistic qualities of 2D animation, while 2D elements can be embedded into 3D environments to boost visual richness and narrative clarity. A study by O’Hailey (2015) supports this approach, stressing how the integration of both techniques creates a dynamic animation pipeline that uses the strengths of each medium. From a character movement perspective, the hybrid

model introduces a spectrum of expressive potential. Traditional 2D animation allows for fluid and gestural representation, while 3D offers consistent control over anatomy, lighting, and camera movement. By combining the two, animators can choreograph movements that feel both spontaneous and grounded. Fonseca (2015) notes that 3D posing benefits from traditional principles like line of action and contrapposto, which are often associated with classical 2D figure drawing. These techniques guide naturalistic and readable postures that reflect personality and emotion.

Hybrid animation also allows for the seamless integration of motion capture, a technique that has been discussed thoroughly in this chapter. This integration results in nuanced and realistic movement, particularly effective for conveying subtle emotional cues (Amaya et al., 1996; Coleman, 2012). When this mocap data is layered with 2D-style overlays or stylized render passes, the final output keeps both realism and artistic individuality.

A compelling case study can be seen in *Spider-Man: Into the Spider-Verse*, where the protagonist Miles Morales is animated using a blend of 2D and 3D elements. His movements, particularly in emotionally charged or high-action scenes, highlight the benefits of this fusion. Fluid hand-drawn additions are overlaid on 3D base models, while the application of diverse textures, such as watercolor and collage, further enhances the dynamism and emotional tone of each movement (Kim, 2023). The result is a uniquely stylized, immersive form of character motion that reflects both internal emotion and external narrative shifts.

Hybrid animation also plays a critical role in reducing production complexity while enhancing creative output. As Luntraru et al. (2022) explain, using 3D models for complex objects can simplify 2D workflows, while integrating hand-drawn effects into 3D environments maintains a handmade aesthetic. This not only reorganizes the animation process but also raises richer character performance. A historical example of this method is clear in Disney's *Treasure Planet*, where 2D character animation was composited over 3D-rendered objects. As Barbieri et al. (2017) illustrate, this technique produced visually harmonious results, blending the elasticity of drawn animation with the spatial logic of CGI, an approach now foundational to hybrid character movement.

## **2.2.2.2 Enhanced Action Sequences:**

### **2.2.2.2.1 Animating Action: The Power of Style and Technique**

Hybrid animation action sequences evolve beyond their practical use to become artistic masterpieces which express emotional depth and narrative drive and visual creativity. The action choreography in *Spider-Man: Into the Spider-Verse* represents both character identity and narrative ideology through its physical confrontations. This analysis investigates the technical and stylistic elements which enhance action sequences through hybrid animation by uniting 2D visual precision with 3D spatial movement in fight scenes.

#### **2.2.2.2.2 Framing, Lighting, and Stylization**

A proper composition and framing system help maintain clear 2D visual representations. The placement of characters and objects within the frame by filmmakers enables viewers to understand the visual structure of the scene. The fight scenes in dynamic sequences need special attention because they tend to become disorderly. The combination of rule of thirds composition with leading lines and symmetry enables designers to create balanced visual compositions that appeal to viewers (Lee, 2025). The visual technique of lighting functions as an essential element which enhances 2D clarity while producing 3D dynamism. The strategic application of lighting techniques produces depth effects and highlights essential details while creating emotional environments. The combination of bright and dim lighting creates deep shadows that deepen visual depth but soft illumination results in an even flat visual effect. Artists use their combination of light and shadow effects to guide viewers through the visual space (Oyallon-Koloski & Junokas, 2022). The final collider sequence employs separate lighting effects for Miles and Kingpin which creates emotional and spatial differences between the protagonist and antagonist. The intentional application of compositional logic unites 2D animation silhouette clarity with 3D spatial realism to fulfill its purpose.

#### **2.2.2.2.3 Motion Design and Physicality**

Hybrid animation generates impact and momentum through the combination of smear frames, motion lines and dynamic posing techniques. Animation uses smear frames to create exaggerated motion transitions which both speed up and increase flexibility in attacks (Basset et al., 2024). The visual bursts and graphic streaks in Miles's venom strike make the attack's kinetic force more intense during that instant. Kingpin's large body size is highlighted through his slow-moving heavy movements while Miles shows quick and agile

movements. The opposing physical characteristics symbolize opposing philosophical beliefs because adaptability opposes brute force.

#### **2.2.2.2.4 Camera Movement and Kinetic Engagement**

The combination of dynamic camera positions and motion paths controlled by actors creates animated fight choreography that replicates cinematic experiences. Actor-driven techniques allow characters and cameras to move in synchronized patterns to maintain spatial coherence according to Wu et al. (2023). In *Into the Spider-Verse*, Miles experiences aerial motion which follows him with sweeping arcs and crash zooms and rotational pivots that show his spatial orientation in the air. The camera strategies used in fight scenes create both readability and immersive physical responses from viewers. The combination of dolly zooms, tracking shots and crane shots establishes depth and movement effects but static shots deliver clear focused moments (Kurz et al., 2010).

#### **2.2.2.2.5 Frame Rate Modulation as Emotional Signifier**

The deliberate use of asynchronous frame rates, the technique of animating characters at different temporal resolutions, serves both stylistic and narrative functions. Miles is initially animated “on twos,” resulting in a stuttered motion that denotes inexperience and disconnection. As his arc progresses, his movement becomes smoother, aligning with other Spider-characters “on ones,” signifying emotional integration (Teh et al., 2023). In action sequences, this modulation directs viewer perception, slows time for impact, or heightens speed for urgency.

#### **2.2.2.2.6 2D animation techniques: creating exaggerated and dynamic action sequences.**

2D animation techniques allow artists to merge traditional methods with modern technology for producing exaggerated and dynamic action sequences. Rotoscoping produces believable 2D animation and movements when artists execute the technique properly. The non-linear rough 2D animation techniques developed by Even et al. (2023) enable artists to achieve real-time control over movement exaggeration and dynamism. Through non-linear movement patterns animators can generate sequences which extend beyond linear animation limitations to produce more expressive and dynamic action.

Traditional animation exaggeration principles which Hill et al. (2005) explain serve as the essential element for developing captivating dynamic action sequences. Exaggerated design and actions reveal the fundamental idea while making characters alive and generating emotional responses from viewers. Traditional animation principles can be changed to improve movement exaggeration and dynamism in both 2D and 3D computer animation formats. The Rubber-like exaggeration techniques described by Kwon & Lee (2007) provide artists with an efficient method to produce exciting exaggerated motions for character animation. The application of rubber-like properties to character movements produces dynamic exaggerated actions which enhance animation personality and flair.

The research by Liu et al. (2019) about facial features in American and Japanese cartoon characters proves through their study that exaggeration stays vital for designing visually engaging animated characters. Through exaggerated facial features and actions animators can develop character personalities and charm which enhances audience connection.

#### **2.2.2.2.7 3D Animation and the Realism of Physics and Weight in Action**

3D animation technology changed the presentation of physical realism in animated films because it allows authentic simulations of realistic physical behavior during action sequences. 3D animation creates real-world physics simulations because it differs from traditional 2D animation which depends on exaggerated stylized motion. Through motion capture technology and inverse kinematics and physics-based systems animators can create believable depictions of gravity, weight, and momentum. Digital animation techniques enable developers to generate realistic scenarios which show characters engaging with their surroundings naturally.

Physics-based motion enhances realism through its ability to reproduce how actual objects react to external forces and conditions by colliding and bouncing and responding to external forces. The combination of ragdoll physics with collision detection allows animators to manage character movement within intricate action scenarios including fight scenes and stunts. Liu et al. (2005) prove that implementing these methods generates authentic motion while meeting viewer requirements for visual appeal. The kinetic realism enhances both characters and environments, so they appear more physically real.

The modern 3D animation industry heavily relies on motion capture technology. Through motion capture technology, actors perform physical movements which digital characters receive to produce authentic animated performances (Guo & Zhong, 2022). The traditional marker-based and sensor-based tracking systems achieve high joint accuracy through elaborate

setup procedures. Multiple cameras working under deep learning technology enable markerless systems to detect joint positions from video recordings according to Guo and Zhong (2022). Real weight can only be achieved through rigging and inverse kinematics to generate realistic body movements. The process of rigging constructs an internal structure for model control but inverse kinematics enables exact body part movement through end position adjustments (Flores, 2016; Popovic & Bowers, 2019). Through integrated systems animators obtain the capability to produce weighty and natural motion which appears realistic according to physical laws.

#### **2.2.2.2.8 Camera Interaction and Environmental Integration**

3D animation weight and realism depend on character movement as well as environmental reactions and camera perspectives. The camera movements in animation play an essential role to enhance physical forces including gravity, collision, and speed. The synchronization of camera movements with actor actions according to Wu et al. (2023) produces a viewing experience that directly conveys impact and momentum to the audience. The technique draws viewers into the animated world by providing them with a more realistic experience of physical reality.

The synchronization of camera movement with character movement produces a reactive viewing experience. The camera functions as an active element within the scene by producing motion that mirrors the occurring actions. Real-time camera rigs together with motion capture enable simultaneous recording of actor and camera paths according to Wu et al. (2023). The visual field becomes fully immersive because every movement appears connected which helps keep the rhythm and weight of animated gestures and impacts.

The position of the camera determines how audiences understand both physical movement and force. The animation process uses specific camera angles to display trajectories and impacts and spatial dimensions which create physical tension effects. Fast-paced sequences benefit from multi-camera setups and rotational angles and shifting perspectives to maintain momentum and clarity according to Kurz et al. (2010). Real-time control tools including through-the-lens systems and motion graphs and procedural rigs enable flexible adjustments during production just like live-action cinematography (Gleicher & Witkin, 1992; Sanokho et al., 2014). Through these systems animators can generate realistic interactions between character movements and camera viewpoints.

### 2.2.2.3 Innovation in Movement Techniques:

#### 2.2.2.3.1 Innovative Animation Techniques in Groundbreaking Film Movements

The development of animated filmmaking has always progressed through efforts to push forward motion, style, and expression. Hybrid animation has recently appeared as a new experimental wave that enables animators to push beyond conventional cinematic movement through improved emotional depth and visual novelty, and kinetic innovation. The development of rotoscoping and smear frames and frame rate modulation, and motion extrema techniques serves as the basis for creating expressive, fluid, and psychologically immersive movements.

#### 2.2.2.3.2 Rotoscoping and Expressive Realism

Rotoscoping is a technique that involves tracing over live-action footage to create realistic animations. This technique has a well-known disadvantage because it can produce an uncanny effect due to its ability to closely mimic real-life movements, which can be both engaging for its realistic part, but also unsettling for viewers because of the uncanny effect (Lukmanto, 2018). In films like “Waking Life”, Figure 2.8. Rotoscoping is used in the film not only to replicate reality as it is intended for use, but to offer a dreamlike, fluid visual experience that represents the character's mental processes and interpretations (Ko, 2014). Furthermore, Rotoscoping has another purpose as it serves as a useful tool for documenting and analyzing real motion, as seen in a research involving dance and martial arts, where the study concluded that Rotoscoping helps communicate visual expression and performance techniques (Karpathyova, 2017).

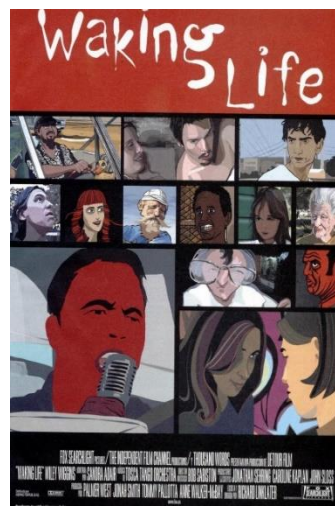


Figure 2.8: Waking Life 2002, Source: MovieScore.

### **2.2.2.3.3 Smear Frames and Motion Stylization**

The technique of smear frames creates the illusion of fast motion through temporary object deformation which matches human eye perception of quick movement. The technique serves two main purposes in animation by creating smooth motion between character movements so viewers can see the action in 2D and stop-motion formats (Valdivieso, 2025). The technique of smear frames in 3D animation enables artists to enhance motion expression through artistic control while extending objects along their paths (Basset et al., 2024). The application of these frames in 3D environments needs precise stylization to prevent visual conflicts. The frames, according to Valdivieso (2025) and Basset et al. (2024), function as expressive tools that enhance visual storytelling by producing speed and intensity effects. The strategic application of these frames allows storytellers to express both disorder and elegance based on their narrative requirements.

### **2.2.2.3.4 Case Study: Miles Morales and Expressive Evolution**

The Spider-Verse franchise presents Miles's journey as an excellent example to study movement innovation. The emotional progression of Miles manifests through his use of smear effects and rotoscoping segments and his employment of different frame rates and artistic shifts. The visual techniques serve both aesthetic purposes and narrative functions to represent Miles's psychological states through stylistic elements (Kim, 2023). The animated movement achieves expressive and performative qualities through its rapid transitions between artistic forms such as collage and sketch, which depart from traditional realistic animation.

Kivistö (2019) and O'Hailey (2015) explain how hybrid animation enables artists to merge 2D and 3D techniques in their creative work. The multimodal constructive interaction creates stylistic elasticity, which can be seen in Spider-Man: Across the Universe through its combination of watercolor-style overlays with 3D rigged forms (Kim, 2023). The visual grammar combines illustrative and volumetric elements while keeping traditional and contemporary qualities.

### **2.2.2.3.5 Movement Limitations**

Hybrid animation presents multiple complex problems because it requires the unification of two different motion systems which belong to 2D and 3D animation. The process of 2D animation allows complete control of timing and arc and exaggeration through manual frame-by-frame drawing which results in fluid expressive motion. The 3D animation system uses character rigs together with physical simulations and spatial coherence which follows real-

world mechanical principles (Guo & Zhong, 2022). When characters from different animation styles appear in the same frame their opposing motion languages produce motion dissonance. The realistic 3D movement of volumetric characters clashes with the stylized 2D motion that uses elastic and flattened and metaphorical elements which produces perceptual friction (Cooper, 2002).

The problem becomes most challenging during scenes where characters need to interact directly with each other. The symbolic nature of 2D animation enables characters to break free from gravity and change their form dramatically while 3D characters stay limited by their skeletal framework and simulated weight (O'Hailey, 2015). Hybrid scenes tend to damage narrative credibility because hand-drawn characters use metaphorical intensity while 3D characters follow physical rules of movement, creating an uneven visual rhythm. The inconsistencies between different animation styles create two main problems that destroy spatial coherence while disrupting emotional flow, which harms essential narrative moments.

When characters exist on planes that do not match visually, it creates problems with spatial integration. The placement of 2D figures above 3D rendered scenes creates a visual depth conflict, which deepens the separation between characters and their environments (Thomas et al., 1995). The ability to keep an illusion of unified space becomes increasingly difficult for sustained narrative immersion. The separation between different visual elements within hybrid scenes creates emotional and aesthetic disconnects that harm the storytelling impact, according to Cooper (2002), when transformations or relational conflicts form the story's core. The limitations show why specific movement planning becomes essential when merging animated forms, especially in *Spider-Verse*, where emotions and narrative importance rely heavily on character movements.

### 2.2.2.3.6 Conclusion

Animation techniques that include rotoscoping with frame-rate modulation and Laban analysis and hybrid compositing enable new forms of expression in animation. Through kinetic form animators use these tools to convey both narrative meaning and emotional nuance. The development of hybrid methodologies increases animated films' ability to deliver emotionally powerful storytelling with diverse styles and movement-based narratives.

Most animators use smear frames together with rapid frame-rate shifts to create scenes of chaos or urgency or emotional intensity. Through these techniques audiences gain direct access to how characters experience internal states in key emotional situations (Ramanayake & Bandara, 2024). Slow frame rates alongside precise rotoscoping methods enable animators to emphasize tiny expressions and individual emotional moments which create psychological clarity and introspective experiences for viewers (Yuanliang & Zhe, 2024). The frame-rate works as a dual-purpose tool since it functions both as a creative element and a storytelling mechanism through opposing frame-rate approaches.

Visual storytelling employs frame-rate modulation for aesthetic goals and deep thematic and psychological goals. Audiences experience transformation and emotional weight along with time perception based directly on the frame rates used in character-driven narratives. *Spider-Man: Into the Spider-Verse* shows Miles Morales' transformation through his animation method which changes between "on twos" and "on ones" to represent his development from hesitation to confidence. Through this method filmmakers embed character development information directly into animated movement systems.

Research-based studies on cinematic storytelling confirm this method. The use of 120 fps frame rates creates immersive experiences because they minimize blur while maximizing motion clarity to emphasize transformative and action-packed sequences (Berton & Chuang, 2016). The depiction of emotional gravity and psychological focus through animation tends to use frame rates at lower levels. The different frame rates serve as a narrative structure which filmmakers use to lead viewers through emotional and pacing transformations.

Frame-rate modulation proves most effective when creators want to depict self-discovery and transformation themes which appear in modern literature and film. Animators use visual tempo changes in a way that parallels language and structural transformations in works like *Towards Another Summer* to convey emotional shifts (Jing, 2023). Animation uses these tempo

variations to produce effects that transcend visual representation and become tangible experiences for viewers.

These techniques come with both negative evaluations and operational boundaries. The precise method of rotoscoping faces criticism because it depends heavily on live-action footage, which challenges its originality and artistic independence in animation production (Lukmanto, 2018). The successful implementation of smear frames and frame-rate modulation demands skilled control since excessive use or improper application results in viewer confusion. Success with these techniques depends on achieving a proper balance between artistic styles and audience comprehension, together with emotional power and narrative clarity.

The success of frame-rate as a filmmaking tool depends on integrating it with other cinematic elements like sound design, editing rhythm, and cinematography to create unified emotional and narrative effects. Through strategic application, these techniques enhance animation storytelling ability, which produces visual dynamism and emotional impact for viewers.

## 2.2.3 Narrative Enhancement

### 2.2.3.1 World-Building and Immersion

World-building is a term that describes the design practice that, in one way or another, enables the creation of worlds for transmedia and also post-cinematic storytelling (Mohd Hasri & Md Syed, 2021). Moreover, Animation styles are a vital element in differentiating between the real and fantastical world within a movie, as mentioned in the study done by Hetherington and McRae (2017), where the study discusses the principles of reality, which relies mainly on a mutual agreement between the creator of the fantastical world and the audience. In other terms, this connection clearly shows that animation can set up a clear boundary between the two distinguished worlds. Moreover, major American animation studios tend to employ a shared character design style to evoke empathy among viewers. This style aims to combine lifelikeness with abstraction, creating characters that resonate emotionally with audiences. Manipulating character design elements enables animators to elicit specific responses from viewers, whether in real-world or fantastical settings, aiding in distinguishing between the two worlds in a film (Rooij, 2019).

In another study conducted by Paik and kim (2013) shows how using different animation styles, such as the one used in Disney's amazing 3d animation movie ("Wreck It Ralph") Figure 2.9, can express various aesthetics through camera movements and character animation. In the movie they used different but also distinct styles for the different worlds. This will help differentiate between the real and fantastical worlds thus enhancing visual experience and immersion and the storytelling through guiding the audience.



Figure 2.9: Wreck it Ralph, Disney, 2012.

On the same topic, the contrast in styles is a visual cue for the audience to distinguish between the fantastical and real elements and shots in the movie. This is mentioned in Gong's study (2023), where he illustrates how the contrast between realism and the unbelievable story can strongly contribute to the unique appeal of stop-motion animation.

As described in academic studies, hybrid animation can uniquely build a layered world by utilizing both the depth and realism of 3D animation with the stylistic expressiveness of 2D (Aditya, 2018). This blend helps in creating the immersive world and makes it tangible and fantastical at the same time, this would draw the audience's attention and immersive experience into the story having multiple dimensions. This balance on the other hand can ensure the flow of the narrative while transitioning between the different worlds. Effective worldbuilding can convey complex narratives, such as class conflicts, through visual elements (Violetta & Ratri, 2023).

The world-building is vital in the movie *Spiderman: into the Spider-verse*, the movie introduces multiple parallel universes, each one with its unique visual style. Using different animation styles to differentiate between these dimensions will help maintain the clarity of the narrative while leading the viewers into an immersive and unique experience (Ndalianis, 2009). Each world has its own aesthetic identity, contributing to the overall narrative by emphasizing the diversity of the multiverse and the different versions of Spider-Man that inhabit it.

A YouTube video by The 7<sup>th</sup> Vision (2023), explains how the use of visual cues like colors and texture along with spatial depth is linked to how the animators alter these cues to create a contrasting color scheme that can help differentiate between different universes, to make it easier to navigate the story. This is well employed in the movie since each one of the dimensions has its unique color pallet and animation style, which will create a visual difference that reflects the movie's narrative structure.

World-building in hybrid animation requires the integration of environmental details which support narrative themes. The hybrid animation technique enables creators to build environments without the restrictions that come from using a single animation style. Through this flexibility animators can develop visually compelling worlds that enrich the narrative while creating a dynamic and living environment (O'Hailey, 2015). For example, the cityscapes in *Spider-Man: Into the Spider-Verse* present an attractive visual design that mirrors the disorder and intricate nature of the multiverse.

### **2.2.3.1.1 Comic Grammar and Sequential Logic in Visual Storytelling**

Scott McCloud's (1993) theory of comic grammar offers foundational insights into how visual sequencing shapes time, emotion, and narrative pacing. His concepts of closure, moment-to-moment transitions, and Emanata explain how static images generate temporal flow and psychological resonance. McCloud underlines that comic panels are not mere containers of action but tools for manipulating rhythm, inference, and audience engagement. This framework applies directly to hybrid animation that integrates comic elements into cinematic form. In *Spider-Verse*, the use of floating panels, halftone textures, and graphic overlays mirrors the logic of the comic page, enabling the film to depict inner thought, emotional instability, or symbolic transformation. By adopting McCloud's visual syntax, hybrid films can use the readability and emotional directness of comics while keeping the spatial depth and motion of 3D animation.

### **2.2.3.1.2 Comics as Visual Narrative Foundations**

The medium of comics uses visual storytelling through images and sequences and text elements to present characters and their actions and emotions. The construction of narrative meaning in comics depends on a combination of hand-drawn panels and symbolic cues as explained by Kukkonen (Kukkonen, 2014) (p. 174). The film *Spider-Man: Into the Spider-Verse* employs comic aesthetics beyond mere tribute because they serve as structural and expressive design elements. Because both comics and animation use visual sequences to tell stories they share a natural conceptual base that supports the film's hybrid animated style (Kukkonen, 2013, p. 75). The transition from comic page to moving image goes beyond technical implementation because it enables the film to incorporate comic logic into its animated structure.

The main comic-based method in *Spider-Verse* consists of utilizing panel-like frames. The story in comics uses image spaces with defined boundaries to both divide and control the pacing of the narrative (Kukkonen, 2013, p. 174). The film uses panel grids as screen elements to create separate spaces for characters and actions as well as comedic elements. The three-character pause occurs through sequential visual blocks which the film treats like comic panels by both visual presentation and rhythmic timing to guide viewer interpretation of the screen. The film uses stylized speed lines which in comics show motion through lines connecting a character's starting and ending points (Kukkonen, 2013, p. 174). The lines that appear during

fast-paced sequences use drawn graphic abstraction to emphasize the animated approach while showing movement through their visual representation.

The film incorporates traditional comic elements, which include speech bubbles and thought bubbles, and onomatopoeic sound effects. The visual representation of speech occurs through text boxes with tail directions to show speech, while thought bubbles use cloud-like forms according to Kukkonen (2013) (pp. 24–25). The film uses exaggerated fonts and shapes to display visual sound effects, including “WATCH OUT!” and “BAM!” which directly mirror the onomatopoeic practices of comic art (Kukkonen, 2013, p. 174). The film applies halftone printing techniques, which replicate comic book ink textures through tiny colored dots to create a pop-art appearance across its 3D environments. According to Jain (2019) halftone printing creates the perception of tonal shifts through its dot-based pattern. The halftone dot pattern throughout Spider-Verse screens most prominently in areas with defocused vision to create a subtle comic book-inspired effect.

#### **2.2.3.1.3 Stylization as a Narrative Enhancer**

The aesthetic choice of stylization in Spider-Man: Into the Spider-Verse functions as a storytelling tool that enhances the narrative. The visual presentation of the story in the film directly expresses both emotional and thematic elements of the narrative. The stylized visual elements of Miles Morales’ universe through its bold lines and vibrant colors, and dynamic camera movements, mirror his process of self-discovery. The visual style functions as a narrative guide that leads viewers through the emotional peaks and valleys of the story. to achieve its narrative success through its transmedial identity, which also allows the film to build a complex narrative by merging storytelling elements from comic books to attract diverse viewers. The transmedial storytelling method strengthens both the narrative and the film’s themes about identity and interconnectedness (Baroni et al., 2023)

#### **2.2.3.1.4 The Role of Transitions in Multiverse Narratives**

The narrative transitions between universes in Spider-Man: Into the Spider-Verse function as storytelling devices which improve the overall narrative. The flicker transition effect between universes creates audience disorientation which matches the characters’ experiences. The narrative transitions function beyond visual effects because they establish the multiverse concept which shows realities in constant change (Maldon, 2025).

The film sets up multiverse rules through its visual language, which helps viewers understand how different universes relate to each other. The narrative requires this clarity because it presents multiple parallel realities, which helps viewers understand the story better and prevents confusion. The transitions represent both technical mastery and narrative enhancement, which improve the overall storytelling experience (Goodbrey, 2015).

#### **2.2.3.1.5 The Impact of Hybrid Animation on Storytelling**

Hybrid animation, which combines elements of 2D and 3D animation, plays a crucial role in the storytelling of *Spider-Man: Into the Spider-Verse*. The film's use of 2D character designs within a 3D environment creates a unique visual style that is both grounded and fantastical. This hybrid approach allows for a level of expressiveness and emotional depth that would be difficult to achieve with traditional animation techniques.

The integration of 2D and 3D elements also serves to enhance the film's pacing and rhythm. The dynamic camera movements and stylized action sequences are made possible by the flexibility of hybrid animation, allowing the filmmakers to create sequences that are both visually stunning and narratively impactful. This approach not only enhances the storytelling but also sets a new standard for animated films in terms of visual innovation and narrative potential (O'Hailey, 2015).

In conclusion, world-building and immersion are achieved through carefully integrating 2D and 3D elements in the case of hybrid animation; this integration creates distinct visual styles for different worlds and elevates the overall narrative experience. As viewed in the literature, using multiple contrasting styles can help ease the animator's job to guide the audience's attention through complex storylines that span multiple dimensions, creating a richly layered and immersive narrative. The success of films like *Spider-Man: Into the Spider-Verse* demonstrates the potential of hybrid animation to create compelling and immersive worlds, each world contrasting the other in the color palette and visual style, maintaining the clarity and complex narratives, such as those present in class conflict, that draw the audience deeper into the story.

#### **2.2.3.1.6 Emotional Connection through Style**

Animation styles can increase the audience emotional engagement with the characters of the movie alongside the story by simply controlling and shaping how these emotions are shown and expressed by the audience. According to the literature, multiple studies have explored the different aspect of character design and animation, such as the facial expression and emotional

design, and their role on altering the viewers perception and connection with the animated content. These aspects can be shown in the study by Carter et al (2013), where he explains that how the increased audience attention to the characters faces correlates directly to whether the audience accepts and likes the animated characters or not, thus showing the deep relation between the animation style and the acceptance of the audience, because of its influence on the viewing patten and subjective opinion. This suggests that the role visual representation of the characters in evoking specific emotions and emotional response of the audience.

Another study by Zainal and Desa (2024), highlights the ability of animation to manipulate the viewers emotions, and pointed out the importance of the presence of emotional element in the process of story development to increase the audience emotional engagement. On the same topic, Chen and Khynevych (2023) discusses how the Chinese animation were built based on the psychological levels of the audience, showing the importance of narrative parts such as the Plot and modelling styles on the emotional connection between the viewers and the characters of the animated movie. This clearly shows that using emotional elements in animation making can enhance the viewers engagement with the narrative.

Moreover, the effect of emotional design factors on the process of audio-visual communication, where certain design elements can stimulate the viewers perceptual systems, thus triggering an emotional response, and fortifying the connection with the content (Fang et al., 2022). This suggests that choices of intentional emotion design can enhance the audience engagement with the content and with the story being told. On the other hand, Rooij (2019) highlights how major animation studios such as Disney uses a shared character design style to evoke the audience empathy and emotional connection with the animated movie characters, thus enhancing the immersive experience with the movie's narrative.

The role of facial expression and gestures is discussed by Melati (2023), where the study points out the effect of technological advancement on deepen the audience connection with the characters underscoring how emotions are affected by the animation style as well as the audience engagement. On the same topic, Dirin and Laine (2023), discuss the use of animation as a tool for emotional engagement, particularly in the virtual reality context. In his study he pointed out several key points, such as emotional empathy and the art design and emotional resonance, these points would play a vital role in enhancing the emotional engagement experience and evoke the feeling of pleasure and relaxation. According to the study, the effect of this animation style exceeds that is used in traditional animation, thus highlighting the

importance of using various animation styles to establish a good viewer-content emotional relation.

To sum things up, according to the literature, the effect of the animation style on the emotional engagement is powerful, by controlling key aspects of the characters such as facial expressions which plays a vital role on shaping audience perception and connection. Incorporating emotional elements in storytelling enhances audience engagement, while plot and modeling styles can affect the emotional connection between viewers and characters. Additionally, certain design elements can stimulate viewers' perceptual systems and trigger emotional responses. Consistent character design styles can evoke audience empathy and connection, and advancements in technology have deepened this connection through more realistic emotions. Overall, animation styles have a profound influence on audience engagement by strategically manipulating emotions through character design, storytelling, and visual elements.

### **2.2.3.1.7 2D animation: nostalgia and expressiveness**

#### **2.2.3.1.7.1 Nostalgia:**

Nostalgia is defined as “ the sentimental longing for one’s past”, often experienced through mythology (Kim, 2020, p. 19), the study further explores the aspects that evoke nostalgia in the audience and the study mentions the movie Toy Story as an example, in the movie the use of children’s toys, this employment may evoke certain questions from childhood, and these questions may include, what if my toys were moving and had their own life and adventures (Kim, 2020)In the same study, the author relates the use of colors in the Toy Story movie, which was used to contrast the well-built and detailed background with the brushed texture. Using bright colors that are used in the children’s rooms, this employment of colors has the power to evoke a nostalgic effect. Moreover, Dzulkifli and Mustafar (2013) explored the importance of colors in enhancing both of memory performance and also attentional level, while the study did not mention or address Nostalgia as a theme of the study but it highlights the connection between colors and memories which includes the childhood memories in other terms, Nostalgia.

2D animation has an incredibly unique ability to evoke nostalgia through factors such as the emotional connection it creates with the audience and the aesthetic qualities. The reuse of the old traditional animation style, especially the ones connected to the early animation works, can evoke Nostalgia, a study by Haswell (2015), discusses the effect of technological advancement on the return of what is called the organic aesthetic, which many users find it Nostalgic. As noticed in works by big animation studios such as Pixar and Walt Disney the Nostalgia influence

is more in traditional animation styles. Nostalgia plays a pivotal role in the way 2D animation can evoke these feelings as discussed by the study conducted by Khoshghadam et al (2019), in the same study the authors explore the relation between life satisfaction and nostalgic emotion, the study suggests that there is a relation between nostalgia and emotional well-being, which can be triggered by visual stimuli, such stimuli can be found in 2D animations.

According to the literature on Nostalgia, we can conclude that 2D animation can clearly evoke Nostalgia since the 2D animation style is considered to be the first style to be present in its traditional era way before computer animation, which links to the childhood of viewers, the psychological connection of nostalgia along with traditional aesthetics and emotional resonance creates an exponentially powerful medium that entertains and also connects the audience with their past.

#### **2.2.3.1.7.2 2D Animation and Expressiveness**

2D animation serves as a rich environment for expressing emotions because it uses visual storytelling to convey emotions. According to Zhao (2019) emotional expressiveness through 2D live animations improves the viewer's experience during online interactions. The research by Wickramasinghe (2021) supports this finding by showing how 2D animation makes complex academic concepts easier to understand which leads to better student engagement and emotional connection with the learning environment.

The effectiveness of 2D animation in storytelling is supported by research by Sabri and Adiprabowo (2022), In their study, they emphasized that visual storytelling in animated movies can effectively communicate emotions without relying on verbal communication techniques, thus enhancing the expressiveness of the medium. This nonverbal has excellent value since it allows the audience to emotionally connect with the content, removing any linguistic barrier.

According to the literature review, 2D animation's ability to evoke expressiveness is due to its ability to create an emotional connection between the audience and visual storytelling and nonverbal communication. This approach will not only enhance audience engagement but also enhance the audience's communication and education skills.

In evoking emotional depth in characters, 2D animation has the unique ability to do so through many techniques that can enhance the connection with the audience through empathy and engagement. According to the existing literature, the narrative structure of animated stories plays a key role in achieving emotional engagement. As proposed by the study by Zainal & Desa (2024) who discusses the plot build-up through tension and emotional peaks can make the

character's emotional journey unforgettable to the audience, thus fortifying the connection between the audience and the movie characters. These findings align with Jiang's (2024) study which highlights that empathy and action-oriented responses from the audience can be evoked by the multimodal design elements in digital storytelling can evoke empathy and action-oriented responses from the audience. This approach will give the animators the ability to set up a sense of empathy along with the audience's entertainment.

Besides the technical aspect of the narrative and narrative techniques, the technical aspects of animation, like the posture and how motion is portrayed are essential in conveying emotions. As the study by Normoyle et al. (2013) indicates the range of emotions can be expressed by the dynamics of the character's movement. Body motion and facial expression are important in achieving motion realism which affects the audience's emotional authenticity in animation (Chan et al., 2019). According to the literature, this combination allows animators to animate characters that feel real and lifelike, thus enhancing the emotional depth of the narrative.

Other factors that can alter and change the audience's emotional perception are color and visual aesthetics in 2D animation. This claim is supported by the study conducted by Seifi et al. (2011), the study suggested that using varied color palettes can effectively change and alter the emotions perceived by the audience. Thus, affecting the audience's emotional resonance and engagement with the animated content.

#### **2.2.3.1.8 3D Animation and the sense of realism**

The advancement of technology has resulted in achieving elevated levels of visual realism. However, this realism has always raised questions about the medium unique qualities and artistic expression. A study by Amadou et al. (2023) investigates the effect of the realism of virtual 3D characters on the emotional intensities, attractiveness, and audience perception, and shows that realistic renderings in both appearance and animation can enhance both immersion and social presence. One of the main reasons that led to the remarkable success in the medium of 3D animation is the realism that it offers. The study by Hodgkinson (2009) explains that this realism is responsible for the relief of interpretive efforts of the audience, since it somehow represents real life.

### 2.2.3.1.9 Thematic Integration and Immersion

Hybrid animation creates better visual engagement because it unites different visual styles with narrative themes to create deeper audience immersion in the story. The thematic integration in hybrid animation uses different animation techniques to emphasize story themes through visual contrasts which merge visual style with narrative content. The fusion of 2D and 3D animation techniques enables filmmakers to use visual contrasts as thematic metaphors which deepen the story's thematic meaning.

The combination of different visual styles in hybrid animation proves beneficial for thematic integration because it lets artists express various narrative perspectives or emotional states through their animation techniques. O'Hailey (2015) explains how hybrid animation provides the benefit of combining 2D and 3D elements which represent different elements in characters' journeys and thematic aspects of storytelling. The filmmakers in *Spider-Man: Into the Spider-Verse* use animation styles that contrast with each other to show Spider-Man characters and their worlds while reinforcing the themes about identity, diversity, and belonging.

Hybrid animation enables thematic integration through its method of using different animation techniques to display shifting emotional states and narrative shifts. The use of 2D animation dominates scenes that display introspection and emotional intensity throughout many animated films. The production team uses 3D animation for physical sequences because these sequences need increased spatial depth and extraordinary physicality (Kivistö, 2019). The narrative gains enhanced emotional impact through this technique combination because filmmakers use each style's particular strengths to fulfill thematic requirements.

The combination of 2D and 3D animation through hybrid techniques enables filmmakers to develop experimental approaches when developing thematic storytelling. The versatility of uniting 2D with 3D techniques allows filmmakers to create visual metaphors through animation techniques which traditional animation methods would struggle to achieve. Maldon (2025) examines glitches in video games to explore how they generate immersive horror experiences and impact player conceptualizations of the experience. The glitch effects and distorted animation techniques in *Spider-Man: Into the Spider-Verse* represent the multiverse instability and the character's identification struggles. These visual elements function as more than visual aesthetics because they actively take part in storytelling to express sophisticated themes through animated visual elements.

Hybrid animation enables the use of contrasting visual styles to subvert traditional storytelling conventions as well as challenge them. Filmmakers employ contrasting animation techniques to set up narrative tension through the combination of familiar and unfamiliar visual elements which reinforces story themes. The filmmaking technique works best when films present identity or reality themes because animation style shifts mirror character development (Karmakar, 2021).

The integration of themes in hybrid animation functions closely with how well it creates immersive experiences for viewers. Visual style alignment with narrative themes creates a stronger connection between the audience and the story. According to Karmakar (2021) the extent of visual style integration with the narrative makes the viewing experience more immersive for audience members. The narrative integration process in hybrid animation occurs through the combination of 2D and 3D animation techniques that make crucial thematic moments more engaging for viewers.

The theme of self-discovery receives thematic integration through *Spider-Man: Into the Spider-Verse* by implementing diverse animation techniques. The animation techniques used for *Spider-Man* characters match their distinct personality traits while extending both their individual stories and personalities. The thematic integration deepens character development and strengthens the central message about personal uniqueness.

Strategic implementation of opposing animation techniques in hybrid animation helps producers integrate themes while creating deep emotional and thematic storytelling experiences. Hybrid animation combines visual metaphors with experimental animation styles to let filmmakers create innovative complex thematic explorations which generate immersive emotional storytelling experiences. The hybrid animation in *Spider-Man: Into the Spider-Verse* combines visual elements with story elements to produce a thematically rich and deeply immersive movie.

### **2.2.3.2 Narrative Structure and Symbolic Techniques**

#### **2.2.3.2.1 Visual Metaphor**

Visual metaphors are essential in narrative structures, providing a bridge between abstract concepts and tangible representations. They are effective in conveying emotions, such as in Tim Burton's adaptation of *Charlie and the Chocolate Factory*, where metaphors like "boiling rage" and "heavy stones" are used to represent anger and sadness (Cahyani & Hasbi, 2024). In *Howl's*

Moving Castle, symbolic visual elements like the moving castle serve as a metaphor for the protagonist's inner journey and redemption. Color is another powerful tool in emotional expression, as seen in *The Matrix*, where green-tinted visuals symbolize the artificial nature of simulated reality, the Matrix as the author is referring to, and the contrast between the Matrix and the real world underscores themes of illusion and freedom (Cao, 2024). Visual metaphors are also used to explore complex themes, such as in *Luck*, where the use of green and imagery like ladybugs reinforces the film's exploration of luck and prosperity.

#### **2.2.3.2.2 Glitching as a visual metaphor**

While there are studies on the effect of visual metaphors such as glitching and ink splatter in the movie *Spider-Man: into the Spider-verse*, a study by Kuntoro (2024) offers an insight on the glitch art and he concludes in his study that Glitch art is a creative concept that explores the fragility of human memory through data-bending techniques. The author uses the digital audio editing program Audacity to produce concepts that are visually expressive and represent episodic memory. By displaying the spirit of creation, this art form enhances scientific publications and current visual art. According to the author this is a unique way to convey complex narratives and emotional depth. These metaphors may influence the viewer's familiarity with digital and analogue media, creating a bridge between the familiar and the unfamiliar. On the other hand, Mason (2012) demonstrates how Glitch aesthetics, which are similar to avant-garde visual traditions, function as a metaphor for distorted perception and unstable identity. Mason says that glitch art recalls Cubism and Dadaism in its fascination with collage and repurposed combination, breaking the unified whole of the unbroken image data through visual fragmentation. In line with Lacan's concept of "empty signifiers"<sup>6</sup>, whose meaning varies based on the reader's frame of reference, this disruption reflects post-structuralist concerns with the deconstruction of meaning and subjective interpretation. Thus, the glitch turns into a metaphor for existential instability, plurality, and discontinuity.

#### **2.2.3.2.3 Glitching as a Narrative Device**

Glitching, a digital artifact resulting from errors in data processing, has become a popular visual metaphor in contemporary media. It stands for the disruption of order, the revelation of underlying systems, and the fragility of technology. Glitch becomes an engine for nonlinear storytelling by reorienting narrative from a set storyline to a procedural transformation through

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<sup>6</sup> "Empty signifier" refers to a signifier that lacks a fixed, inherent meaning and can be filled with various, sometimes contradictory, signifiers (Bettiza, 2014).

the data-bending process. “The art is in the process,” which emphasizes how a piece changes from its initial shape, is preferred over the finished product (Mason, 2012). Glitches can also produce tension and remarkable disruption of the usual flow of visuals. For instance, glitches in the computer game Oxenfree Figure 2.10 reflect supernatural aspects, therefore generating ambiguity. Glitching can also stand for human mistake or technology failure, acting as a metaphor for more general ideas like the weakness of modern life and the results of unchecked technological development. Because animators can generate surprising narrative twists or reveals of hidden information, glitching provides a unique visual language for artistic storytelling. For instance, in artificial intelligence-generated motion capture, artistic output has been enhanced by means of glitches, therefore producing surprising favorable results (Maldon, 2025).



Figure 2.10: computer game Oxenfree.

#### 2.2.3.2.4 Innovative Narrative techniques

One of the most significant contributions of hybrid animation to contemporary cinema is its ability to employ innovative storytelling techniques that expand visual narrative possibilities. By combining 2D and 3D elements, hybrid animation allows filmmakers to experiment with different narrative structures and visual metaphors, creating new ways to tell stories that would not be possible using traditional animation techniques alone. This section explores how hybrid animation is used to develop novel approaches to storytelling, focusing on visual metaphors, symbolism, and non-linear narratives.

Hybrid animation's potential for visual innovation lies in its ability to use contrasting animation styles as a visual metaphor. As Rosita (2025) explains, hybrid animation can employ different animation techniques to symbolise various aspects of a story, such as characters' psychological states or the thematic underpinnings of a narrative. For example, in *Spider-Man: Into the Spider-Verse*, the filmmakers use visual metaphors such as glitch effects to stand for the instability of the multiverse, while different animation styles are used to distinguish between the various Spider-People and their unique journeys.

In addition to visual metaphors, hybrid animation is well-suited for the use of symbolism, which can be embedded into the visual design of the animation. Symbolism in hybrid animation often takes the form of visual cues that hint at deeper narrative meanings or thematic concerns (Rosita, 2025). In *Spider-Man: Into the Spider-Verse*, for instance, the symbolic use of color, lighting, and textural elements helps to underscore the film's exploration of identity and belonging. The contrast between the brightly colored world of Miles Morales and the darker, more muted tones of other dimensions symbolizes the tension between his emerging identity as Spider-Man and the established Spider-People from other universes. This use of color and texture serves as a visual shorthand for the film's thematic exploration of individuality and heroism, adding layers of meaning to the narrative through symbolic imagery.

Another innovative storytelling technique that hybrid animation eases is the manipulation of non-linear narrative structures. Hybrid animation's flexibility in blending different visual styles allows filmmakers to experiment with narrative timelines and parallel storytelling. Filmmakers can create non-linear, visually coherent, engaging stories using distinct animation techniques to represent different timelines or realities. In hybrid animated films, such as *Spider-Man: Into the Spider-Verse*, the use of multiple animation styles helps the audience distinguish between different dimensions and timelines, making the non-linear narrative structure more accessible and visually stimulating (Saber, 2023).

Non-linear storytelling in hybrid animation also benefits from the ability to shift between 2D and 3D animation, which can signify changes in time, perspective, or reality. For example, scenes in a different timeline or dimension can be animated in a distinct style, signaling to the audience that they are in a different narrative space. This approach allows filmmakers to weave together complex storylines without confusing the viewer, as the visual distinctions help to clarify the narrative structure (Bruckner, 2015).

In conclusion, hybrid animation offers a powerful tool for innovative storytelling, allowing filmmakers to experiment with visual metaphors, symbolism, non-linear narratives, and pacing. The flexibility of combining 2D and 3D techniques opens new possibilities for narrative construction, enabling filmmakers to explore complex themes and structures in ways that would be difficult to achieve using traditional animation alone. Films like *Spider-Man: Into the Spider-Verse* exemplify how hybrid animation can push the boundaries of storytelling, creating visually and thematically rich narratives that resonate with audiences.

#### **2.2.3.2.5 Hybrid Animation: Tension and Transformation**

Hybrid animators, who combine different animation techniques such as 2D and 3D, often use narrative devices like plot structure and character development to create narrative tension and transformation. These elements are crucial in engaging audiences and conveying complex themes effectively. Below is a detailed exploration of how these narrative devices are employed in hybrid animation, supported by insights from diverse studies and analyses.

#### **2.2.3.2.6 Plot Structure in Hybrid Animation**

The archplot structure, a goal-oriented narrative with a clear beginning, middle, and end, is commonly used in hybrid animation to create tension and drive character development. This structure, as seen in films like *Bhumi*, consists of three acts, six stages, and five turning points, which help in building a missionary journey for the protagonist (Surasa, 2022). The use of archplot can help ensure that the narrative progresses logically, with each act and stage contributing to the overall tension and transformation of the characters.

Non-linear narrative structures are used to enhance character development and emotional engagement. Studies on animated short films like *The Coin* and *Negative Space* demonstrate how non-linear storytelling can create a deeper connection with the audience by distorting time and focusing on the psychological aspects of the characters (Saber, 2023). This approach allows for a more complex exploration of the characters' inner worlds, leading to a more impactful narrative.

#### **2.2.3.2.7 Character Development in Hybrid Animation**

The Embodied Plot model, which prioritizes character psychology over traditional plot structure, is increasingly used in hybrid animation. This model suggests that the dramatic arc of the narrative is driven by the protagonist's internal experiences and problem-solving processes (Tu & Brown, 2020). By focusing on the character's psychological journey,

animators can create more nuanced and relatable characters, whose development is deeply intertwined with the plot. The relationships between characters play a significant role in their development. Research on films like *Ngeri-Ngeri Sedap* highlights how relationships between characters influence the psychological, physiological, and sociological dimensions of 3d characters (Yoel et al., 2024). These interactions often lead to positive or negative transformations, which are central to the narrative tension and resolution.

#### 2.2.3.2.8 Narrative Tension and Transformation

Hybrid animators often use ecological and ethical themes to convey transformation. Chinese minority-themed animations, for instance, focus on the harmonious coexistence of humans and nature, reshaping the audience's understanding of ecological relationships (Chen et al., 2024). These themes not only create narrative tension but also inspire reflection on real-world issues. Cultural hybridity in animation can also serve as a tool for social commentary. Films like *Big Hero 6*, Figure 2.11 blend multicultural elements to address identity politics and racial struggles, albeit sometimes oversimplifying these issues (Zhang, 2024). This approach highlights the potential of hybrid animation to explore complex social themes while keeping broad appeal.



Figure 2.11: *Big Hero 6* movie poster, Disney, 2014.

#### 2.2.3.2.9 Innovative Storytelling Techniques

Hybrid animators in the gaming industry use character-based models to generate interactive narratives. These models combine multi-agent planning with drama management strategies,

allowing for dynamic and engaging storylines (Lima et al., 2022). This approach ensures that the narrative adapts to the audience's interactions, creating a unique experience each time.

The use of transmedia storytelling, as discussed in *Dramatic Storytelling & Narrative Design*, allows hybrid animators to extend their narratives across multiple platforms (Berger, 2019). This approach not only enhances the story's longevity but also provides opportunities for deeper character development and world-building.

#### **2.2.3.2.10 Narrative limitations**

The storytelling limitations of hybrid animation become clear when unexplained formal gaps between 2D and 3D elements occur. According to Wells (1998) animated storytelling succeeds through expressive mutability which enables visual forms to transform emotionally and symbolically. Style shifts in mutability without narrative explanations create audience confusion rather than deeper storytelling. The audience experiences a continuity break when a 2D flashback sequence appears inside a 3D setting because it lacks proper transitional logic (Cooper, 2002). The narrative rhythm breaks down while emotional pacing weakens when visual inconsistency occurs.

The inconsistency in visual elements creates a major problem which disrupts how audiences connect with characters. The expressive lines and abstracted forms of stylized 2D figures create a different emotional connection with viewers than the volumetric appearance of rendered 3D characters. Different visual styles that lack a unified aesthetic system make it difficult for viewers to show emotional connections across the narrative. According to Paul Wells emotional credibility in animated characters appears from internal coherence rather than realistic depictions (Wells, 1998; O'Hailey, 2015).

Visual contrast does not create problems. The narrative function of form becomes clear in *Spider-Man: Into the Spider-Verse* when Spider-Man Noir appears in monochrome 2D drawings inside a fully textured 3D environment to signify his alien nature. The thematic purpose of dissonance creates a productive effect in this narrative. The actual restriction occurs when visual changes do not follow the logical framework of the story world. The success of hybrid animation storytelling relies more on intentional formal design than on keeping uniform style because each stylistic shift must advance character development or plot progression or emotional resonance.

### **2.2.3.3 Case Study: Making of a Hybrid animation story with Artificial intelligence.**

In this section of the subtheme, I will be discussing the process of producing the hybrid animated short: *Naya and the Shadow in the Woods*, developed as a case study to explore the relationship between form, movement, narrative, it focuses on the effect of technological advancement on hybrid animation. The project was done entirely using artificial intelligence tools for idea creation, design, animation, and audio, excluding only the montage, which was completed manually using Adobe Premiere Pro.

#### **2.2.3.3.1 Concept Development and Narrative Construction**

The story was created using ChatGPT 4.0, which was used to conceptualize and write a script for a children’s story that focuses on bravery. The narrative was built for a young audience (ages 5–8) and planned to support visual storytelling with minimal to no dialogue, making it suitable for hybrid animation treatment, by focusing on the Form part. It explored a young girl’s emotional journey called “Naya,” as she wanders into a forest to rescue her lost puppy, with key scenes written to reflect character transformation, narrative pacing, and thematic contrast.

#### **2.2.3.3.2 Visual Design and Prompt Engineering**

ChatGPT-4.0 wrote prompts for image generation after the script was completed. The prompts were carefully designed to keep visual continuity of the main character (Naya) and to emphasize the integration of 2D character elements with 3D environmental depth. Especially its use of Ben Day dots, comic book speech bubbles, vivid color palettes, and graphic contrasts between 2D and 3D objects, the style deliberately referenced the look of *Spider-Man: Into the Spider-Verse*.

Every one of the twenty-four story sequences was turned into textual cue and then created using a modern artificial intelligence image generator called Sora. Especially in the forest passages (Scenes 10–21), designed as dark enchanted woods with volumetric lighting, fog, and luminous textures, scene development was kept through continuous camera viewpoints and environmental continuity.

#### **2.2.3.3.3 Video Generation and Motion Application**

To make the still images come alive, motion cues were developed in line with the visual and narrative needs of every scene. These covered camera pan descriptions, parallax motion, lighting transitions, and emotional beats, character hesitancy, surprise, or relief included. The animation process was carried out using an artificial intelligence-powered video generating

program called Kling v1.6 - which accepts image-to-video conversion signals. Using Kling to replicate a hybrid animation style reminiscent of contemporary 2.5D techniques, every frame was created with soft movement and cinematic transitions.

#### **2.2.3.3.4 Audio Production and Integration**

The story started with the online text-to-speech system (<https://text-to-speech.online>). The voice used fits the intended audience and gives nice, passionate delivery. Time-aligned to the scene changes and written in a child-friendly style, the audio script was created with clarity. Further background music and transitions were timed to finish the montage using Adobe Premiere Pro.

#### **2.2.3.3.5 Output and Aesthetic Goals**

The final output was a short film employing a coherent hybrid animation technique that completely blends artificial intelligence-generated story, images, audio, and motion. The study reveals how readily available platforms let artificial intelligence tools adopt a Spider-Verse-inspired approach to replicate high-end hybrid aesthetics. The story focuses on formally composed layering, stylized lighting, and hybrid depth. Storywise, it reflects classical narrative arcs generated with artificial intelligence-assisted spontaneity.

#### **2.2.3.3.6 Purpose and Technological Significance**

Particularly in hybrid animation environments where 2D and 3D technologies coexist, this work aimed to question the evolving function of artificial intelligence in the animation sector. It shows how generative co-authors, capable of scripting, designing, animating, and vocalizing a story with least manual intervention, AI can be. Furthermore, considered in the study are the flaws in current technologies, including the rigidity of image-based animation platforms and the challenges keeping artistic authenticity across artificial intelligence output.

Looking at AI-driven hybrid animation, *\*Nina and the Shadow in the Woods\** finally serves as both a narrative piece and a methodological case study. It points toward democratized media production, in which creators, even without traditional animation knowledge, may rapidly produce high-concept animated works by rapid engineering.

### **2.2.3.3.7 Conclusion**

The introduction of artificial intelligence (AI) into hybrid animation pipelines creates a complete transformation that stands for both a creative milestone and an advanced production skill level. The sub-themes of this chapter show artificial intelligence has significantly transformed script-writing and character design and animation tools and production flow. The technology reduces production schedules and enables smaller studios and solo artists to access new levels of automation and visual complexity and interactive capabilities.

The case study “Naya and the Shadow in the Woods” shows how artificial intelligence enables the development of a complete hybrid animation project from concept to delivery without requiring advanced technical ability. The potential of artificial intelligence extends to both modular AI integration for hybrid animation enhancement across production stages and creative sector transformation.

The development of artificial intelligence for animation faces multiple difficult constraints together with limitations. The human element keeps control over qualities which require creative direction and narrative depth and imaginative precision. The ethical problems stemming from artificial intelligence require immediate resolution through responsible systems that address authorship concerns and representation bias and data privacy and creative labor displacement. The combination of 2D and 3D elements in hybrid animation requires ongoing challenges to achieve visual consistency and narrative unity and movement smoothness. The limitations of hybrid animation include visual and aesthetic, narrative, movement, and technical limitations.

## Chapter 3: Research methodology

### 3.1 Research Focus and Analytical Approach

The analysis investigates the production of meaning through hybrid animation techniques by analyzing how 2D comic visual grammar combines with 3D spatial form and cinematic movement in *Spider-Man: Into the Spider-Verse* (2018). The research investigates the visual meanings of *Spider-Man: Into the Spider-Verse* (2018) through a qualitative approach that examines each frame and uses formal analysis and kinetic analysis, and narrative analysis.

The analytical framework relies on Panofsky's three-tiered model (pre-iconographic, iconographic, and iconological levels) that originally analyzed static images, but the research extends it through post-Panofskyan adaptations to study animated movement. The research extends Panofsky's model by incorporating animation theory lenses because Holly (1984) and Mitchell (1994) pointed out its static-image limitations.

The core research question is:

The investigation examines how hybrid 2D/3D animation methods create formal and kinetic and narrative meaning during intense action sequences and transformation events.

The research uses purposive sampling to analyze eleven sequences that display Miles Morales' major transformations in his identity and agency. Qualitative visual research employs thematic intensity and narrative typicality as selection criteria for this study. The analysis required frame-by-frame image capture for studying visual form and movement style, and narrative progression at microscopic intervals. Three levels of coding were conducted:

- Formal coding (e.g., paneling, halftones, spatial layering)
- Kinetic coding (e.g., frame-rate modulation, smear frames, squash and stretch)
- Thematic coding (e.g., identity crisis, rupture, transformation)

To overcome the limitations of Panofsky's model, this research selects three additional theoretical perspectives to enhance its analysis.

- Scott McCloud: for decoding 2D visual grammar and comic-derived sequencing;
- Paul Wells: for analyzing metamorphic performance and visual exaggeration;
- Tom Gunning: for interpreting moments of sensory rupture via cinema-of-attractions theory.

The frameworks were used contextually to analyze visual properties that existed in each scene. The research extends beyond stylistic decoding because it investigates how motion acts as a meaningful vehicle that classical art-historical methods commonly neglect.

The developed model combines Panofsky's structure with motion-aware lenses to create a preliminary hybrid visual analysis tool, which requires additional development for future doctoral research.

### **3.2 Research Orientation and Methodological Foundations**

The research adopts a constructivist-interpretivist paradigm because it views meaning as context-dependent and emergent from visual design. The research method uses Grounded Theory as its foundation, yet it does not follow the complete procedures of open or axial coding. The method employs inductive visual interpretation, which generates insight through repeated exposure to stylized visual data while applying medium-specific theories.

As Ledford et al. (2018) affirms, case-based visual analysis is suitable when addressing “how” and “why” questions, particularly when analyzing real-world artifacts over which the researcher has no control. *Into the Spider-Verse*, as a commercially produced feature film, provides such a context.

The methodology follows qualitative scene analysis as mentioned in Mikos (2014), with particular focus on the aesthetics and configuration of moving images. In Mikos' model, five levels of film analysis are proposed: Content and representation; Narration and dramaturgy; Characters and actors; Aesthetics and configuration; Contexts.

This study focuses primarily on level 4: aesthetics and configuration, particularly as it relates to camera movement, animation layering, color and lighting composition, and temporal shifts in motion (frame rate, smear frames, etc.). Philosophically, this is a non-positivist inquiry into semiotic and performative meaning in visual texts.

### **3.3 Case Selection: Scenes as Sites of Transformation**

The research examines eleven key scenes out of approximately 113 scenes in total, which were chosen through purposive sampling, because they mark both narrative shifts and the highest points of the hybrid animation technique. The scene selection process followed a detailed analysis of *Spider-Man: Into the Spider-Verse* beat sheet, while Snyder's *Save the Cat!* and its

application in the Zoom-In Beat Sheet Analysis (Milles, 2023) guided the film’s narrative structure. The selected scenes occur during periods of intense change and internal struggle and visual disruption, which match the major beats of Catalyst, Debate, Break into Two, Midpoint, All is Lost, and Finale.

The selected scenes serve both narrative purposes and visual expression while showing the hybrid animation grammar through the combination of 2D elements (e.g., halftones, panels, comic effects) with 3D spatial dynamics. The visual elements in these scenes create the best conditions to study how psychological development and emotional stakes manifest through visual representation. Focusing on a limited number of high-impact scenes allows for deep frame-by-frame analysis without diluting interpretive depth.

**Table 1: Scenes Selected and Their Narrative Function.**

| SCENE # | SCENE TARGETED                                    | NARRATIVE FUNCTION                |
|---------|---|-----------------------------------|
| 1       | The Spider Bite                                   | foreshadows multiverse disruption |
| 2       | First Manifestation of Powers.                    | Comic disorientation              |
| 3       | Collider First Encounter and Peter Parker’s Death | Provoking disaster                |
| 4       | Prowler Chase Scene                               | Intensified exposure to danger    |
| 5       | The Graveyard.                                    | Mentor transfer                   |
| 6       | Alchemax Lab Infiltration                         | First mentorship test             |
| 7       | The Rooftop Confrontation                         | Betrayal & catalyst               |
| 8       | Father and Son are separated                      | Post Trauma.                      |
| 9       | The Leap of Faith                                 | Self-acceptance                   |
| 10      | Final Battle: Kingpin Vs Miles                    | Protagonist victory               |
| 11      | The Brooklyn Swing.                               | Re-positioned identity            |

Each scene was broken down into key still frames using digital playback and frame-by-frame analysis. Frames were selected at moments of transformation, whether in visual rhythm, emotional tone, or symbolic gesture. Attention was paid to animation-specific cues such as asynchronous vs. synchronous frame rates, comic-text overlays, camera distortion, and expressive composition, in line with the narrative beats defined in the structure.

### 3.4 Sampling Strategy

This study adopts a purposive, non-random sampling approach. Sampling decisions were made based on typicality and intensity (Flick, 2014): that is, scenes were chosen because they most clearly show the required formal qualities under investigation. These sequences are not representative of the entire film but are strategic parts where hybrid animation techniques are concentrated and with the highest narrative impact.

### 3.5 Analytical Framework and Criteria

The analytical framework follows a three-axis structure grounded in animation theory:

**Table 2: Analytical Framework and Criteria.**

| Dimension | Analytical Focus   |
|-----------|--|
| Form      | Composition, layering of 2D/3D elements, color and lighting, comic-style texture (e.g., halftones, speech bubbles) |
| Movement  | Frame rate, camera motion, character pose/expression, smear frames, squash/stretch, perspective changes            |
| Narrative | Role of moment in plot arc, transformation, tension, character agency, emotional tone                              |

Each frame cluster was examined using Panofsky's iconographic model:

- Level I (pre-iconographic description): Surface features such as color palette, gesture, angle, pose
- Level II (Iconographic analysis): Recognizable motifs (e.g., comic-book references, superhero tropes)
- Level III (Iconological interpretation): Cultural/symbolic meanings of identity, rupture, or transformation.

A fourth layer, Post-Iconographic Commentary, was added to apply media-specific insights from McCloud, Wells, and Gunning. Each scene was broken down according to this structure:

- Form: interpreted with McCloud (panel rhythm, masking, visual metaphor)
- Movement: interpreted with Wells (distortion, metamorphosis, exaggeration)
- Narrative: interpreted with Gunning (attractions, tension modulation, sensory overload)

### **3.6 Researcher Reflexivity**

The research investigation took place through the dual viewpoint of both the researcher and a trained character animator. My academic background in media and visual culture, combined with hands-on training from the Animation Mentor online school, where I finished a complete character animation course. My understanding of motion details and timing, and performance rules in animation, developed from practical experience. The combination of artistic goals and production methods in each scene enabled me to conduct more detailed visual assessments.

The structured framework of Form, Movement, Narrative was used consistently to mitigate bias, and theoretical references were used as analytical tools rather than prescriptive templates. Regular reflection and comparison to prior frames allowed for iterative refinement of insight.

### **3.7 Limitations and Scope**

This study is limited to publicly accessible visual material, using official Blu-Ray and streaming copies for stills and scene dissection. No access was granted to behind-the-scenes animation assets or production documentation. Interviews and production notes were originally intended, but were excluded due to non-responsiveness from industry contacts.

While the analysis is not generalizable, it offers a depth-oriented understanding of hybrid animation's expressive ability in action storytelling.

## Chapter 4: Analysis and Findings

### 4.1 Background of the Film



Figure 4.1: Spider-Man: Into the Spider-verse poster, Sony Pictures, 2018.

Spider-Man: Into the Spider-Verse (2018), Figure 4.1 It is an animated feature produced by Sony Pictures Animation in collaboration with Marvel and directed by Bob Persichetti, Peter Ramsey, and Rodney Rothman. The film reimagines the Spider-Man character through the story of Miles Morales, a teenager of an African American father and a Puerto Rican mother, who becomes the new Spider-Man after the death of his universe version of Spider-Man man Peter Parker. The narrative of the movie holds themes of identity, responsibility, loss, and self-empowerment through a multiversal lens, bringing together various Spider-beings from alternate dimensions.

Critically praised for its innovation in animation, Into the Spider-Verse broke conventional visual norms by combining traditional 2D comic book aesthetics with three-dimensional CGI environments and characters. The result is a groundbreaking hybrid visual style that emulates

the look and feel of graphic novels while keeping cinematic depth and motion. The film uses techniques such as variable frame rates, mixed shading styles, hand-drawn textures, and diegetic onomatopoeia to push the boundaries of animated storytelling.

The film received many awards, including the Oscar Award for Best Animated Feature along with 85 other wins and 60 nominations till 2025, and has since been recognized as a milestone in contemporary animation. Its stylistic hybridity reinforces its narrative structure, using form as a mode of character development and thematic expression. This makes *Into the Spider-Verse* a uniquely rich subject for academic analysis, particularly in the study of hybrid animation and visual storytelling.

**Directors:** Bob Persichetti, Peter Ramsey, and Rodney Rothman.

**Writers:** Phil Lord and Rodney Rothman.

## 4.2 Sample Analysis

### 4.2.1 The Spider Bite Scene

Miles Morales bitten by the radioactive spider.

Timestamp: ~00:13:26:00.



Figure 4.2: A triptych showing the Spider Bite.

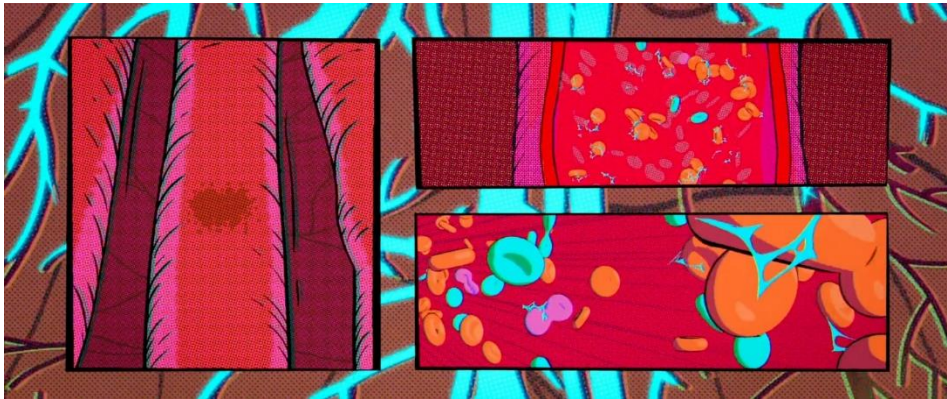


Figure 4.3: the spider bite progression in Miles' skin

### Level I: Pre-Iconographic Description

The three-panel layout Figure 4.2 The still resembles a comic book page, which establishes its connection to graphic novel traditions with various comic book elements, such as color shifts and Ben Day dots, in order to replicate the appearance of printed ink, by using Ben-Day dots generated in a 3D shader pass, then composited at screen-space, mixing comics grammar into CG volume. The first panel shows the genetically modified spider (close-up shot), featuring an image of its spider head. The eight polished, black marble-like eyes of the figure resemble multiple lenses, while its body displays colors such as green, turquoise, and various purples. The combination of these elements creates a stylized consistency that keeps volumetric lighting and introduces graphic lines, patterns, and textures created on the surface of the 3d model of

the spider using different tools and techniques. The spider in these panels shows thick hair on its limbs (fangs).

The spider structure shows a glowing turquoise limb in the second and third panels of the first still shown in Figure 4.2 while it penetrates through the outer skin layers of Miles Morales. The three images illustrate the steps of the spider bite. The still shows Miles' skin completely penetrated by the spider's front fangs. Two-dimensional lines with pointed ends to depict the cracks in the outer layer of skin, which represent the force of these fangs. The second image shown in Figure 4.3, presents a two-dimensional view of Miles' hand anatomy, which shows arteries along with muscle fibers and cellular structures through bright red color, with the venom represented by light blue colors. Multiple visual effects throughout the scene show movement through color changes and hand-drawn stripes, and a Ben Day Dots mechanical printing effect that refers to comic art methods.

### **Level II: Iconographic Analysis**

The visual representation of this scene functions as a symbolic image beyond its ordinary status as a single event. The bite functions as a visual metaphor for the change that superhero stories typically show, the spider appears through a disturbing artistic view that removes it from natural biology to make it seem like a mystical or mythical being, creating a disturbing yet beautiful appearance. And this is noted in the movement of the spider, since it was animated on twos while the camera still animated on ones, producing what is called a stepped animation technique, which marks the alien movement or a mysterious being in horror movies. The multiple reflective eyes echo McCloud's polyptych gaze that is linked to simultaneity in comics.

The visual layout of Figure 4.3 replicates the arrangement of scientific illustrations and educational cartoons. The image combines two dominant colors of saturated red (crimson), which stands for blood and the inner layers of Miles' skin, with light blue, which stands for supernatural power, to create a visual effect of suffering and empowerment happening at the same time. Color functions as an expressive tool in this scene according to the influence theory, which transforms the body of the main character into an emotional space instead of being just a container.

Through intertextual analysis, the venom way of spreading inside Miles skin appears as a thunder strike pattern, Figure 4.4 that foreshadows and symbolizes Miles' future power, which narratively develops into the "Venom Strike". At this point, the animation creates an aesthetic experience that shows internal change through visual abstraction caused by using the hybrid

approach. The visual elements of jagged shapes and colors during this scene match those found in the final confrontation with Kingpin.

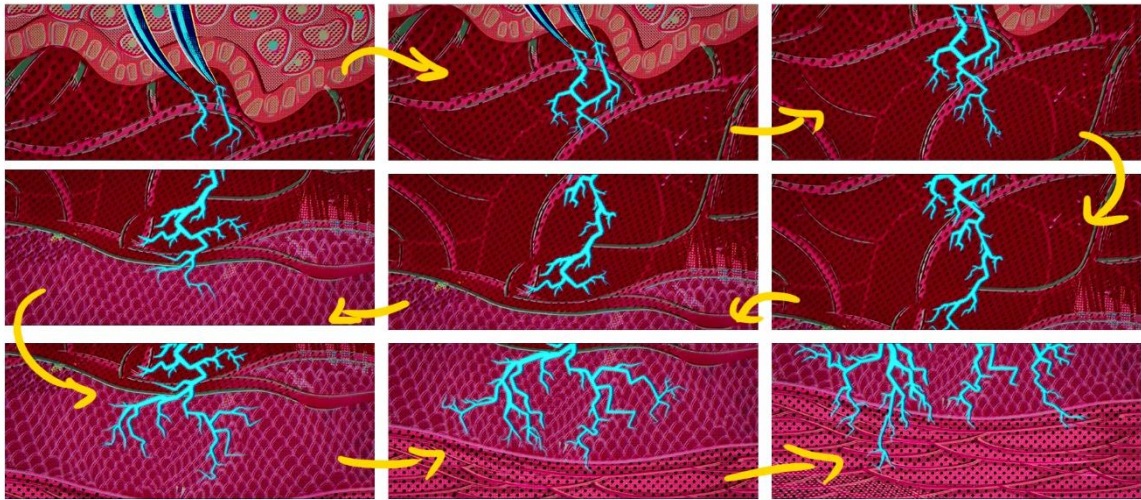


Figure 4.4: Zoomed-in pictures tracing light blue venom spreads through red vessels.

### Level III: Iconological Interpretation

This sequence functions as a cinematic symbol that stands for the fast and powerful changes that occur because of the traumatic events that the character undergoes in this still. The filmmakers used strong care to present this bite moment, which raises it to the status of a mythological transformation, artists used the Purple and green colors for the spider, which are the same colors of both, the green goblin and the prowler, which may hint the Miles could have followed a darker path as his uncle serving evil rather than good, but he was directed to good when meeting Peter Parker in later scenes in the movie. The bite scene in its core is an iconic scene for the Spider-Man franchise, like the original comic book of Spider-Man, written by Stan Lee, and the first live-action movie back in 2002 starring Tobey Maguire and directed by Sam Raimi. Through reusing this scene, the movie evokes a nostalgia effect with the audience, enhancing the immersion and engagement.

The shape of venom spreading might be translated as lightning, which creates visual connections that extend past the written text. In some Afro-Caribbean myths, lightning is controlled by a divine being called Shango (or Xango), who controls thunder, and uses its thunderbolts to achieve justice and judgment, like the Norse god of thunder, Thor's, and his thunder-controlling hammer. Following this speculative path, Miles' electric ability could be interpreted as a cultural connection that links his Afro-Latino heritage to a broader mythological

tradition of justice. The skin surge flow transforms a basic superpower into an inherited symbol of duty, which unites ancestral heritage with the contemporary role of Spider-Man. Beyond its basic narrative purpose, this scene achieves more than its intended role. Through its shape and its sudden impact, and its hybrid visual style, the scene functions as a metaphorical passage. The film transforms the spider's bite into a symbolic mark of difference, which marks the story's beginning.

### **Post-Iconographic Commentary**

Form in this sequence reconfigures the traditional spider bite into a multi-panel visual metaphor using comic-book grammar. The layout is composed of three distinct rectangular panels bordered in black, invoking a printed comic strip format. Each panel isolates a part of the spider's form, its reflective eyes, glowing cyan limbs, and fang piercing Miles's skin, proving what McCloud (1993, p. 78) terms a moment-to-moment transition, which fuses cause and effect into a frozen instant. The second frame (Figure 4.2.1.2) renders Miles's internal anatomy through graphic abstraction, using Ben-Day dots and saturated crimson overlays to depict his bloodstream, while light blue venom spreads like an electric pulse. Hybrid techniques are critical here: the spider's 3D volume is textured with cel shading and halftone overlays, while the background becomes flat, pulsing ink-space. These elements collapse anatomical realism and visual metaphor into a single hybrid plane, marking this moment not as biological fact, but as psychological rupture.

Movement is structured through frame-rate hierarchy. The spider animates on twos, producing a deliberately unnatural rhythm, while the venom, and the fangs during penetration, move on ones, creating a temporal lurch that amplifies the sting's impact. Within Miles's bloodstream, red blood cells float at a calm, steady pace on ones, while the venom cuts through rapidly, visually asserting its invasive urgency. This pacing structure demonstrates Wells's (1998, p. 69) concept of metamorphosis, where transformation is not depicted through realism but symbolic exaggeration. The venom's pulsing arc resembles lightning or energy circuits, further stylized with streaks of teal and violet. The shift from figuration to abstraction culminates in what Gunning (1986) would call a cinema of attractions beat, an interlude where narrative progression halts and sensory spectacle takes over, creating a cinematic shock that visualizes transformation as something felt rather than explained.

Narrative undergoes a fundamental break at this Catalyst beat. This is not just the biological start of Miles's transformation, it is the symbolic rupture of his identity. The spider, rendered

with hues associated with villains (green, purple), visually gestures toward the possibility of a darker path, suggesting that Miles’s direction stays uncertain. But the venom’s visual design, a flowing strike of cyan electricity, becomes a foreshadowing glyph of his eventual “venom strike” ability. The bloodstream visuals, half comic page, half medical diagram, externalize inner change as mythic inheritance. As the ink-like venom courses through his body, it metaphorically replaces his graffiti tag with comic ink, visually reinforcing his shift from creative self-expression to mythic obligation. Miles does not scream or react strongly, instead, he flicks the spider off and conceals the bite. This restraint mirrors the internalization of trauma and echoes a cultural rite-of-passage. The visual abstraction allows the hybrid style to perform symbolic labor: through 2D comic devices and 3D character animation, the moment portrays transformation as a private, mythic initiation into a role shaped by history, ancestry, and future consequence.

#### 4.2.2 First Manifestation of Powers: Dorm room Scene

Miles’ body changes

Timestamp: ~ 00:14:08:18



Figure 4.5: “Miles’ body changes scene.,” Spider-Man man Into the Spider-verse, 2018

#### Level I: Pre-Iconographical Description

The structure of this frame combines irony with visual appeal. The shot is taken from a worm ‘s-eye perspective, and the character Miles Morales looks down at his own body. The environment is identified as the Visions Academy boarding school dorm. The halftone texture, which appears on walls and surfaces, functions as a core visual element because it resembles

comic book artwork. A single yellow caption box, V.O. caption, occupies the background with its bold style “THAT’S WEIRD...” text, Figure 4.6 which sits where normally the thought bubble would be without breaking the diegetic caption. The camera position creates a minor visual distortion while stretching Miles limbs because of its angle, which makes the waist appear much wider than the normal mid shot. This simple composition and the limited color scheme in this frame create visual attention towards the character’s expression.



Figure 4.6: Annotated still highlighting the diegetic caption box and pose.

## Level II: Iconographical Analysis

The scene shows an ordinary narrative device that superhero origin stories often use especially after the cause of the transformation happens, like *Captain America: The First Avenger* 2011 or *The Hulk* 2003. The character shows both expressions of surprise and confusion about his bodily changes by looking downward and wearing non-fitting clothing that used to fit before. The posture of his body and the stretched appearance of his limbs create a sense of discomfort that reflects adolescent development. He even follows that by saying, “I think I hit puberty.” The caption box creates an expressive, less realistic atmosphere, which enhances both the comic book nature and the fictional side of the story. The method brings back a level of formal comedy that connects the frame to traditional comic book storytelling methods.



Figure 4.7: small clothes after transformation. *Captain America: The First Avenger*, 2011.

### **Level III: Iconological Interpretation**

The body's visual change in Figure 4.5 indicates an upcoming power transformation or identity shift for the character. And shows internal physical changes from the small clothing that stands for the boundaries of the old self, which the character needs to move beyond. The physical transformation aligns with broader cultural and psychological themes about puberty and identity development, and self-awareness. Through the comic caption "THAT'S WEIRD..." the narrative functions to mark a threshold where the character becomes aware of changes by recognizing his own self. The dorm room environment, which is typically associated with self-examination, intensifies the introspective nature of the moment. Through visuals and genre conventions, this frame shows the important nature of self-discovery for the main character as they start their journey of personal growth.

### **Post-Iconographic Commentary**

Form in this shot centers on comic language invading cinematic space to externalize internal change. The camera looks up from a worm's-eye angle, distorting Miles's hips into a wide trapezoid, emphasizing his awkward proportions and physical discomfort. His sweatpants appear too short, an early visual signal of transformation. The halftone textures on the dorm room walls pull from print aesthetics, subtly transitioning the environment from photoreal to comic abstraction. A bright yellow caption box saying "THAT'S WEIRD..." appears in the corner of the frame in flat 2D, sharply overlaid on the 3D scene. As McCloud (1993) defines it, this is an "additive combination," where word and image do not just coexist, but jointly create meaning. The caption does not sit passively, it punctuates the visual joke, functioning as both narration and self-commentary. Hybrid animation enables this moment of diegetic fracture, allowing text to enter the visual field as an emotional and narrative cue.

Movement is minimal, yet expressive. Miles's body shifts slightly on twos, with a subtle bounce in his hips that signals confusion and hesitation. The animation delays his physical realization; the body changes before the character fully understands it. Wells (1998) shows this kind of posture-based expression as a key feature of animation's ability to show psychological states. Miles's gesture is exaggerated by the low camera angle, emphasizing both his growing proportions and his emotional vulnerability. The caption stays static, hovering in the frame without any motion blur, acting as a visual anchor. This stillness contrasts with Miles's awkward movement and creates a comic pause, a stutter in narrative rhythm. The joke lands not through dialogue but through compositional timing. As Gunning (1986) argues, this kind of attraction moment halts story progression to create a beat of spectacle, in this case, visual humor drawn from bodily change.

Narrative here enters the Debate phase. Miles has been bitten, but he does not understand what is happening yet. This is the first visible moment of disruption, both physical and narrative. His shrinking clothes symbolize the boundaries of his old self no longer fitting, both literally and figuratively. The dorm, a space associated with adolescence, self-examination, and solitude, becomes the perfect site for this transformation to begin. The comic caption does not just describe confusion, it enacts it. This hybrid moment collapses Miles's interior monologue into visual structure, using captioning and exaggerated scale to turn a bodily realization into a symbolic beat. Through hybrid animation, mixing comic logic with character-driven storytelling, the film externalizes his discomfort, using form and rhythm to signal a threshold moment: Miles's old identity is shrinking, and his new one is only beginning to appear.





Figure 4.9: Annotated still highlighting the chromatic aberration.

### Level II: Iconographic Analysis

This arrangement of the scene shows how the main character is feeling at the moment, and how mentally panicked he feels. The frame's broken-up look stands for Miles' confused mind, which means that his view of reality is not clear; each panel can be seen as a sensory fragment that acts as a way to show how the character is feeling about his surroundings in a way that is broken up and too much for him to handle. The cropped pictures of faces and body parts make it seem like someone is looking at Miles and judging him, and the clock shows that time is running out. The laughter and facial expressions show a feeling of being alone, and the focus on the mouth may have to do with Miles' inability to speak freely. The layout of the floating panels (the anxiety board) also looks like visual surveillance, as if the character is being watched by the people around him. This moment shows a sensitive mental state brought on by changes in the body and mind, which fits with the themes of adolescence and change in the story.

### Level III: Iconological Interpretation

The hybrid approach lets the film grasp Miles' fractured Mentality and environment; the 3D character of Miles stays volumetric while 2D assets stand for psychological data, showing the mind and body at the same time. Miles must deal with the loss of a clear sense of who he is after the body changes presented in the earlier still Figure 4.5, and the sticky hand scene that happened earlier. The decision to show his surroundings through comic panels shows how the story's linearity and perceptual continuity have been broken down. This method highlights the pressures of social standards and cultural expectations, all of which make it hard to be

subjective. The comic book style, which is usually linked to order and a structured story, is broken down here to show how unstable Miles is. Because of this, Miles is portrayed as a liminal figure (in a transitional stage) who can barely respond because he is stuck between being a teenager and an adult, being invisible and being recognized, and being real and being a fictional character. He does not just feel alone; he feels like he does not belong anywhere. This shows that he is having a harder time defining himself in the face of so much change.

### **Post-Iconographic Commentary**

Form in this sequence collapses comic composition and cinematic space to express Miles's internal anxiety. Eighteen floating black-stroked micro-panels orbit around his 3D figure, each having fragmented visual data, chewing gum, shoes, whispers, clock hands, all rendered in neon duotones (magenta/chartreuse, cyan/pink). These inserts break visual unity, replacing the linear hallway with a fractured perceptual field. The corridor itself is drained of contrast, bleached into near white, allowing the swarm of panels to dominate. McCloud's (1993) notion of the polyptych, a static image where multiple moments unfold simultaneously, is realized here as overlapping sensory fragments, collapsing time into space. The comic panels function not as stylistic decoration, but as cognitive architecture: each is a visualized thought, a node of paranoia, or a social trigger. The hybrid animation technique allows 2D comic logic, halftone patterns, CMYK misregistration, heavy linework, to invade the 3D setting, transforming space into a subjective mental landscape.

Movement sets up rhythm through dissonance. Miles is animated smoothly on ones, his body gliding through the hallway, but the surrounding panels twitch on twos, producing a staccato visual counterpoint. This temporal mismatch, his steady pacing versus their erratic flicker, visually encodes disconnection. Wells (1998) argues that animation's power lies in its exaggeration of internal experience; here, the disruption of frame rate and visual layering externalizes a split between mind and body. The camera's dolly movement stays consistent, but the visual swarm around Miles resists coherence. This compositional conflict becomes symbolic: the scene shows how psychological noise can distort physical navigation. The visual overload crescendos with graphic text, "EVERYONE KNOWS.," bursting across the background, the final period landing like a cannonball. This moment, what Gunning (1986) would term an "attraction," suspends narrative progression to stage an immersive spectacle of emotion, privileging sensation over sequence.

Narrative lands in the Debate beat of Miles's arc. This is not just a moment of embarrassment, it is his crisis of identity. The hybrid visual design performs that crisis spatially: the comic panels are not abstract overlays but diegetic disruptions. They invade the frame like accusations, turning each detail, students' smiles, glances, gestures, into visual evidence of Miles's imagined exposure. His inner monologue, fragmented into rapid-fire questions and insecurities, is made visible through these captioned intrusions. The scene functions as a perceptual psychoscape: the hallway becomes the site of his breakdown between past normality and emergent transformation. Hybrid animation allows this interiority to become diegetic, mood becomes environment, thought becomes form. In this way, the film uses its hybrid aesthetic not just for stylistic flair but as a narrative mechanism. Here, form and movement do not reflect Miles's instability, they enact it.

#### 4.2.4 Collider First Encounter and Peter Parker's Death Scene.

Miles senses guide him to the collider

Timestamp: ~ 00:20:26:10



Figure 4.10: “Miles’ looking for answers scene.,” Spider-Man man Into the Spider-verse, 2018.

##### Level I: Pre-Iconographic Description

Miles Morales stands in the center of a dimly lit control room throughout this scene. this is the abandoned signal booth, which is turned into an Alchemax maintenance/assembly chamber under the Brooklyn subway, which Miles reached through the tunnels after finding the dead radioactive spider in the earlier scene; his senses guided him here. He holds his phone and flashlight on, which produces a tiny beam of light in front of him, although his face stays partially hidden in shadows. A large glass window stands behind him as it receives bright neon lighting. The words “LOOK OUT” appear in red capital letters across a blue background which combines dotted halftone textures with layered graphic nosiness to match the film’s comic-inspired design. these red letters are a diegetic onomatopoeia triggered by Miles’ emergent spider-sense, not architectural signage.

The area has control panels together with mechanical levers that stretch across both sides of the frame. The combination of blue linework - a momentary spider-sense overlay that sweeps the frame as danger approaches- extending from the floor and sides with control panels and mechanical levers creates a technological feeling. The dim lighting produces a sharp contrast between the dimly lit foreground and the well-lit background typography.

## **Level II: Iconographic Analysis**

A tense moment with warning signs appears in this specific frame. The large “LOOK OUT” typography serves two purposes as environmental text while at the same time delivering a warning message to both the character and the audience. Through his phone flashlight, Miles is representing the start of the journey to search for answers while showing his confusion and investigative nature. The way he stands displays his caution and uncertainty because he feels unfamiliar with this environment, and he is experiencing a new feeling through his spider senses.

The composition of the room is mostly symmetrical, showing Miles at the center with large text extending behind him, which creates a sense of isolation and positions him as the main figure with danger coming from behind. The intense color distinction between blue and red in the film creates added tension through its dual reality symbolism. The visual elements that come from comic books (halftone dots, flat overlays, exaggerated colors) merge with 3D settings to show the ongoing blend of animation techniques throughout the movie.

## **Level III: Iconological Interpretation**

This scene symbolizes the struggle of facing danger as a form of coming of age (puberty) experience. The environmental design of the maintenance room, along with the text, “LOOK OUT,” serves as a literal warning and at the same time stands for Miles' development from being an observer to be an active defender in the final part of the movie. His flashlight shines dimly, symbolizing a limited understanding and power during this first stage of his transformation. His movement shows fear, caution, and anxiety.

The visual design of light and dark elements strengthens the dual nature between light and darkness and visible and invisible and the understood and unknown aspects, which represent both adolescent change and superhero transformation. The maintenance room environment with its panels and cold interfaces, mirrors the artificial aspects of collider and multiverse technology. Miles faces his early spiritual and narrative test as he stands alone against massive forces while the room lit by the spotlight. The stylized comic warning “LOOK OUT” symbolizes the dangerous transition into a cruel world with unlimited dangers and a lot of responsibility.

### Post-Iconographic Commentary

Form in this scene transforms architectural space into emotional language. A wall of control-room windows lights up with the bold, flat-ink caption “LOOK OUT” in scarlet red against a cobalt-blue halftone field. The environment becomes typographic; a graphic warning built into space. McCloud (1993) describes how comic sound effects function as visualized time, extending the moment’s emotional weight. Here, the diegetic text is not a sign but a psychic signal, externalized spider-sense. Halftone dot gradients and motion hatching radiate from Miles’s position, creating visual pressure. His small flashlight cone cuts a narrow beam through the darkness, isolating him at the frame’s center. Hybrid animation merges these 2D comic elements with a 3D-rendered industrial environment, converting the space into an interface for his subconscious fear. The scene reads not as physical geography but emotional landscape.

Movement works on mismatch and delay. Miles is animated on twos, hesitant, visually behind the pace of the frame’s warning system. The “LOOK OUT” typography and radiating motion lines appear on ones, creating an offset rhythm that mirrors Miles’s lagging awareness. This disjunction emphasizes internal conflict, he senses something wrong, but does not yet act. Wells (1998) explains that animation uses stylized motion and gesture to express internal states, not physical realism. Here, the flashlight beam animates like a visual metaphor for confusion, swaying unsteadily while danger builds behind him. The camera holds its dolly shot static, while color pulses and line effects surge across the environment. This visual overload fits Gunning’s (1986) definition of the cinema of attractions, an aesthetic pause that prioritizes sensation over plot advancement. The viewer is drawn into Miles’s disoriented state through graphic spectacle rather than dialogue or action.

Narrative tension culminates in the Debate beat, Miles has received a warning, but he has not yet learned to respond. This moment occurs just before the subway crash, as competing voiceovers echo through his mind: “Look out,” “You’re like me,” “I don’t want to be a hero.” These overlapping lines create a sensory overload that the animation reflects through form. The typographic warning becomes Miles’s spider-sense made visible, a hallucinated premonition he does not yet know how to interpret. The environment mirrors this confusion, the cold metal levers, symmetrical control panels, and neon typography frame him as a figure caught between knowledge and fear. Hybrid animation literalizes this threshold: text becomes architecture, thought becomes image, and inner conflict becomes spatial design. Miles does not run yet. But the visuals already show us that the world is beginning to speak to him differently.

#### 4.2.5 Collider First Encounter and Peter Parker’s Death Scene.

Miles meets Peter Parker.

Timestamp: ~ 00:22:07:01



Figure 4.11: “Peter Parker Looking at Miles,” Spider-Man, into the spider verse, 2018.



Figure 4.12: “Miles meets Spider-Man scene.,” Spider-Man man Into the Spider-verse, 2018.

#### Level I: Pre-Iconographic Description

This frame shows Peter Parker (Earth-1610 Peter) and Miles Morales facing off in a way that looks symmetrical, as they use their Spider-Sense for the first time. Both characters are shown in close-up camera angle and centered in the frame, with their faces facing each other directly. Shot reverse shot aligns their eyelines at the identical center of the screen, making a visual rhyme before any dialogue. This suggests that both the composition and the emotion are balanced. The red and blue colors in the background behind Peter are bright and saturated. These colors are often associated with the classic Spider-Man character. At first, Miles is surrounded by green and purple tones, which are often associated with villains like the Prowler. These color schemes that are opposite each other create visual tension that shows uncertainty. The composition pulls separate Cyan and Magenta dot passes, shifting Miles from Prowler purple toward Spidey red over four frames.

There are motion effects like vibrating squiggles, Ben-Day dot ripples, and halftone distortions that come from both characters’ heads. These effects show that their extrasensory ability has been activated. The animation style combines 3D character modeling with 2D visual textures.

For example, Peter’s suit has crosshatching and ink-like details that are easy to see, while Miles features are defined by a little cel-shading. The use of stylized flattening at key points makes the change from realistic movie scenes to comic book-like scenes clearer, which makes the scene more emotional.

### **Level II: Iconographic Analysis**

This scene is a key moment in the story; it links Miles with his own universe’s Spider-Man; simultaneous spider-sense pulses confirm a shared physiology. it is also a way for spiders to understand and communicate with each other. The two characters, who are of different ages and sizes, realize that they are similar. The alignment of their posture, gaze, and the way the colors around Miles’s change show how the sensory bond connects them. The first impression was confusing since the aura of miles held the green and purple colors. But now, his aura shifts toward Peter’s red and blue in 36 frames, which means that Miles is no longer seen as an outsider, but as family.



Figure 4.13: “You Are Like Me scene.,” Spider-Man: Into the Spider-verse, 2018.

“You are like me,” Peter says, which is a symbolic affirmation. It is not just a statement; it is a speech that changes things. It is a verbal confirmation of a metaphysical truth that has already been felt. The Spider-Sense, working at the same time, acts as a ceremony of passage that lets Miles take on the symbolic identity of Spider-Man. Also, the stylized way this moment is shown, with comic book textures and dot matrices, fits with the film’s visual grammar, which shows that sharp perception changes like awareness and the way the world looks.

### **Level III: Iconological Interpretation**

This scene deals with ideas of inheritance, recognition, and belonging on a deeper cultural and symbolic level. The Spider-Sense is an arachno-frequency<sup>8</sup>, which acts as a metaphysical thread that connects spider people across time, space, and dimension. As the movie's story says, this frequency is an internal radar that goes beyond spoken language. At this moment, it confirms destiny: Miles is not here by chance; he is here because the universe planned it that way. The feeling is also like interoception, which is the ability to be aware of your own body. The movie makes this internal process visible through stylization, which lets the viewer feel emotional. This meeting is also a way for culture to pass on, Peter, without realizing it, takes on the roles of mentor and symbolic ancestor, seeing in Miles not only similarity but also as his successor. The red and blue colors stop being just costumes and start to mean something about lineage. In terms of the story, this moment is like the Call to Adventure in the Hero's Journey. It ends Miles' first stage of feeling alone and puts him on the road to defining himself. The world, which used to be too much and out of control, now starts to show where he belongs. Miles crosses a line into myth and the multiverse through recognition and a shared sense.

### **Post-Iconographic Commentary**

Form in this shot is built on a mirrored composition and a symbolic color contrast. Peter Parker and Miles Morales are framed in symmetrical close-ups, with matching eye-lines and near-identical framing that establishes visual parity. Peter's side is backlit in vibrant reds and blues, the classic Spider-Man palette. At the same time, Miles is initially cast in violet and green, colors historically associated with villainy or instability in the film. This chromatic opposition creates visual tension, but a subtle color transition, a cyan and magenta dot passes, shifting over 36 frames, reorients Miles toward Peter's palette, visually signaling a shift in allegiance and self-perception. Stylized Emanata, radiating lines, halftone distortions, and jagged lines appear from both characters' heads, externalizing their shared Spider-Sense. As McCloud (1993) argues, these comic devices make invisible emotions and sensations visible, turning inner realization into graphic form. The hybrid animation flattens depth using 2D texture passes over 3D models, allowing psychological insight to overtake physical realism.

Movement is subtle but rich in symbolic rhythm. Peter leans in with confident ease, while Miles pulls back with hesitation. These opposing gestures enact what Wells (1998) calls "conflicting

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<sup>8</sup> "Arachno-frequency" refers to a concept introduced in Marvel's Spider-Man comics, describing the unique frequencies that Spider-People use to perceive their spider-sense. (Jung, 2019)

modes of movement,” a visual language that reveals character states through physical rhythms (p. 114). Their micro-motions are animated with exact timing: Peter moves on ones, steady and forward; Miles shifts slightly on twos, resistant but curious. A single frame-flash punctuates their synchronized spider-sense, a sensory overload cut that breaks narrative flow and aligns viewer emotion with the characters’ internal bond. Gunning’s (1986) theory of attraction applies here not for spectacle but for affect: the flash disrupts time to center the viewer in this mutual recognition. The hybrid frame layers comic markers and cinematic rhythm to express a metaphysical bridge, more than communication, this is psychic attunement.

Narrative progression enters the B-Story through this beat: recognition, mentorship, and emotional inheritance. Peter’s line, “You’re like me,” is both confirmation and invitation. It marks the first moment Miles is recognized not as an outsider, but as part of a mythic lineage. Their shared Spider-Sense is framed not just as a physical trait, but as a spiritual frequency, what the film proposes as the invisible thread between spider-beings across dimensions. The scene visually and emotionally enacts the Call to Adventure: Miles no longer stands alone in the collider’s massive chamber; he is seen, mirrored, and invited forward. The hybrid animation, combining 2D comic grammar with 3D space, translates this invisible transmission into a visible ritual. Radiating lines, aura shifts, and mirrored framing all perform the handoff of legacy. This is not just an origin story; it is a visual thesis: Spider-Man is not one story; it is a shared condition. And Miles, whether he accepts it yet or not, is already inside it.

#### 4.2.6 Collider First encounter and Peter Parker's Death Scene.

Peter and the Multiverse portal.

Timestamp: ~ 00:25:21:01



Figure 4.14: “pushed into the beam scene.,” Spider-Man: Into the Spider-Verse, 2018.

##### Level I: Pre-Iconographic Description

The still is a part of the first collider battle where The Green Goblin pushes Spider-Man (Peter Parker) into an unstable energy beam made by the collider, which is very abstract and stylized. The picture is made up of a bright and distorted mix of colors that explode in a kaleidoscopic way. The main colors are red, green, cyan, pink, yellow, and electric blue. There are many copies, layers, and pieces of Spider-Man's mask and eyes throughout the composition. These are drawn with bold halftone textures, contour hatching, and comic linework.

The background is made up of chaotic, glitchy splashes of visual distortion, with digital threads that move sideways, cutting through the image from all sides. There is not just one light source; instead, the whole visual field is filled with moving and colored light. The frame is flat in depth and busy in visual layering, which makes the experience on purpose too much. This design style not only suggests action, but also a break in reality itself.

##### Level II: Iconographic Analysis

This scene is like the part of the story where Peter Parker is hit by the collider's energy, and we can see the portal to the multiverse from his point of view. The distortion in the images, especially the repeated rendering of Spider-Man's face, shows how dimensional instability can break up the multiverse. Using too much chromatic aberration and graphical glitching is a literal

and figurative way to show how Peter’s body (and the world) are breaking down because of the collider’s force.

The many Spider-Man masks represent echoes in time and space. The shot reads as a frame-by-frame of the one body being temporally sliced. This glitching becomes a metaphor for interdimensional interference, which hints at the arrival of alternate Spider-People that can be seen when the movie is played frame by frame. The point of view makes the confusion more personal, letting the audience see Peter’s trauma as both personal and universal.



Figure 4.15: “Multiverse Spider Characters scene.,” *Spider-Man: Into the Spider-verse*, 2018.

The visual grammar follows comic book rules like halftones, cross-hatching, and bright primary colors, but it does so in a way that is digitally enhanced; the beam consists of ink splashes like a particle stream. These formal elements show that we are seeing a more real world, one that is not limited by the laws of nature but by the collider’s own logic for the multiverse.

McCloud (1993) highlights what he calls the masking effect which through duplicate masks can be used to show identity fragmentation. The breakdown of the frame through smear effects becomes Wells metamorphic dance of dissolution (Wells 1998, 105). The hallucinogenic colors in this shot create an attractions-based visual overload which surpasses intellectual understanding (Gunning 1986).

### **Level III: Iconological Interpretation**

This frame serves as a visual allegory for rupture, transition, and metaphysical transformation. The crash between Spider-Man and the multiverse beam echoes religious iconography for the

viewer, e.g., a time of giving up, breaking down, and being reborn. The glitching effect is more than just a stylistic choice; it also shows how unstable life can be, with a hero being pulled apart by forces that cannot be understood.

On a deeper philosophical level, the frame shows the viewer that reality is made up of many shards of pieces. The shattered Spider Man faces challenge the idea of identity as a whole. Every mask is an avatar, an updated version of the Spider Man story that the movie will later tell. The visual layering becomes a strategy for the story structure: there are many identities, stories happening at the same time, and universes are unstable but connected.

This is also the moment when Peter Parker symbolically learns about the universe. The view he gets from the collider is not just light and data; it is also access to mythic time, where every Spider-Man has lived, is living, or will live. His perceptual breakdown does not mean death, but revelation. The heroic self starts to fade away so that other people can come through. This picture shows the spiritual main idea of *Into the Spider-Verse*: that everyone has the potential to be a hero, which can be seen in times of crisis and realized through diversity.

### **Post-Iconographic Commentary**

Form in this frame abandons physical logic in favor of symbolic fragmentation. Spider-Man's identity dissolves into five chromatic mask shards, red, cyan, yellow, magenta, green, each cut out as flat 2D planes bearing halftone patterns and bold contour lines. These fragments are suspended inside a field of glitch energy, where RGB streaks cut across a textured void with no fixed light source. This stylized abstraction, built from comic-book grammar and digital visual noise, turns Peter's mask into a kaleidoscopic mosaic. McCloud's (1993) masking effect becomes literal: the shattered Spider-faces no longer conceal identity but expose multiplicity. Each mask is a stand-in for another possible self. The background consists of particle streams and ink-smear vectors rendered without motion blur, reinforcing the hand-drawn illusion inside a digital collapse. The hybrid animation merges 3D form with 2D comic techniques to rupture the visual field. What results is not realism but overload, a frame flooded with too much data, meant to signal rupture, not resolution.

Movement becomes destabilized. As Peter is shoved into the collider beam, the motion breaks conventional time: frames stutter, duplicate, and smear Figure 4.16 in directions that no camera could follow. The energy trails ripple diagonally, guiding the eye from green to magenta to cyan, visual sequencing that mirrors a temporal fracture. Wells (1998) describes this kind of animation as metamorphic: form melts, not to mimic reality, but to express identity collapse.

Spider-Man glitches because the collider’s pulse does not just hit his body, it tears through his narrative. Speed-lines, particle bursts, and overlay effects interrupt naturalistic movement, replacing it with symbolic distortion. Gunning’s (1986) cinema of attractions logic governs here: the scene stalls the story to present visual spectacle, offering an awe-state rooted not in plot but in form. The viewer does not follow the action; they experience its rupture.



Figure 4.16: Smear frames: Spider-Man: Into the Spider-verse,2018.

Narrative transformation begins through dissolution. This moment marks the Break into Two, the story fractures as the multiverse cracks open. Peter’s collision with the collider is not just physical; it is mythological. His identity is split across timelines and space. The repeated mask shards signal that “one and only Spider-Man” no longer exists. What begins as Goblin’s physical assault becomes a metaphysical release. The collider renders identity unstable, showing Peter not as singular but as part of a wider network of masked possibilities. Miles has not entered this sequence yet, but its meaning orbits around him. The loss of Peter in this beam becomes Miles’s burden to carry. The film’s central thesis, that anyone can wear the mask, is planted here in silence, before it is ever spoken. The hybrid animation visualizes this transition: glitch logic replaces linear story logic, and the world reveals itself as a layered multiplicity. Peter’s POV becomes the audience’s initiation into a new mythic space: the Spider-Verse.

#### 4.2.7 Prowler Chase Scene – The Glove.

Prowler's Glove Strikes

Timestamp: ~00:28:42:20



Figure 4.17: “Prowler Glove scene.,” *Spider-Man: Into the Spider-verse*, 2018.

##### Level I: Pre-Iconographic Description

The frame shows an intense close-up view of the Prowler's mechanical glove, which projects violently into the scene from the right, which is technically known as the impact panel. A deep purple field with layered halftone shading and Ben-Day dot textures provides the backdrop where a bright green starburst of impact radiates outward. The burst lines display jagged explosive forms that resemble the comic-book stylistic energy. The metallic construction of the glove stands out against the saturated background through its sharp contrast appearance and its sharp metallic contours. The composition uses angular lines to create a posterized effect that emphasizes the sudden and violent nature of the interruption.

##### Level II: Iconographic Analysis

The picture shows wide symbolic value. A violent green explosion destroys the peaceful purple atmosphere to reveal both emotional breakage and story-based surprise. The color transition serves a purpose since green functions as a disturbing space, which interrupts the previous blue and purple color scheme. Through its mechanical structure the glove shows both menacing qualities and deception. Aaron Miles's uncle works as the Prowler by wearing a mechanical glove throughout the film as a signature of his character as the villain. The movement creates a dual impact because it functions as both a violent action and a warning sign of an upcoming disaster. The predator and prey relationship becomes visible here through visual opposition as much as through movement.

### **Level III: Iconological Interpretation**

This visual representation serves as a symbol for the breakdown of family relationships along with the corruption of moral values. The hand which used to belong to a family member transformed into a symbol of dangerous threat. The green impact visualizes the moment of ideological rupture: when loyalty becomes violence, when family becomes the other. Throughout the story that explores dual identities and alternate selves the glove creates an unspoken query about Miles potentially following an incorrect path. Through its violence and exaggerated rupture, the comic book visual language both respects and challenges the physical approach of conveying emotional weight in storytelling. The image turns betrayal into a symbolic visual representation. It stands for more than a physical strike because it serves as an artistic representation of moral problems. The scene transforms from an action sequence into philosophical observation about how protectors become predators and what costs result from accepting inherited roles in broken societies.

### **Post-Iconographic Commentary**

The still image leaves from realistic representation by implementing graphic symbolism as its primary artistic choice. A neon-green starburst appears from a magenta halftone void which represents violence in the composition. The Prowler's mechanical glove enters the frame from the right side while white contours of the glove stand out against deep purple armor. The glove cuts through the starburst's center to create an exaggerated comic-book impact splash while speed lines radiate in jagged inked directions. The stylistic bursts according to McCloud (1993) function as visual symbols which depict both motion and hostility while simultaneously creating a visceral experience. The hybrid animation combines 2D comic elements (slashes, dots, starburst) with 3D modeling to create visual shock through its composition. The image shows a complete stop in action since time stays motionless. The visual presentation cuts cinematic realism because it uses design elements to transform kinetic energy into powerful symbolic content.

Design freezes all movement in the scene. The earlier chase sequence takes place in a continuous cinematic flow, yet this single frame disrupts that rhythm with its graphic shock. The camera performs a crash-zoom effect by zooming directly into the glove which compresses time into an impact panel. The panel functions as spectacle just like Gunning (1986) noted in his study of early cinema. Motion halts. The glove becomes a message. Wells (1998) describes metamorphosis in animation as symbolic performance; here, the glove performs identity.

The glove serves as more than a weapon because it stands for the dual nature of Aaron's character. The gauntlet keeps its mechanical and technological nature while staying detached from all biological change. The frame's rhythm break combined with the frozen elements except for the inked streaks creates a message of violence which stays uninterpreted in the suspended moment.

The narrative reaches its highest point during this scene because it occurs at the moment when bad guys approach. The frame transforms the pursuit into a prediction. The Prowler's claw which once served as an instrument of control now serves as a destructive marker. The narrative has not reached its strike, but the reader experiences a strike-related warning in this moment. The bright green burst functions as a visual prediction for Miles's future cyan venom glyph which appears later in the story. Miles clings to the subway ceiling while helpless as the glove transforms into a symbol of his family member who has become a predator. The symbolic violence extends beyond plot, it asks what happens when roles fracture, when support systems betray. The scene uses hybrid animation techniques to display the depicted fear through visual communication systems. The scene displays no blood or physical contact but only uses symbolic representations. These symbols send a more sinister warning which extends beyond physical threats to reveal moral deterioration. Through the freeze frame the creators transform fear into a visual representation which converts the chase sequence into a confrontation of the mind.

#### 4.2.8 Prowler Chase Scene – The Leap.

Miles’s Subway Leap.

Timestamp: ~00:29:04:23



Figure 4.18: “Incoming train scene.,” Spider-Man: Into the Spider-verse, 2018.

##### Level I: Pre-Iconographic Description

This still captures Miles Morales suspended mid leap in front of an upcoming train as he narrowly avoids it, which the train sign reads “677 ST LOCAL.” The entire frame displays a warm high-contrast color scheme that features dominant yellows and oranges. The comic line art along with stylized halftone dots in this artwork shows its origins as an illustration. The central position of Miles’s silhouette creates a near-symmetrical arrangement which uses two comic-style bursts sit below Miles, punctuating the moment the train’s headlights flare. These symbols emphasize the energetic charge of the moment. The lighting creates dramatic backlit effects that produce strong shadows which make the scene feel dangerous. The background contains angular architectural elements which have been compressed and stylized to generate visual intensity and restricted motion. A combination of 2D and 3D elements through cel-shading and hand-drawn textures produces a visual effect which blends animation with ink drawing techniques.

##### Level II: Iconographic Analysis

This movement exceeds physical action since it reveals a natural growth of instincts. Here we see Miles display reflexive style purely because of the adrenaline rush caused by his fear. The visual match between Miles and the approaching subway train creates a symbolic battle which depths personal freedom against inevitable circumstances and individual control against urban

disorder. Throughout the film the subway represents continuous urban activity which serves as a symbol for systemic forces and destiny as well as expectations and established threats that Miles needs to overcome. The pause in mid-air which comic elements highlight transforms this scene into a crucial narrative stage. Through being chased Miles starts to prove his position as one of the active actors.

### **Level III: Iconological Interpretation**

The scene illustrates Miles's failed transition from being a passive character to an active hero at a symbolic level because of his panicking. The subway serves as a visual representation of the city's interconnected structure which symbolizes the moral and social systems Miles now belongs to. Miles acts instead of surrendering to being overwhelmed. The film uses comic book conventions and impact bursts and offset framing and visual noise as more than decoration because these elements are both historical and thematic. The visual devices connect the frame to heroic storytelling traditions yet indicate Miles' transition from adolescent years to responsible adulthood. The scene functions as a coming-of-age experience through the character's encounter with the speed of existence. The leap transcends railroad tracks to represent a complete transformation of personal identity.

### **Post-Iconographic Commentary**

Form in this still hinges on visual intensity and graphic punctuation. Miles's silhouette cuts across a hot tunnel space rendered in yellow-orange gradients, flanked by bold red speed lines and abstracted halftone textures. Comic-style starbursts mark the flare of the train's headlight, positioned directly behind him. These visual icons, classified by McCloud (1993) as "non-verbal graphic emphasis," do not just signal danger, they freeze the impact moment in stylized form. The tunnel's geometry exaggerates perspective with compressed vanishing lines, creating both spatial distortion and a sense of unstoppable momentum. Though heavily stylized, the signage, "677 ST LOCAL", grounds the image in specific geography, fusing comic abstraction with real-world reference. Hybrid animation here blends cel-shading, ink lines, and 3D modeling to create a layered effect that evokes both threat and transformation.

Movement defines the scene's emotional tension. Miles begins on ones, his form stretched and sharply readable. As he leaps, the animation staggers to twos, introducing a subtle break in tempo that amplifies the drama mid-air. The tunnel environment continues ones, which sharpens the contrast between moving figure and background. As Wells (1998) explains, animated

gesture can express emotion beyond realism; here, Miles's arc, launched in fear, is physically impossible but emotionally exact. He leaps without a web, purely by instinct. The squash-and-stretch of his body captures panic and emergence in the same frame. This leap does not just bridge space, it bridges self-perception: the act of running becomes a rehearsal for transformation.

Narrative reaches a peak in the Bad Guys Close In beat. Miles is alone, no mentor, no gadget, just raw instinct. The tunnel becomes a visual metaphor for pressure, speed, and systemic force. The oncoming train symbolizes not just threat but inevitability. Yet Miles clears it. The visual design, explosive icons, speed lines, and hot palette, echoes Gunning's (1986) idea of cinema of attractions: pure sensory experience, used here to translate emotion into spectacle. The hybrid animation allows form to carry symbolic weight. This isn't just escape, it is foreshadowed growth. The moment suggests what will later become the leap of faith. The danger is real, but the jump becomes a declaration: Miles can act, even before he fully believes. Here, form and movement together mark the start of self-authorship.

#### 4.2.9 The Graveyard Scene.

First contact / reluctant mentorship

Timestamps: ~00:35:09:21 to ~00:35:39:08



Figure 4.19: “Venom Strike First Launch,” Spider-Man: Into the Spider-verse, 2018.



Figure 4.20: “The Graveyard Scene,” Spider-Man: Into the Spider-verse, 2018.

#### Level I: Pre-Iconographic Description

Post the death of Peter Parker, the spider man of Miles universe, at the graveyard Miles Morales delivers an accidental electric venom strike to Peter B. Parker that knocks him out while his body is still unconscious at the beginning of this merged scene. Miles’ hand radiates blue electricity from his extended position, while Peter’s shock made him freeze in mid-air during a snow-covered graveyard. The explosive lighting effect and halftone create a disorderly effect on the cool toned harmony of the scene. The next panel presents a comic-panel printed layout that shows Peter unconscious on the snowy ground as Miles stands next to him within panel

borders among gravestones. The halo-like panel art circle surrounding Peter creates visual interest while text boxes display diegetic dialogue such as “Hey kid...” and “WHO ARE YOU?,” signaling a diegetic transition.

### **Level II: Iconographic Analysis**

Through the side-by-side display of images the visual elements highlight the conflict between fear and legacy and recognition. The venom strike happens unexpectedly because Miles experiences fear which makes his body unleash power before his thinking brain can understand the situation. The cemetery serves as the iconic site for Spider-Man’s myths, which deepens the story’s meaning. The combination of Miles’ unpredictable radiant energy and Peter’s webbing shows how heroism breaks its conventional sequence. In the comic-panel, the move to narration creates a narrative inheritance through trouble instead of intentional selection. The graveyard visuals combine comic page conventions with emotional haziness to create a visual representation of memory and rebirth. Miles’ power activates the past through a literal electrical shock.

### **Level III: Iconological Interpretation**

The combined still images depict an accidental power surge by Miles that happens before he obtains permission in the story. The venom strike. Although production notes frame this beat as comic relief, the imagery also invites a reading of comic reversal and bonding; it serves as more than an identification marker for Miles because it disrupts the established pattern of passing on heroism. Peter Parker’s grave serves as a sacred location where an unpredictable new hero appears after the death of the earlier one. The comic-panel arrangement in the second still pays tribute and breaks apart as it integrates Miles into the mythological narrative through disruption instead of continuity. The story marks a fundamental change in the hero’s progression because it reveals potential instead of showing mastery. The hybrid animation style uses textural vector artwork and layered panel design, and snow effects to create a deeper contrast between comic book fantasy elements and realistic experiences. The two frames show how Miles will create his own narrative path while handling inherited responsibilities through his special, uncontrolled tempo.

**Post-Iconographic Commentary:** (Beat-sheet anchor: B-Story ignition),

Form in this scene uses visual contrast and media layering to highlight disruption and legacy. In the first frame, Miles's extended hand radiates sharp cyan electricity that cuts through the red-toned mask and suit of Peter B. Parker. The venom strike is rendered through jagged 2D glyphs layered over his 3D glove, emphasizing a fusion of graphic abstraction and spatial realism. The electric arcs distort the surrounding color harmony, introducing static visual noise that breaks the snow-muted palette. In the second frame, the visual design shifts into comic panel form. The scene flattens into printed textures, framed with black gutters, pastel snow tones, and diegetic text boxes like "Hey kid..." and "WHO ARE YOU?" This stylized freeze reflects McCloud's (1993) idea of the panel as a narrative device that pauses time while deepening impact. The transition from cinematic realism to page-bound structure marks a shift from spontaneous accident to storied memory.

Movement slows to emphasize emotional rupture. Miles and Peter animate on twos during the approach, but the venom strike fires on ones, injecting urgency and control loss. Peter's body jerks backward as webbing flies involuntarily from his hands, sticking to Miles. The motion stutters and freezes at the peak of impact. This visual rhythm, burst, bind, pause, creates a jolt that matches Gunning's (1986) notion of attraction: it halts narrative to center sensation. As Wells (1998) notes, animation externalizes internal change. Here, Miles's fear triggers a movement that exceeds his intention. The comic-panel transition completes the sequence by removing movement altogether, allowing viewers to dwell in the aftermath, where form replaces motion to communicate shock, guilt, and transition.

Narrative pivots through this moment. This is the B-Story ignition: Miles and Peter's relationship begins not with mentorship, but with reversal. The newcomer knocks out the veteran. Miles's strike, accidental and uncontrolled, upends the expected hierarchy. His power activates before his confidence. Formally, the cool blue of the venom glyph overtakes Peter's warmer tones, signaling a tonal inversion in legacy. What begins as apology, "I'm not sure I'm the guy," transforms into an unconscious assertion of potential. The cemetery as setting reinforces symbolic rebirth, Peter's grave marks an end, but also the beginning of Miles's authorship. The hybrid animation, comic glyphs, layered snow effects, freeze-panel inserts, makes this emotional switch material. The story does not just shift characters; it shifts visual grammar to signal that the rules of succession have changed. Miles does not inherit the mantle through ceremony; he seizes it through disruption.

#### 4.2.10 Alchemax Lab Infiltration- Forest Swing Scene.

Forest escape.

Timestamp: ~ 00:53:49:15



Figure 4.21: “first Mentorship experience scene,” *Spider-Man: Into the Spider-verse*, 2018.

#### Level I: Pre-Iconographic Description

The scene shows Peter B. Parker (left) and Miles Morales (right) swinging through Hudson Highlands’ foliage filled with the deep orange hues while being chased by Alchemax. Peter brakes while Miles continues to accelerate as they stay connected to web anchors that exist outside the screen. Comic THWIP! captions which appear next to each line. The 3-D characters receive a 2-D print treatment through cel-shaded suits and stylised matte-paint trunks which blend with oranges and crimsons in the color palette. Each of the characters hangs in midair as they move diagonally across the picture through web lines that extend past the top edge of the frame. Vertical tree trunks rise from the forest floor to create a structured appearance. The still contains autumnal hues of orange, red, and amber. The powerful colors in this scene depict both seasonal transition and energetic movement. The onomatopoeic word “THWIP!” appears twice in bold comic typeface above the scene to represent the web-slinging sounds as the characters swing between trees. The artist combined 2D stylization techniques with volumetric 3D modeling to construct this frame. The combination of Ben-Day dots and halftone textures on trees and characters unites comic book aesthetics with natural elements.

## **Level II: Iconographical Analysis**

This image presents a narrative about partnership development along with dynamic movement and deepening trust. The scene shows Miles and Peter swinging together as they carry the stolen Alchemax's computer containing the collider's data immediately after they finished the first phase of the Alchemax lab escape. The scene serves as both an actual and symbolic demonstration of joint accountability and mentorship under fire. The midair still of Miles and Peter connected through their shared velocity shows the growth of their mentorship relationship. The open forest environment contrasts with the Alchemax laboratory space because it produces feelings of liberty and openness to fresh beginnings and transformation. The comic book sound effect "THWIP!" Both enhance the movie's comic book style and show Miles' increasing integration into the Spider-Man universe. The visual representation of his participation in the mythological story. The forest represents an untamed natural environment that differs from the highly organized areas seen in earlier lab scenes. The story develops from confined situations to free actions through this element. The combination of comic book elements within realistic settings shows how the characters transition into a world where different elements blend together.

## **Level III: Iconological Interpretation**

This frame holds the most profound meaning as it depicts a hero's transformative moment during their journey. The forest functions as both an escape route and a personal development space for testing and self-discovery. At this moment, Miles progresses from following Peter to taking part actively. This marks the point where Miles develops both his abilities along with his personal identity. Through his movement, Peter shows mentorship, yet Miles's new alignment writes down the direction of future Spider development. The vibrant autumnal colors have multiple symbolic meanings, while the design brief was geographic realism, autumn tones also lend themselves to a rite-of-passage reading. The autumn season represents transition and preparation for slumber, which reflects Peter B. Parker's fading purpose as well as the story's forthcoming renewal through mentorship. The scene illustrates Miles' developing self-awareness that exists between being fully formed and becoming more conscious of actions and their consequences. The swinging motion exists between gravity and momentum to show the struggle between freedom and control and traditional values and innovative concepts. Through its aesthetic philosophy the Spider-Verse shows how personal identity exists as multiple performances that cannot be confined to a single fixed state. Through the combination of 2D

halftone illustrations on 3D naturalistic models the film demonstrates this approach. The combination of comic grammar with cinematic realism within this frame supports the central thesis which shows how superhero stories and their human wearers share characteristics of flexibility and diversity and profound human nature. The camera perspective transforms Spider-Man's swing from an escape method into a literal flight of creative authorship.

### **Post-Iconographic Commentary**

Form in this scene blends comic style with cinematic space to visualize trust in motion. Miles and Peter swing diagonally across the frame; each anchored to unseen weblines above. The backdrop is filled with warm autumn hues, burnt orange, amber, and red, flattened into halftone clusters and stylized matte trunks. This hybrid design collapses depth into layered panels, giving the forest the look of a graphic page. The repeated THWIP! captions mark each character's release, shown in bold comic lettering. As McCloud (1993) suggests, sound becomes part of form: the onomatopoeia does not just go with action, it illustrates it. The forest palette marks the tonal shift: autumn signals change, not only seasonal but personal. The hybrid animation, 2D comic textures on 3D models, turns the environment into a symbolic space for transformation.

Movement is synchronized and instructive. Peter and Miles swing in tandem, animated cleanly on ones. Their cadence builds with Peter's coaching, "Thwip, release," until Miles begins to echo the rhythm. That verbal instruction becomes visual pacing. As Wells (1998) argues, animation performs identity through posture and rhythm. Miles's motion was scattered earlier; here, it aligns. The shared THWIP! visuals are not just stylistic, they are narrative beats, revealing the transfer of knowledge through rhythm. The fluid motion, offset with jittery moments and midair corrections, keeps the movement readable and expressive. Gunning's (1986) idea of attractions fits here as well, this is not just narrative progression, it is spectacle as shared flight. The camera does not cut away; it rides their rhythm, giving weight to their sync.

Narrative advances the B-Story arc, Miles and Peter move from reluctant allies to a functioning duo. Form stages this bond through shared framing, and Movement articulates it through mirrored swing mechanics. The moment expresses Peter's growth as a mentor and Miles's rise as a learner. The Alchemax computer, slung between them, works symbolically as a baton, passing not just responsibility but belonging. Their mutual "Thwip. Release." becomes a dialogue of mentorship in visual form. Hybrid animation enables this dual storytelling by

collapsing text, timing, and spatial choreography into a single sequence. Miles is not just learning to swing, he is learning to belong. By the time Peter says, “I’m proud of us,” the visuals have already spoken. Their teamwork, captured midair, becomes a brief, kinetic metaphor for relational growth, unstable, but working.

#### 4.2.11 Alchemax Lab Infiltration- Gwen Scene.

The Spider Woman Reveal.

Timestamp: ~ 00:54:46:00



*Figure 4.22: Spider-Gwen Reveal Scene,” Spider-Man: Into the Spider-verse, 2018*

#### Level I: Pre-Iconographic Description

The frame shows Peter B. Parker hangs upright from his web while Miles stays upside down in the air next to him. Gwen Stacy stands on the snow-covered branch in front while wearing black suit leggings and teal pointe sneakers. The autumn oranges in the matte-paint canopy take center stage while Gwen’s footwear stands out as a vibrant color pop because the saturated greens are toned down. Their bodies make diagonal lines that show movement and chaos, and their web lines make it clear that they are all spider variants. The bright orange and red leaves of fall make a colorful background that stands out against the snow below. This gives the impression of change, warmth, and instability.

The lower half of Gwen Stacy takes up most of the left side of the frame. She is firmly planted on top of a log that is covered in snow. The way she stands and wears ballet-style slippers is a visual and symbolic contrast to the two Spider-Men’s chaotic suspension. Gwen’s teal accents

pop because the forest duotone intentionally omits complementary greens. The shot uses layered animation styles, with thick lines, halftone textures, and a painterly leaf pattern that are all common in the film's hybrid comic-book style.

### **Level II: Iconographic Analysis**

This frame is both funny and a way to show what the characters are like. Peter and Miles are tied up and hanging upside down, which shows that they have lost control and that their mentoring relationship is based on improvisation. Peter B. Parker, who is slouching with bare feet and wrinkled sweatpants, is an unwilling, messy hero. Miles is literally and figuratively “not ready” for his role as Spider-Man because he is still learning.

Gwen's pose introduces a new character, also changing the tone of the story. She becomes the competent to the male characters' clumsiness. Gwen standing up while the others hang out shows that she is in charge of the story; her pose is straight, grounded, and symmetrical, which makes her look disciplined and capable. The autumn setting makes the metaphor stronger. The fall season has always stood for change, growth, and getting ready for change, which is like Miles' growth arc.

### **Level III: Iconological Interpretation**

This frame shows the main themes of *Into the Spider-Verse*: mentorship, identity crisis, and the idea that there are many heroes. The funny parts of this scene hide its deeper meaning: Peter and Miles are tied to the Spider-legacy, but right now they cannot move because of it. The webbing is a sign of power, but here it keeps them from doing what they want until they learn how to use it. Gwen's appearance is both a turning point in the story and a statement about the themes: that heroism is not just for men and that strength and grace can coexist. Her upright presence, especially when compared to their chaos, sets a new standard for heroism: cool, capable, and controlled yet brisk, signaling leadership. In a broader cultural sense, the scene makes fun of traditional hero origin stories. Miles' journey is not just serious; it is also communal, chaotic, and fun. This makes the Spider-Man mythos more accessible to everyone, showing that anyone, regardless of age, gender, or readiness, can wear the mask, even if they get stuck in the web at first.

### **Post-Iconographic Commentary**

Form visual contrasts throughout this shot create three separate effects that emphasize power and elegance as well as disruption. Gwen Stacy maintains a strong position at the left of the frame wearing black leggings and teal ballet shoes while Peter and Miles are still upside down at the right side of the frame. The frame divides into two distinct sections through body positions and direction. The deep saffron-orange autumn leaves in the background create halftone clusters through their flat design which produces a comic-style effect while snow at the bottom adds graphic equilibrium and seasonal meaning. The production design suppresses forest green tones to highlight Gwen's teal accents, so she stands out as a foreign entity which visually appears as if she comes from another dimension. Through McCloud's (1993) visual hierarchy theory Gwen's upright stance and screen placement show her dominant position in the composition. The background's painterly style merges with cel-shaded characters and thick outlines through a hybrid frame structure which creates multiple aesthetic layers to define narrative tone.

Movement divides characters through cadence and rhythm. Gwen performs her entry with ones which creates a perfect landing that shows her mastery of control. The Spider-Men's bodies sway in an uncontrolled manner on twos because they are upside down. The threes bring snowdrifts into the scene that produces a gentle parallax effect to keep the scene's suspension. The animated movement of Gwen creates meaningful narrative content according to Wells (1998). Through their Silver-Age comedic poses the two Spider-Men create visual humor that connects to classic gag panel humor and creates laughter. Gwen lands before the camera freezes up, so timing takes over to present the visual joke. The film applies Gunning's (1986) cinema of attractions concept to create a comic display instead of showing action spectacle. Through animated rhythm the story presents its physical humor in a precise and staged manner.

Narrative, through her arrival the story transitions into a new direction. The scene serves as a transition between the chase sequence and ensemble segment which transforms both the emotional atmosphere and the power dynamics. The audience sees Gwen entering as a character who changes the mentorship dynamic instead of playing the role of a love interest or sidekick. The recent declaration of Peter as mentor loses its authority because he now finds himself hanging upside down. The combination of Gwen's body posture and her strategic position in the scene together with her precise movement timing proves her dominance of the visual space.

During this slapstick moment Miles stays silent rather than showing signs of love for Gwen. The core message of the film becomes clear through this moment since heroism exists in multiple forms. The mask fits many.

Gwen's arrival multiplies the myth. The hybrid animation technique allows this because it unites visual rhythm with graphic texture and stylized form to tell a story about shared space and alternate paths and expanded possibility. The introduction of Gwen transforms both the story's direction and its tone while showing that Spider-Man status depends on individual character rather than following a standard mold. Through her ballet flats Gwen connects this scene to an earlier still Figure 4.8, where the narrative is connected to show that Gwen was there in the school hallway during the body transformation of Miles.

#### 4.2.12 The Rooftop Confrontation Scene.

The loss of a friend.

Timestamp: ~ 01:13:14:17 – 01:13:53:02



Figure 4.23: “Miles Exposed Scene,” *Spider-Man: Into the Spider-verse*, 2018



Figure 4.24: “The Choice Scene,” *Spider-Man: Into the Spider-verse*, 2018

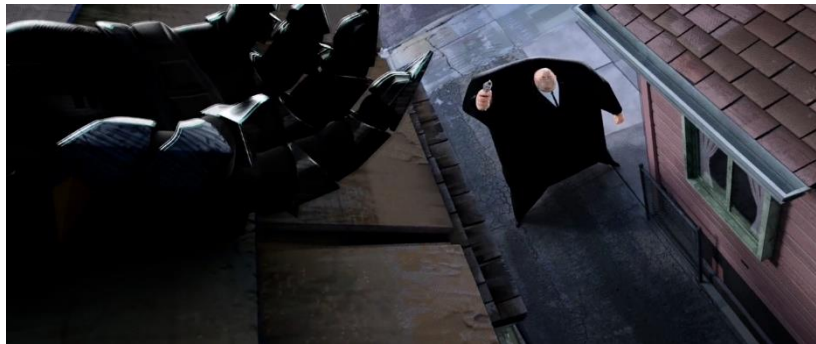


Figure 4.25: “Prowler Death Scene,” *Spider-Man: Into the Spider-verse*, 2018.

#### Level I: Pre-Iconographic Description

Three distinct visual photos make up this sequence each section uses different formal and emotional approaches. At the beginning of the sequence, Aaron Davis known as Prowler, confronts Miles before understanding that his opponent is his nephew, Miles Morales. A shallow depth of field in the composition makes Aaron’s face the only visible element with

expressions of shock and remorse while his body fades into the background and the colors remain cool and soft with purple and red tones. The second frame breaks this atmosphere. The frame displays white background along with deep red coloring that has exaggerated comic-book onomatopoeia labeled BAM! which creates effects like Silver Age comic book illustrations. Aaron freezes during his reaction as his body stays suspended while his face shows both shock and disbelief. Through visual abstraction, the panel acts like a comic book page by stopping time flow and showing emotional detachment.

The final frame shifts perspective dramatically. Kingpin appears in a low-angle perspective from the rooftop street floor below. His body stands as an exaggerated shape which appears both unnatural and immovable. After the comic-style outburst the image returns to its neutral background colors and urban textures that keep realistic visual elements. The transition from stylized abstraction to realistic imagery in the final frame reveals the severity of Aaron's death which allows the story to reconnect with both its emotional and narrative flow.

## **Level II: Iconographic Analysis**

The sequence develops a timeless redemption and martyrdom structure which roots in established superhero storytelling conventions. Aaron's discovery of Miles under the mask stands for the symbolic act of unmasking which reveals both identity and conscience. The change in his loyalty because of family recognition follows classic redemption patterns from mythic and comic literature such as Darth Vader's final scene in Star Wars and many hero transformations in superhero comics.

The visual depiction of BAM in the frame duplicates comic book conventions which show fatal impacts, panel functions as an abstract rupture. The visual depiction of sound serves as more than visual representation since it creates a disruptive pause in the story that freezes time. The visual language of 20th-century comic stylists powers this moment through dramatic abstraction to show pivotal moments. Kingpin's visual dominance in the final frame shows his role as an antagonist. The moral fall between Aaron's sacrifice and Kingpin's dominance becomes clear through the symmetrical rooftop and street-level contrast. The rooftop and street-level setup present a spatial arrangement that reveals how Aaron gives his life while Kingpin exercises control over the scene.

### **Level III: Iconological Interpretation**

This sequence reveals its deepest symbolic meaning by showing the struggle between personal identity and moral principles, and heritage. Aaron experiences a transformation from basic recognition to a profound understanding. When he sees Miles, he understands the price he paid for his choices. Through his death, Aaron creates an essential disruption which drives Miles toward the development of his heroic identity. Miles needs to experience a fundamental loss to discover himself, which is a classic Spider-Man part of the story. Aaron serves as a sacrificial figure because he stands between his criminal roots and his role as a mentor to Miles.

Kingpin stands for a stiff system which reacts with punishment toward those who show hesitation or empathy. Aaron's immediate execution by Kingpin shows the way power structures get rid of any complexity. The visual exaggeration of Kingpin's body separates him completely from humanity and turns him into a massive force instead of a human being. Through this sequence the narrative shows how systems of power function through fear-based methods that end moral complexity.

The sequence also functions as an allegory that stands for cultural elements. The Afro-Latino youth Miles Morales stands between two masculine figures: the flawed mentor with goodness and the ruthless enforcer. The scene investigates how people from younger generations handle the heavy burden of family heritages and at the same time confront different identity standards. The animation technique which combines realistic elements with abstract graphics creates an artistic effect that symbolizes the internal conflict of change versus outward development. This scene presents both a story of death and a moral transformation through the visual combination of BAM! and the following silence of Aaron.

### **Post-Iconographic Commentary**

Art director Patrick O'Keefe calls the sequence an 'emotion chokepoint,' emphasizing editorial urgency over overt religious iconography.

Form in this triptych sequence evolves across three distinct visual phases. The first frame isolates Aaron Davis against a soft lilac background, his face lit with cool rim light while his body fades. This reduction of space strips the setting to its emotional core: recognition and vulnerability. Hybrid compositing flattens 3D volume into near-2D stylization, emphasizing

facial detail and psychological rupture. Wells (1998) describes this as metamorphic performance, where gesture becomes a symbolic transformation. In this case, unmasking is both literal and metaphorical. The second panel wipes to a blank field pierced by a crimson “BAM,” a typographic eruption. This visual onomatopoeia follows McCloud’s (1993) concept of comic space shaping time. The white void halts narrative flow, allowing shock to fill the frame. Finally, the third frame reintroduces depth and gravity: Kingpin stands framed in sharp contrast against urban detail, rendered with heavy matte shading. His mass dominates the space. This formal shift, from symbolic abstraction to textured realism, marks the return to consequence. Visual style performs the sequence’s emotional rhythm.

Movement is choreographed through pacing shifts. The recognition moment moves on twos, blinking, hesitating, inhaling. Then the “BAM” lands on ones, removing blur to produce a strobe-like punch. Time collapses. The aftermath unfolds on threes: Aaron falls, Kingpin raises his gun, Miles flees. This cadence, 2s to 1 to 3s, narrates the emotional descent. As Wells (1998) argues, movement becomes a storytelling device when rhythm reflects internal change. Here, tempo embodies grief. Aaron’s stillness becomes an ethical decision. Kingpin’s gesture is mechanical, but Miles’s retreat is fluid and urgent. The pacing structure alone maps trauma as a visual timeline.

Narrative reaches its “All Is Lost” beat here. Aaron’s choice to spare Miles marks a break from his role as enforcer, he chooses family over function. But the system he served punishes that hesitation at once. Kingpin’s shot collapses that moment of mercy. The visual language mirrors this collapse: from pastel stillness to graphic rupture, to heavy realism. Gunning (1986) noted how spectacle interrupts story to deliver emotional impact, this scene uses that strategy not for excitement, but for grief. The hybrid animation lets these shifts materialize: the visual abstraction of BAM amplifies shock, while the heavy realism of Kingpin’s silhouette grounds the weight of consequence. Aaron’s death becomes the emotional pivot, not just for Miles’s arc but for the film’s larger moral framework. From this point, Miles carries the burden of that choice, of legacy broken by violence, and of heroism redefined by empathy.

#### 4.2.13 Father and Son separated Scene.

Jefferson Davis and Miles Morales

Timestamp: ~ 01:21:46:02



Figure .4.26: “Separation Scene,” Spider-Man: Into the Spider-verse, 2018.

##### Level I: Pre-Iconographic Description

The vertical doorframe separates the interior of Miles’s dormitory from the hallway outside. Jefferson Davis (his father), stands upright in the window-lit left side of the picture while warm daylight illuminates pink walls behind him. The expression on his face shows seriousness and sorrow, while his body shows controlled movements. Miles is tied to the chair, while his figure stays in shadow from the earlier scene, which binds him down. Spatial tension between the two characters, along with contrasting color temperatures, creates a visual distinction between father and son through the warm right side and the cluttered, dark left side. Contrasting color temperatures to separate the father warm, sunset orange on the left side of the screen from the son cooler violet shadows on the right side of the screen.

##### Level II: Iconographic Analysis

This scene materializes the emotional gap between father and son. The doorframe serves as both physical and symbolic divider which keeps Jefferson from bridging the silent gap that restricts Miles through verbal communication. The entire area surrounding Jefferson shines with warm colors which stand for his fatherly care and stability. Only Jefferson’s side receives these tones; Miles’ corner keeps the cooler violet pass; a palette decision production designer Thompson calls heat at the threshold. The low position of Miles along with his speechless state and shaded environment communicates his emotional freeze after the death of his uncle. Their

mirrored positions stand in symmetry, while a deep disconnection exists between them. Jefferson delivers his words while Miles stays silent, but the visual presentation shows their hearts engaged in an intimate exchange across emotional boundaries.

### **Level III: Iconological Interpretation**

This frame stands for the fundamental emotional connection which Miles needs to transform into his future self. Through his soft yet firm speech Jefferson creates a spiritual bond that directs Miles toward love and identity as well as belonging. During this moment Miles starts to cry without speaking thus marking a crucial turning point which stands for the development of determination through recognition of unconditional support. The conversation exceeds normal dialogue because it stands for an initiation ritual. The architectural line which separates the frame works as a visual connection that bridges past and future while uniting father and son and separating suffering from impending action.

This scene uses both positive and negative approaches to challenge standard superhero narratives because the hero's destiny does not isolate him from relationships yet shapes him through personal connections. The character of Jefferson functions as the source of authority and care through which Miles develops his moral values. Through this shot the audience experiences a spiritual transition. The camera requires Miles to feel rather than speak to complete its mission. At this moment, the essential elements exist for Miles's upcoming transformation which goes beyond faith to connect his isolation with a sense of belonging while developing his ability to act.

### **Post-Iconographic Commentary**

Form relies on architectural division to show emotional separation. A vertical line splits the frame down the middle, Jefferson on one side, Miles on the other. It functions like a comic gutter, a visual panel break (McCloud, 1993), turning space into a symbol of emotional distance. Jefferson is lit by soft, warm light from a halftone window. His half of the screen is filled with peach tones and clarity. Miles, wrapped in webbing, sits low in the shadows, surrounded by deep purples and muted indigos. The color contrast visualizes two emotional states: the father's warmth and concern, the son's silence, and doubt. This setup, designed with hybrid techniques, 2D textures, soft gradients, and compositional stillness, lets the moment read like a single comic panel, rich in subtext.

Movement is restrained but precise. Jefferson breathes on ones, each inhale slow and weighted. His speech is measured, deliberate. Miles barely moves, his figure stays tight and still, his taped mouth fluttering slightly on twos. This contrast in timing turns silence into narrative rhythm. As Wells (1998) notes, meaning in animation comes not just from action, but from the significance of movement, or the refusal to move. The camera holds the two-shot, uncut, allowing breath and space to hold emotional weight. The final motion, Jefferson tapping the door, lands with symbolic force. Like the final line of a comic panel, it marks the boundary between connection and release.

Narrative reaches its emotional low point. This is the Dark Night of the Soul beat: the moment just before Miles reclaims his agency. Form stages their emotional disconnect. Movement suspends narrative drive. But something shifts. Jefferson's words cross the barrier, "I see this spark in you." This is the turning point not of action, but of belief. The lighting subtly shifts. Around Miles's fingers, a faint blue flicker begins. No explosion. No swing. Just the first sign of return. Gunning (1986) describes attraction moments as spectacle for the viewer's eye; here, the spectacle is emotional. Hybrid animation allows this, blending soft FX, stillness, and comic composition, to visualize internal change without dialogue. The leap has not happened yet. But this is where it begins.

#### 4.2.14 The Leap of Faith Scene – Glass Shattering.

Shattering.

Timestamp: ~ 01:23:31:21



Figure 4.27: “liberation scene,” Spider-Man: Into the Spider-verse, 2018.

##### **Level I: Pre-Iconographic Description**

The still shows a strong color contrast that appears throughout the picture as Miles’ red fingers face off against the cool blues and purples of the background. The dualities in the picture represent the struggle between personal transformation and outside obstacles. The diagonal layout extends from left to right through broken glass fragments, which guide the viewer’s attention towards an explosive motion. The digital texture creation shows glass through its semi-abstract reflective surfaces that use broken geometric shapes like cubist art. city plate is a 2D matte with RGB misregistration simulating chromatic key offset. The digital aesthetic shines through the refractions and shines because the film combines 2D and 3D compositing techniques. Though static in the frame, the implication of speed and force is unmistakable. The 3D space shows broken glass pieces reflecting light like comic book speed.

##### **Level II: Iconographic Analysis**

The glass-breaking sequence is more than visual effects because it symbolizes crossing boundaries in initiation rituals. This act functions similarly to religious and mythic rites of passage which use violent boundary crossing to move individuals from potential to actual and from fear to agency. The red light beneath Miles’ palm shows both dangerous potential and vital energy since he endangers himself to achieve his authentic self. The visual influence stems from comic books because red hands in those stories stand for decisive actions alongside courageous

behavior and transformative power. The glass surface shows city reflections which indicate Miles now stands beyond his earlier hesitation while stepping into his superhero destiny.

### **Level III: Iconological Interpretation**

Through this frame, Miles passes into his transformation phase. Through his hand, Miles shows his ability to break free from glass that shears away when he finally releases his spider-grip and commits to the dive, a physical crack that echoes the emotional “leap of faith,” and, more importantly, from his limitations. His hand now functions as a purposeful tool that destroys physical barriers and breaks through symbolic attachment to the wall that previously trapped him. This moment acts as a metaphysical action that goes beyond its narrative meaning. Through his glass-breaking act Miles shatters both his expected limitations and his self-doubts while stepping beyond his inherited identity. The moment serves as an anti-mirror reflection because Miles chooses to shatter his reflection rather than accept his earlier identities. Visual metaphors of broken multiversal boundaries appear through the fragmented glass pieces that reflect the film’s theme of collapse and rise.

### **Post-Iconographic Commentary**

Form in this frame centers on a sharp color and texture contrast. Miles’s red-gloved hand breaks through a glass wall, scattering fragments across a deep blue background. The shards reflect city lights with RGB glitching, giving them a layered comic-book look. The moment visually combines two techniques: the sharpness of 2D graphic lines and the dimensional depth of 3D rendering. McCloud’s (1993) idea of the panel as a narrative threshold is literalized here, the glass becomes a border between fear and action. The hybrid animation uses visual language to express a shift. Red over black on Miles’s glove signals the merging of two parts of himself. The world’s surface breaks because he no longer accepts the limits that held him.

Movement emphasizes intention. The break is animated on ones with no motion blur, each piece of glass frozen mid-shatter. Then the camera flips, showing Miles falling through the frame with his body centered against an upside-down skyline. This inversion turns falling into rising. The scene tracks his descent in layers: Miles’s body on ones, his web line on twos, the background sliding on threes. As Wells (1998) argues, animation uses rhythm and posture to communicate identity. Miles’s pose is confident and extended, he is not panicked. This rhythm shift shows control. The glass no longer holds him back. The city no longer presses down. His motion reclaims space.

Narrative turns on this action. This is the “Break into Three” beat: Miles accepts the role without saying a word. Peter’s earlier line, “It’s a leap of faith,” echoes here, but Miles does not repeat it. He acts. The world responds. The shattered glass and inverted city visualize a deeper shift: Miles is not just entering the story; he is changing its structure. Gunning (1986) described spectacle as a direct visual address, here the shock of the glass burst pauses time, drawing us into his moment of transformation. Through hybrid animation, Miles’s identity shift becomes a structural shift. The frame does not just show a superhero; it redefines what becoming one looks like.

#### 4.2.15 The Leap of Faith Scene.

The Full Transformation.

Timestamp: ~ 01:23:39:06



Figure 4.28: “Leap of Faith Scene,” Spider-Man: Into the Spider-verse, 2018.

#### Level I: Pre-Iconographic Description

Miles Morales appears descending in mid-air while facing an inverted cityscape view in this cinematic shot. Through the inverted camera lens the descent becomes an illusion of ascending which reverses the connection between falling and failure. The figure of Miles is exactly centered within the frame, which is marked by symmetrical balance and compositional precision. The image benefits from highly saturated colors, which include deep blue along with violet and bright magenta that match both the neon-lit city environment and comic book artistic conventions. The character expresses movement while keeping an active posture. He started by breaking through glass before extending his body fully while reaching out his limbs and looking upwards. This body language aligns with traditional heroic imagery because it uses openness and elevation to stand for power and transcendence. The visual elements create a space that invites multiple interpretations to appear.

#### Level II: Iconographic Analysis

The visual elements in this scene derive their meaning from traditional superhero imagery and classic mythical themes, just like the leap of faith from the Matrix movie, Figure 4.29. Miles’s body now fits perfectly into the Spider-Man suit, which earlier seemed both inappropriate and borrowed. The scene shows two things: physical adjustment and storytelling progress as Miles develops from a past imitator into a creator of original content. The earlier description of Miles

fighting his powers while wearing a shop costume stands in direct contrast to his current confident stance.



Figure 4.29: Failed leap of faith attempt, The Matrix movie, 1999.

The leap itself is a literal escape path, but it also serves as a symbolic coming-of-age experience. Peter B. Parker previously said to Miles, “That’s all it is, Miles. A leap of faith,” which serves as a genre mythical reference to the typical heroic test of bravery found throughout many legendary traditions. The broken glass motif serves to strengthen the theme of breakthrough. Miles distinguishes himself from other Spider-characters in the multiverse through his unique urban movements, which highlight his agility and innovative parkour abilities. The distinct travel methods of each Spider-character reflect their unique personalities, yet Miles uses his specific movement to display his individuality which strengthens the film’s message about diversity and uniqueness.

### **Level III: Iconological Interpretation**

This visual scene functions as an allegory that displays self-discovery and multicultural values alongside new definitions of heroism. Miles’s physical leap stands for a fundamental shift in the superhero genre by setting up a new paradigm. Miles appears as a living example of hybrid identity because he faces multiple social pressures and family expectations and internal conflicts as an Afro-Latino adolescent. The frequent statement “Anyone can wear the mask” evolves into a visual approach that represents principles of collective power.

The cityscape inversion presents a visual representation of value system transformation because descent appears as ascent in this view. The narrative presents success as a process of reinterpreting failure and fear instead of eliminating them. The urban environment which initially seemed overpowering, has become open to Miles's presence, creating a visual harmony that represents his narrative and symbolic control.

This moment also intersects with discourses of media representation. The film introduces a character to a heroic role which traditionally belonged to dominant identities thus enlarging the cinematic language of heroism. Miles transforms the Spider-Man legacy beyond mere inheritance because he actively shapes its definition. The film develops a mixed visual language through comic-book visual grammar and urban musicality which reflects the hybrid nature of its protagonist.

The entire frame stands for the central thematic idea of *Spider-Man: Into the Spider-Verse* by showing that genuine change appears from personal beliefs while identity serves as a transformative power and heroism exists independently of family ties through creative thinking. Through its visual rhyme the "Leap of Faith" presents both visual beauty and philosophical depth which confirms the new directions of modern mythological storytelling.

### **Post-Iconographic Commentary**

Form dominates this sequence through bold visual composition and symbolic inversion. Miles is centered within the frame, descending through an upside-down city that turns falling into rising. This visual flip transforms gravity into metaphor. The frame is marked by deep blues, violets, and electric magentas, a high-saturation palette described by Thompson as "Midnight Jazz." The hybrid animation style blends realistic 3D lighting with comic-style halftone dots and chromatic edge-splitting. This fusion reflects Miles's identity: neither fully traditional nor entirely new, but a synthesis. The use of symmetrical balance, glowing particles, and broken glass motifs reinforces the theme of breakthrough, visually and psychologically.

Movement in this moment signals full control. Earlier, Miles jittered or lagged behind others, often animated in twos to express hesitation. Here, his leap is animated on ones, fluid, intentional, and continuous. As Wells (1998) notes, character movement carries meaning; Miles's extended limbs, upright posture, and confident web-swinging perform his transformation. He is no longer reacting; he is choosing. His trajectory across the city is not just physical; it maps his progression from scattered to centered. The hybrid form enhances this

performance by exaggerating motion and allowing impossible perspectives. He flails at first, but quickly stabilizes, each move confirming authorship.

Narrative clarity peaks in this moment. Miles's leap does not just continue the plot; it redefines it. The city that once overwhelmed him now becomes a stage he moves through with confidence. As Gunning (1986) explains, spectacle can interrupt narrative for emotional emphasis. The leap uses visual excess to mark inner change. This is the "leap of faith" beat from the Zoom-In Beat Sheet, the moment Miles claims the Spider-Man identity through action, not inheritance. His spray-painted suit, his handmade decisions, and his chosen movement patterns mark him as distinct. Hybrid animation supports this by literalizing belief as visual ascent. Here, movement, form, and narrative combine to show that Miles is no longer becoming Spider-Man. He is.

The two shots together (glass shattering, leap of faith) form a metaphoric progression which shows Miles transitioning from fear to freedom and from fragmented to whole and from grounded to flying. Miles becomes Spider-Man at this instant through his belief that he can experience failure yet continue to rise.

#### 4.2.16 Final Battle: Kingpin Vs Miles – the Confrontation Scene.

Miles Vs Kingpin

Timestamp: ~ 01:36:09:01

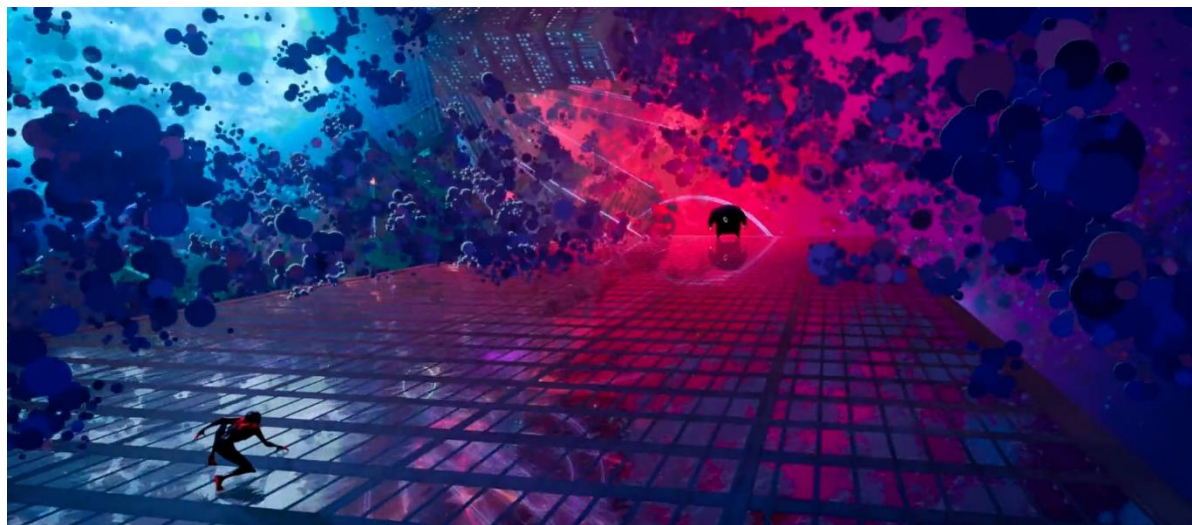


Figure 4.30: “final confrontation Scene,” Spider-Man: Into the Spider-verse, 2018.

#### Level I: Pre-Iconographic Description

The composition reveals a confusing layout where Miles Morales stands low in a left corner ready to confront Kingpin who stands in the central vanishing point. Inside the collider stands a surreal setting which depicts a fractured plane composed of glass tiles that stretch outward in grid pattern. A distinct color scheme divides the picture into two parts with deep blues and cyans in the left section and magentas and bright reds in the right section. The opposing color fields which are described as indigo universe-blossom particles with Kirby-Krackle ancestry, which resemble multiversal debris to show chaos and the pending collapse of physical reality. The camera positions itself behind Miles to present Kingpin as the pivotal point and Miles appears both flexible and stable. The reflection of light and distorted floor elements on the glass surface creates spatial depth which intensifies the instability. The visual effects of glitching particles together with warping edges strengthen the theme of disrupted order. The black-and-red costume he wears displays his hybrid background by both absorbing and reflecting surrounding colors.

#### Level II: Iconographic Analysis

The narrative highlights the peak moment when Miles evolves into a confident Spider-Man. His forward-leaning posture, together with his controlled stance, resembles predator-prey imagery, which shows both physical readiness and mental determination. This posture stands

out from earlier scenes where Miles displayed uncertainty or physical disconnection. He stands with confidence while honoring Spider-Man's legacy while creating his own individual visual and storytelling presence. The collider is a metaphoric and actual point of convergence between different worlds and timelines, together with character storylines. Miles's psychological struggle and external danger mirror the unstable design of the collider, which uses light and glass and floating debris to create its structure. The dramatic color split between cool blue and violent red stands for a dual nature that unites creation with destruction and chaos with order and origin with obliteration. Kingpin stands motionless at the center of the composition while his dark, unnatural body shape turns him into a solid architectural structure that appears monumental, emotionless, and immovable. The static position of Kingpin creates an opposition to Miles's energetic body language, which emphasizes their fundamental disagreement. The current outfit Miles wears serves both protective functions and serves as a symbol. The black-and-red color scheme gives him a distinctive appearance that separates him from the visual heritage of Peter Parker. Through his new color palette, Miles visualizes his separate path, which differs from all earlier Spider-Men and traditional expectations of Spider-Man inheritance. He is now iconographically distinct.

### **Level III: Iconological Interpretation**

The symbolic representation of Miles Morales's heroic journey reaches both psychological and external peaks through this frame. The unstable structure of the collider mirrors the psychological fragmentation which occurs when someone grows while building their identity and dealing with intergenerational challenges. The scene functions as a physical representation of adolescence because different influences and inherited stresses disrupt perception until personal determination achieves integration. The struggle between Miles Morales and Kingpin extends beyond physical combat because it represents an ideological struggle between their belief systems. Kingpin uses his family tragedy to create a heroic ideology that combines ownership with dominance. The character attempts to bring back a fixed past by jeopardizing the entire multiverse's existence. Through his opposition to Kingpin Miles promotes an alternative perspective which holds that future possibilities are still open and personal identity requires active change of current circumstances. The overwhelming visual chaos no longer dominates Miles in this scene. His movement through this space becomes deliberate and purposeful. Through his movement across the grid Miles shows his ability to create his own story as he walks beyond established boundaries to show that his journey belongs to him rather

than being figured out by inheritance. The frame shows the main idea of Spider-Verse by showing how heroism becomes available to everyone and exists in multiple forms and appears from conflicts. This powerful moment shows Miles surpassing his status as a successor to become an origin through his visually striking appearance and stable setting, and intense emotional power.

**Post-Iconographic Commentary:** (beat-sheet: “Finale: showdown with Kingpin”)

Form in this shot is shaped by a strong diagonal layout. A grid of glass panels cuts across the space, dividing the collider interior into two clashing color zones, cool cyan on one side, harsh magenta on the other. This split creates a visual boundary between calm and chaos. As McCloud (1993) explains, shifts in visual style or frame design often mark narrative change. Here, that shift is made literal. The floor becomes a dividing line between past and future. Miles’s black-and-red suit anchors him in the calm zone, while Kingpin’s massive dark figure stands in the chaotic half. The hybrid style is clear: hand-drawn Kirby-like particle effects swirl in the background while the space itself warps with digital lighting. These elements show how 2D and 3D animation techniques combine to present instability and transformation.

Movement emphasizes control versus collapse. Miles advances smoothly, animated on ones, with a low, grounded posture that signals confidence. His stride is steady, his arms wide, and his center of gravity low. Kingpin, in contrast, stays fixed and immobile. Debris around them glitches on threes, stuttering through space without order. This dissonance draws focus to Miles. As Wells (1998) argues, animation uses character motion to express inner change. In this scene, Miles’s stable movement shows growth, his body now tells the story. The collider fragments move chaotically, but Miles does not. His movement becomes the organizing rhythm inside visual chaos.

Narrative reaches a turning point here. This is no longer about just fighting Kingpin; it is about stepping into authorship. The collider background collapses under the weight of its own contradictions. Gunning (1986) calls this kind of visual excess a “cinema of attractions”, a moment built to shock the eye more than move the plot. The flying debris and warped space form a spectacle of emergence. But it is not empty. The chaos contrasts with Miles’s clarity. He now controls his movement, his space, and his visual identity. In this way, hybrid animation becomes narrative structure. Miles swings away not just as a hero, but as the author of his own story.

Final Battle: Kingpin Vs Miles – Family Timestamp: ~ 01:37:00:03

Reunion Scene. Delusions.

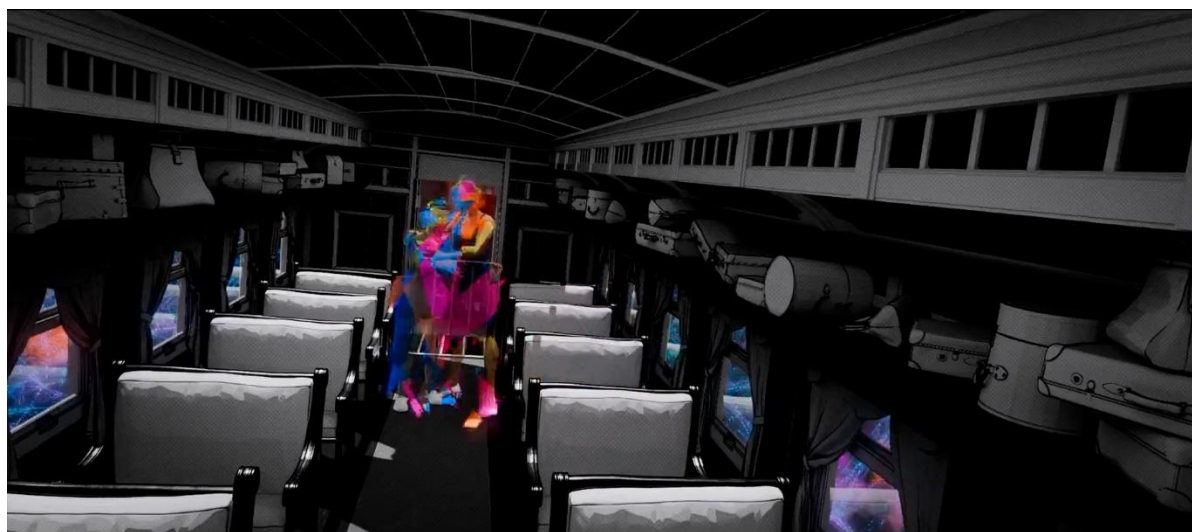


Figure 4.31: “Kingpin Hallucinations Scene,” Spider-Man: Into the Spider-Verse, 2018.

### **Level I: Pre-Iconographic Description**

The train interior shows grayscale tones that look like a comic panel's style and create a memory of inked black and white images, as well as temporal isolation. The formal design creates a deep contrast between the monochromatic train sections and the vibrant pink, blue, orange, and purple visual chaos, which stands for intense feelings and temporal dissonance. Kingpin views the scene through his own perspective. The viewer experiences the view that Kingpin sees of his family because he stands in his position. The visual glitch effects and misalignments employ an animation vocabulary based on Cubist fragmentation and digital error, which duplicates contours and overlaps forms and creates temporal smears to depict a body in various realities at the same time.

The still merges 3D volumetric forms with 2D elements such as Ben-Day dots and thick outlines, and glitch bursts which create visual tension between hand-drawn comic art and computer-generated rendering to blur the distinction between these two artistic approaches.

### **Level II: Iconographic Analysis**

The train serves as a symbol of both memory storage and movement, which brings together the past with the present. The grayscale visual style of the train stands for both its artificial nature

and emotional detachment, while its symmetrical composition mirrors Kingpin's helpless quest to bring back his family. The glitching apparitions of Vanessa and Richard display a non-representative form that holds multiple versions of themselves from different universe dimensions. The avant-garde art movement of Cubism inspires its form, which displays fractured and multiplied and angular elements to challenge traditional perspective and singular identity. The visual representation of broken time resembles the Cubist method which displays time and space as fragmented pieces. The family appears as ghostly shape because they exist only as triggered echoes which the collider creates during its dimensional exploration.

### **Level III: Iconological Interpretation**

At this critical narrative stage, the visual language of Cubism serves as a metaphor for grief, delusion and false hope. The visual scene creates an illusion of a family reunion as Kingpin's technological abilities prove successful. Visually, the scene refuses to provide any sense of resolution. The characters exist in a state of unreadability with distorted features that show multiple unstable variations. The vision Kingpin experiences displays his fixation rather than his family, since this mental image appears through multiverse technology that processes his psychological trauma.

Through this shot, the audience understands that Kingpin maintains his connection to the past despite his physical power and technological abilities. Through the collider, Kingpin receives repetitive suffering, which appears in multiple broken visual representations. Through its Cubist imagery, this scene proves to Kingpin that grief cannot be defeated by force because it distorts and duplicates itself while escaping like shattered glass.

### **Post-Iconographic Commentary**

Form in this scene is built from strong contrasts. The subway car is entirely in grayscale, like an old comic strip, creating a sense of frozen memory. This static design is broken by the sudden appearance of Vanessa and Richard in glitchy layers of cyan, magenta, and orange. Their forms are duplicated and misaligned, combining Cubist fragmentation with digital error. These "ghosts" do not read as real bodies but as distorted echoes. The glitching outlines and color planes turn emotion into design. As McCloud (1993) explains, showing multiple perspectives at once can express time and perception. Here, Wells's (1998) idea of metamorphic animation is made literal; their appearance deforms to show psychological instability. The hybrid

animation combines 2D effects like halftone dots and 3D rendering to show memory breaking apart.

Movement splits across different visual rhythms. Kingpin moves slowly and heavily, animated on twos. His weight anchors him in the frame. In contrast, the ghost family flickers on and off, stuttering in and out of presence. Their instability is visualized as motion that cannot settle. The central vanishing point of the train draws the eye, but every glitch breaks that pull. The flashing color overlays act like what Gunning (1989) calls an attraction, brief, overwhelming, not for story but for sensation. As the ghosts vanish, the train jerks sideways on three, removing any visual stability. This collapse is not just emotional; it becomes a spatial and temporal breakdown.

Narrative tension peaks here, not through action, but through realization. This is the high-tower surprise: Kingpin's fantasy fails. The collider cannot bring back what is lost. The ghosts recoil, and Kingpin is left alone, running into an empty car. The hybrid form helps show this collapse. Cubist glitches deny resolution; the past breaks apart on screen. Miles's quiet question, "Is this what you want, man?" marks the shift. Narrative control leaves Kingpin and moves to Miles. In this moment, the film stops looking backward. The ghosts fade, the grayscale recedes, and the visual field prepares for Miles to step in. Hybrid animation turns inner failure into clear external form, grief cannot be undone by force, only transformed by letting go.

#### 4.2.17 Final Battle: Kingpin Vs Miles – Defeat Scene.

Apparent Defeat

Timestamp: ~ 01:38:41:10



Figure 4.32: “False victory Scene,” Spider-Man: Into the Spider-verse, 2018.

##### Level I: Pre-Iconographic Description

The frame displays an intense moment that creates both visual and narrative tension. Miles Morales extends his exhausted body across the ground of the ripped part of the collider version of the Brooklyn Bridge, which displays through his outstretched limbs. Miles Morales takes up the bottom left section of the image because the camera points slightly downward to emphasize his position on the floor. Kingpin stands tall in the background on the right side of the image while his enormous body occupies half of the picture. Kingpin’s suit is a one-piece shadow-catcher, though a subtle pinstripe pass keeps him from merging with the void. A worn web line dangles from his hand, limp and disconnected.

The entire environment displays blood-red tones while particle effects and halftone textures spin throughout the frame. The dark shadows spread through the space to create an atmosphere of awaiting doom. Kingpin appears as a massive black shape with light edges around him, but Miles displays detailed visual elements, including his suit’s cel-shading and halftone surface and inked outlines. The visual difference between Miles and Kingpin highlights their artistic styles as Miles displays fluid vulnerability, yet Kingpin shows oppressive solidity.

## **Level II: Iconographic Analysis**

The visual elements in this frame heavily reference traditional heroic conventions. In this scene, Miles faces Kingpin in an iconic confrontation between a small, flexible young hero and a massive motionless villain. The confrontation gains its emotional weight from the massive size difference, combined with the red-lit atmosphere. The torn webline in Kingpin's hand demonstrates a dual meaning that symbolizes both the loss of Miles's physical strength and the loss of connection, support, and stability. The composition of Miles' body aligns with traditional representations of defeated heroes who display open arms while their body falls forward and their eyes avoid direct contact. The visual composition mirrors Peter Parker's death, but now Miles stands in this position as the main character. The environmental elements of the scene form both a spatial whirlpool and a psychological manifestation that represent the twisted emotions experienced by Kingpin and Miles. This scene marks a narrative break because its broken visual structure, together with its red-black color, stands for the character's psychological confusion.

## **Level III: Iconological Interpretation**

At its deepest level, this frame depicts the pivotal moment where a hero transitions through their journey. Miles exists in a state of symbolic midpoint between defeat and transformation because his physical defeat transitions into a symbolic state. The picture presents the core emotional struggle found in *Spider-Man: Into the Spider-Verse*, which includes confronting inherited trauma and experiencing external support collapse alongside self-discovery under systemic oppression. Through this composition, Kingpin serves as a visual representation of fatalistic destiny. The large black mass, which depicts Kingpin, is an empty space that extends beyond empathy to include a complete absence of narrative potential. The pose of Kingpin appears as a black hole of grief which eclipses hope in a metaphorical way. Through his character the world presents itself as a place where power stays unchangeable and legacy passes through violence while grief requires domination. Through his depiction the artist shows that he has evolved into an ideological construct which surpasses his human nature.

Miles presents himself as complex through his detailed aesthetic while keeping a grounded and overwhelmed visual presence. His presence, still textured, still visible, symbolizes narrative potential. This stands for the critical turning point in traditional story development because it decides whether the hero will surrender to destiny or break through it. The torn web symbolizes

both the loss of what existed and the necessary step for new identity development because the destruction of the past connection enables the birth of a new self. Through its visual hybridization the animation design functions as a thematic element. The combination of 2D drawing techniques with 3D spatial models and glitch visual effects outside the character's mind displays his inner chaos while facing both universe destruction and self-transformation. This frame poses a question to the viewer: Will Miles fall like other defeated heroes, or will he set up a new definition for rising?

### **Post-Iconographic Commentary**

The frame holds form elements which appear from intense visual contrasts between Kingpin's large black body that fills half the screen and Miles' small vulnerable form in the bottom corner. The power imbalance between Kingpin and Miles becomes clear through the exaggerated scale difference. The hybrid style uses flat blacks with cel-shaded textures and halftone overlays to merge 2D comic grammar with 3D models. The red bursts emanating from Kingpin illustrate the invisible pressure according to McCloud's (1993) Emanata concept. The visual elements such as the dangling web line serve symbolic functions to represent Miles's feeling of being disconnected from support.

Movement is nearly frozen here. The animation keeps each element in a state of sharp readability because it lacks motion smear or blur which freezes the scene in a moment of fear. The collider FX create rotating and pulsing effects which trap the viewer inside a state of visual tension. The animation stops narrative progression to display spectacle which matches Gunning's (1986) cinema of attractions. Wells (1998) states that animation achieves emotional power through the use of distorted visual elements. The unnatural bulk of Kingpin functions as a visual expression of his grief and anger through its exaggerated size.

Narrative of the story reaches its highest point of tension at this moment. Miles experiences repeated knockdowns which mirror the visual representation of Peter Parker's earlier death. The torn web serves as a narrative element which stands for both the destroyed connection to his former self and the starting point of his transformation. The hybrid form functions as more than decoration because it serves to advance the story. The combination of 2D and 3D elements in this frame depicts Miles' emotional state and poses the fundamental question about his future: will he ascend or continue the pattern. This frame shows the instant before narrative transformation occurs when defeat transitions into emergence.

#### 4.2.18 Final Battle: Kingpin Vs Miles – Shoulder Touch Scene.

The Moment of Transformation

Timestamp: ~ 01:39:47:20



Figure 4.33: “Rising Hero Scene,” Spider-Man: Into the Spider-Verse, 2018.

#### Level I: Pre-Iconographic Description

Miles Morales delivers a venom strike to Kingpin as he fights in his black and red Spider-Man costume within the center of the frame. A cyan energy radiates outward from his right hand that presses against Kingpin’s chest in sharp, jagged spikes. The background design presents itself as a simple flat red comic-textured text “HEY,” which creates an intense contrast to the moving figures. The frame shows aggressive red tones dominating the right half, yet electric blue and cool white tones originating from the strike spread across the middle and left side. Kingpin takes shape as a shadowy figure in the background because his head withdraws from the blast’s strong impact. Miles receives light rim illumination, which highlights his complete three-dimensional presence and strong determination. The composition follows diagonal lines from Miles’ stable position to Kingpin’s unstable position, thus creating an action-driven line that splits the frame from left to right. The comic aesthetic shines through the cinematic space through 2D stylized lightning strokes and starburst graphics, which are depicted with exaggerated visual elements.

#### Level II: Iconographic Analysis

The story reaches its peak when Miles Morales develops into his own self-determining agent after learning from others. The venom strike functions beyond its superpowered capabilities because it stands for a distinctive combat signature that differentiates from other Spider-Men.

Miles delivers this distinctive energy touch as his signature move, which demonstrates how he moves beyond imitation to establish his own unique identity. The thin form of Miles creates an asymmetrical power against Kingpin's massive body which establishes the traditional David versus Goliath storyline. The red orby background which was source of power to Kingpin during his supremacy, now displays the signs of his loss of power. The blue color which symbolizes truth and clarity and stands for peace breaks through the red chaos to set up a new state of equilibrium. Through the composition, Kingpin's body moves towards the outer edges of the frame which represents his declining control and strength. The frame places Miles, on the hard-left and leaned forward while keeping visual dominance as the main character of this moment and his narrative.

### **Level III: Iconological Interpretation**

The deepest level of interpretation in this frame shows how self-claim appears through synthesis. The venom strike shows Miles's blended identity because it shows his unique inheritance combined with his individual experiences and his achieved independence. The energy functions as a transformative force that arises from personal faith instead of violent domination. Miles reaches the conclusion of his journey towards adulthood at this specific moment. Miles now uses a power that belongs to him exclusively to transform the battlefield into a place where he finds endorsement. The supporting force that stands for control and power makes Kingpin powerless to stop the new emergent power. The visual power structure now shifts against Kingpin because he faces the same force, he used to enforce upon others which comes from resistance instead of fear. The visual point of contact glows with a light that recalls the spider bite scene. Miles transitions from accepting transformative energy to becoming its source. The venom strike serves as a declaration that heroism develops through personal transformation. The hybrid animation combines 2D line art with glitch energy and 3D form, which serves as both visual aesthetics and symbolic representation. This visual representation stands for the fragmented nature of the character who needs to combine multiple elements to establish a unified whole.

**Post-Iconographic Commentary** (Beat-sheet node: Finale - Execution of the New Plan - “shoulder-touch / venom-strike”)

Form in this frame visually encodes confrontation and authorship through layered contrast. Miles’s black-and-red silhouette is sharply outlined against a crimson halftone backdrop. His fingertips pulse with cyan energy, rendered as jagged, 2D lightning bolts that fracture across the composition. These electric shapes, drawn with comic-style exaggeration, burst from a single point of contact, his shoulder touch. The backdrop is split diagonally: red dominates the space around Kingpin while blue energy expands outward from Miles. McCloud’s (1993) concept of visual onomatopoeia is realized here, where the “HEY” text and venom glyph work as both sound and shape, collapsing the difference between action and meaning. Hybrid rendering techniques, cel-shading, glitch overlays, and volumetric lighting, compress 2D and 3D forms into one symbolic plane. The frame becomes a battleground of color and graphic energy, expressing both conflict and clarity.

Movement is compressed into one decisive gesture. Miles approaches slowly, his motion fluid and deliberate, while Kingpin’s figure is heavy and stalled. The moment of impact, the venom strike, erupts on ones, freezing Kingpin for two frames before recoil. This timed stutter visualizes loss of control. As Wells (1998) argues, transformation in animation often hinges on visible metamorphosis; here, Kingpin’s mass briefly distorts under the force of Miles’s power. The camera holds a flat, side-on perspective, like a comic strip panel, emphasizing the singularity of the gesture: one shoulder touch, one strike, one shift in rhythm. The venom burst does not blur; it slices. The movement becomes symbolic punctuation, not just action.

Narrative resolution unfolds through poetic inversion. Earlier in the film, the “shoulder touch” was a failed attempt at confidence. Here, it becomes a weapon of calm precision. The moment belongs to the “Execution of the New Plan” beat, not because Miles overpowers Kingpin physically, but because he reframes the terms of engagement. The venom strike is not a copied move; it is original, distinct, his. Gunning’s (1986) concept of cinematic attraction applies here: the venom burst interrupts narrative to deliver a sensory jolt, but one that carries meaning. Hybrid animation lets the frame hold comic abstraction and cinematic realism at once. The red field of grief gives way to cyan clarity. Miles does not just end the fight; he rewrites its visual logic. In that flash, the myth transforms. Spider-Man is no longer inherited. It is made.

#### 4.2.19 The Brooklyn Swing Scene.

Brooklin's new Spider-Man.

Timestamp: ~ 01:44:34:09



Figure 4.34: “Swing with Confidence Scene,” Spider-Man: Into the Spider-verse, 2018.

##### Level I: Pre-Iconographic Description

The palette contrasts deep midnight blues with luminous reds. The scene is covered in indirect light, giving it a moody yet glorious atmosphere. The bright red of Miles' gloves and emblem is sharply defined against the deep blue background, enhancing readability and emotional intensity. The motion lines trailing from Miles' hand and the energized webline are rendered with 2D comic aesthetics. The suit texture blends 3D shading with halftone ink-dot effects, and rain-like lines fall vertically, intensifying the scene's kinetic force. The upside-down pose flips the perspective entirely, aligning with the earlier “Leap of Faith” visual grammar but presenting it with newfound control and fluidity. Miles now swings with command, not chaos.

##### Level II: Iconographic Analysis

The upside-down framing is not accidental; it echoes the earlier “falling/rising” visual motif, but here, Miles is in perfect balanced shape. The inversion signals that he now owns his new worldview and identity. This vibrant back spider icon on his back is visually and narratively critical. Unlike Peter Parker's blue-and-red suit, Miles' black-and-red combo evokes modernity, rebellion, and distinction. It is a symbol of difference embraced. On the other hand, the electric charge running through the web line subtly invokes Miles' unique venom strike. This visual detail reinforces the narrative that he is not merely a new Spider-Man, but a redefinition of what Spider-Man can be. His pose, open, confident, in full stretch, mirrors classic superhero

iconography but also evokes ballet-like grace. Miles is no longer hesitating or masking insecurity.

### **Level III: Iconological Interpretation**

This frame refines the film's central transformation into a single pose, the becoming of Miles Morales as Spider-Man. Where earlier sequences fought with fear, doubt, and fragmentation, this image visualizes wholeness, and authorship. The upside-down shot no longer signals confusion; it shows that Miles has taken control. The world is not spinning out of control, Miles has learned to master it, to find rhythm in the chaos. The red trail lines from his fingers (Smear Frames), is a sign of speed, and the electric web serves as a metaphor for authorship; he is now writing his own story, not tracing Peter's.

The rain-like vertical lines, usually a cinematic signifier of sorrow or tension, here become a backdrop for dramatic momentum. In this context, it evokes catharsis; the storm is past, and Miles swings through its residue with power. Moreover, the hybrid animation techniques are crucial to interpreting the moment. The hand-drawn web effects and 2D action lines underscore how Miles' world is a synthesis of comic book heritage and cinematic reinvention, just like Miles himself is a fusion of legacy and innovation, race and culture, trauma, and strength.

### **Post-Iconographic Commentary**

(Beat-sheet anchor: Final Image – “Anyone can wear the mask” montage)

Form in this final image is defined by clarity, contrast, and symbolic design. Miles's black suit absorbs the surrounding city lights while his gloves and emblem burst with clean red tones, visually separating him from the background. A blue lightning arc trails his webline, subtly tying back to his venom strike, and completes the red-black-blue tri-color motif first introduced during the “Leap of Faith” sequence. Rain streaks fall in white vertical lines, hand-drawn in 2D, framing his upside-down pose with graphic emphasis. The image uses exaggerated perspective, halftone textures, and smear lines to blend comic-book abstraction with cinematic depth. McCloud's (1993) concept of iconic composition is literalized: Miles becomes both readable image and symbolic identity. Hybrid techniques unify this frame, letting ink-style elements live inside a volumetric world.

Movement confirms Miles's mastery. He swings cleanly on ones, smooth, fluid, composed. This is a full departure from the earlier stuttered twos used to mark his inexperience. The red smear lines trailing from his hands flicker on twos, creating a cadence offset that feels kinetic without losing legibility. Wells (1998) argues that animation's power lies in its ability to reveal interior states through physical exaggeration. Here, Miles's posture, open arms, legs stretched, inverted, signals ownership, not uncertainty. His gesture is no longer reactive; it is expressive. The weblines carry not just momentum, but authorship. The body becomes the sentence. Rhythm replaces struggle.

Narrative resolves with visual confidence. This is the "Final Image" beat: Miles swings through Brooklyn in full control, narrating his story with clarity and humor. What was once a fractured identity has become a synthesis, Afro-Latino culture, personal grief, superhero myth, all present in how he moves, looks, and speaks. The upside-down framing no longer signifies confusion but fluency. Gunning's (1986) notion of attraction applies here: the frame dazzles, but not for empty spectacle. It punctuates transformation. Miles does not just perform Spider-Man, he defines him. Hybrid animation makes this closure possible. The frame itself becomes manifesto: the myth now belongs to him.

### 4.3 Findings

The analysis results are presented in this section through an organization of the three core elements, which include form, movement, and narrative. The analysis shows how hybrid animation produces meaning in *Spider-Man: Into the Spider-Verse* through the combination of 2D and 3D techniques in each area.

#### **Form: Visual Design with Purpose**

This analysis uses the Spider Bite scene (Scene 1), the Collider Encounter scene (Scene 3), and the Final Battle sequence (Scene 10), where hybrid animation enhances emotional and symbolic meaning through compositional layering. The movie unites comic book design elements with digital 3D virtual environments.

The visual treatment of characters includes Ben-Day dots and cel shading and halftone textures, and offset outlines, which create printed ink effects while supporting spatial depth. The colors in this scene draw from comic book tropes about mutation and glitch aesthetics. The visual elements of speech bubbles and motion lines, and panel overlays become most visible during times of emotional stress.

The visual space in Scene 2 (First Manifestation of Powers) displays floating panels that are both crowd reactions and Miles's invasive thoughts, which create a visual representation of his confusion. According to McCloud (1993, p. 70), the "moment-to-moment transitions" create a time suspension in the narrative, which stands for psychological ambiguity.

The visual space in Scene 3 (Kingpin's Hallucination) breaks into Cubist-inspired, fragmented pieces. The space in this scene follows Wells's (1998, p. 124) concept of "expressive distortion," which uses emotional expression instead of realistic representation. The resulting composition transforms into a performative visual space that displays affect externally. These examples show how hybrid animation serves as a semantic structure that supports character psychology and guides audience perception.

#### **Movement: Motion as Emotional Language**

This section uses Scenes 2 (First Manifestation), 4 (Prowler Chase), 9 (Leap of Faith), and 10 (Final Battle) to show how animated movement expresses emotional change. Miles's physicality evolves throughout the film. At the beginning of the film, Miles's animation is on

twos, which creates a jerky and uncertain rhythm. In Scene 9, the animation moves to ones that produce fluid arcs that show confidence.

Miles takes a leap of faith by jumping from a glass skyscraper during the “Leap of Faith” sequence. The picture shows his body mid-jump, which references classic superhero poses. The dive represents agency, as Miles makes a deliberate choice rather than falling. The visual design reflects this narrative shift.

The film uses squash-and-stretch, smear frames, and blurred arcs during key action scenes to enhance emotional impact. In Scene 10, Miles uses his venom strike to stretch his body while releasing electrical energy. The visual effect follows Wells’s (1998) concept of “metamorphic exaggeration,” which places emotional force above realistic motion.

The camera movements in the film depict the internal transformations of the characters. The inverted camera angle in Scene 9 transforms Miles’s descent into an upward motion that symbolizes his growth. This inversion conveys transformation. The mask in McCloud’s (1993, p. 36) theory does not hide Miles’s identity but shows it to the audience.

The visual elements in Scene 4 create disorientation through speed lines, which Gunning (1986, p. 64) describes as a “cinema of attractions.” The narrative stops to let spectacle take center stage. Motion serves as a storytelling tool and expressive element in *Spider-Verse*. The visualization of emotional development depends on frame-rate, together with gesture and camera path.

### **Narrative: Storytelling Through Style**

This section draws from Scenes 5 (Graveyard), 7 (Rooftop Revelation), 9 (Leap of Faith), and 11 (Brooklyn Swing Epilogue) to examine how narrative meaning is conveyed through visual form. The film uses comic-style layouts, fragmented panels, thought bubbles, and flashback frames, particularly when characters experience emotional tension.

In Scene 5, panels and thought bubbles break up the screen space as Miles walks with Peter B. Parker through a graveyard. This fragmented layout visually represents Miles’s emotional fragmentation. McCloud’s concept of “subjective motion” (1993, p. 114) describes how internal states can be visualized through layout and pacing rather than through realistic acting or dialogue.

Scene 10 uses rapid editing, glitch overlays, and visual interruptions to generate narrative rhythm. These choices create acceleration and suspense without relying on dialogue. Gunning's (1986, p. 64) theory of attractions explains this approach: narrative takes a back seat to visual intensity, producing a direct emotional experience.

Scene 9 emphasizes Miles's transformation during the collider collapse. As he glitches in mid-air, his body distorts and trails in smears. The image shows visible flickering and visual fragmentation. References to misprinted comic panels and digital errors. this rupture is metaphorical: Miles becomes Spider-Man not by overcoming instability, but by integrating it.

This glitch moment visualizes metamorphosis. However, hybridity also creates visual challenges. In Scene 4, the Prowler chase uses heavy layering and distortion that briefly conceals spatial clarity. While this reflects Miles's fear and confusion, it also complicates viewer orientation. This reveals a productive tension: hybrid animation's expressive power can sometimes disrupt readability.

## **Chapter 5: Discussion**

### **5.1 Introduction**

The research question of this chapter explores how hybrid animation between 2D and 3D techniques functions as a visual and narrative device in *Spider-Man: Into the Spider-Verse*. The research aims guide this discussion which combines theoretical and analytical insights from Wells (1998), McCloud (1993) and Gunning (1986). The analysis investigates how hybrid animation techniques create meaning while expressing emotions and controlling narrative flow especially during transformation sequences. The findings are placed within the context of existing scholarly research about animation and visual storytelling.

### **5.2 Interpretation of Findings**

#### **5.2.1 Hybrid Animation as a Meaning-Making Device**

The analysis shows that hybrid animation functions as a fundamental visual method to depict character transformation in *Spider-Man: Into the Spider-Verse*. During the spider bite and “Leap of Faith” sequences the animation merges 2D comic-style elements including Ben-Day dots and caption overlays and thick ink lines with 3D camera movements and spatial rendering. The stylistic combinations function beyond aesthetic purposes to show psychological boundaries. The animation depicts Miles’s transformation through symbolic visual elements which use flattened geometry and fractured composition and heightened color saturation to show his biological change. Through these visuals the internal conflict becomes visible to the audience which enables them to experience the importance of identity formation instead of just seeing it. During these moments hybrid animation creates meaning because it represents emotional tension through physical screen distortions.

#### **5.2.2 Form and Color as Expressive Tools**

The film combines 2D graphic textures with halftones and cel shading and offset outlines which it applies to 3D character models and environments to create both visual mood and emotional tone. The visual elements create spatial discontinuity particularly in reflective scenes such as the dorm room and hallway, because they flatten backgrounds to match Miles’s psychological confusion. The narrative alignment of color contrasts depends on purple and green representing confusion and threat, while red and blue represent belonging and growth. The film uses narrative function to assign meaning to colors instead of treating them as independent symbols because these colors change when Miles transforms. The visual arrangement and

compositional disorder in the film directly correspond to the emotional condition of its characters. The Cubist planes in Kingpin's hallucination sequence break up space to depict his emotional breakdown. The combination of 2D and 3D visual elements in the film sets up subjective states through visual form which directly supports narrative progression.

### **5.2.3 Movement and Frame-Rate as Emotional Cues**

The animated motion in *Spider-Verse* functions to show both emotional and narrative development. The film shows Miles moving in a slow rhythm on twos while the surrounding world moves in ones during his early scenes. Through this animation technique the filmmakers show Miles's isolation from others while also expressing his lack of synchronization with them. The story progresses through time as Miles learns to match the movement rhythm of his peers, and this change happens at specific narrative points. The story uses movement as a storytelling tool to show character development through the way it is timed. The forest swing scene shows the growth of trust and mentorship between Miles and Peter B. Parker through their shared rhythmic movements. The 3D adaptation of squash-and-stretch principles creates exaggerated motion effects that enhance emotional impact as seen in Miles's venom strike and Kingpin's attacks. The animation technique of freezing and stretching reality uses motion to depict the intensity of pressure and conflict and the resolution of situations. The camera movements in the film track Miles' emotional journey while the "Leap of Faith" sequence uses camera orientation reversal to transform his fear into an upward movement.

### **5.2.4 Narrative Rhythm and Visual Timing**

The film achieves narrative rhythm calibration through its combination of visual tempo and compositional design elements in hybrid animation. The film employs comic-style ruptures with jump cuts and freeze-frames and glitch bursts and floating text to create dramatic moments of tension or internal conflict. The devices disrupt temporal flow to highlight emotional moments which appear during the rooftop confrontation and the graveyard scene. The film transitions between scenes through graphic disruptions which visually show changes in tone or perspective. The collider implosion sequence demonstrates this technique by using fast frame transitions together with spatial distortions to represent the emotional intensity of collapse. The fusion of spectacle and structure occurs through this method. The narrative pacing now depends on both dialogue and action as well as the timing and visual texture of changes. The film shows hybrid animation as a storytelling mechanism through which visual timing functions as a narrative tool.

The research confirms the effectiveness of visual scene-based analysis for studying how hybrid animation conveys meaning through its combination of visual elements and narrative structure. The frame-by-frame analysis of transformation sequences revealed how visual storytelling tools such as 2D overlays and frame-rate shifts and spatial distortions function as narrative devices. The research techniques shown in the findings prove the main research objective which proves how hybrid 2D/3D animation builds character development and emotional depth through its complex visual systems. The findings set up a basis for the following discussion chapter which combines these results with animation theory to evaluate their impact on modern animated cinema discussions about form and meaning.

### **5.3 Synthesis with Literature**

#### **5.3.1 Form: Visual Design as Narrative and Emotional Layer**

The research demonstrates that the visual presentation of *Spider-Man: Into the Spider-Verse* functions beyond aesthetic purposes. The visual structure generates meaning by combining comic-style abstractions with spatial depth elements. The combination of 2D features together with Ben-Day dots and halftone textures and offset outlines and 3D modeling creates a space that shows both volumetric and printed characteristics. Kivistö (2019) and O’Hailey (2015) support the analysis through their research which shows how hand-drawn expressiveness can support spatial integrity when imported into computer-generated environments. These formal techniques which go beyond style serve to tell psychological stories. The environment distorts through glitch overlays together with flattened textures and comic panels whenever Miles experiences anxiety or emotional rupture. The disruptions function as more than visual effects because they express the inner divisions of a character. The research by Oyallon-Koloski & Junokas (2022) along with Kim (2023) establishes that hybrid forms function as carriers of personal subjective experiences. Color modulation serves an equivalent function to the other visual elements. The deliberate color palettes in the film use glowing purples to show tension and red-blue color transitions to signify Spider-Man identity. Hayes (2013) explains that strong color differences between elements help viewers notice specific points in a narrative while reinforcing its core ideas.

Visual inconsistency is another deliberate tool. The misregistered RGB outlines appear as a visual instability when the character experiences emotional peaks or moments of collapse. Luntraru et al. (2022) interpret this visual technique as a psychological representation

of emotional breakdown. The analysis shows that these specific visual effects occur specifically when Miles experiences confusion or danger. The compositional methods of UV texture projection and 2D overlay on 3D rigs serve storytelling purposes in the movie. The processes described by Barbieri et al. (2017) combine traditional elasticity with digital solidity to create a new connection between these elements. In *Spider-Verse* the synthesis functions as a metaphor for Miles's dual existence.

The emotional impact of a scene appears from how the artists build up foreground elements against the background. The graveyard and collider breakdown sequences use matte-painted skies and flat city plates behind three-dimensional characters to generate spatial tension which reflects alienation and breakthrough moments. The strategic use of layered visual elements by Cooper (2002) helps to avoid visual incoherence but in this case, it strengthens emotional states.

### **5.3.2 Movement: Rhythm, Gesture, and Emotional Transformation**

Movement in *Spider-Verse* serves more than choreography, it performs emotion. The findings support the idea that hybrid animation uses movement to externalize internal change. This is clearest in Miles's transformation arc. Early in the film, his awkwardness is rendered through low-frame-rate stutter and hesitant poses. Later, smoother motion marks his newfound confidence. Neff (2014) argues that animated acting translates emotion into gesture. The analysis shows this principle at work: timing and movement are not just technical, they reveal what the character feels.

Frame-rate modulation becomes a visual metaphor. Miles is initially animated on twos, giving him a choppy, uncertain rhythm. As he matures, he shifts to ones, synchronizing with the other *Spider-heroes*. This shift is not only visual but symbolic. Teh et al. (2023) discuss frame rate as a narrative tool, and the findings confirm that asynchronous timing marks character development. Beyond timing, expressive tools like squash-and-stretch, smear frames, and overlapping action enhance emotional beats. Coleman (2012) describes "motion extrema" as freeze-frames of emotional peak. In *Spider-Verse*, key actions, like Miles's venom blast or Kingpin's strikes, use these techniques to dramatize intensity. This supports the interpretation that motion is a psychological signal, not just kinetic display.

Camera motion also shapes emotion. Wu et al. (2023) introduce "actor-driven" camera logic, where the lens mirrors character feeling. The findings confirm this: the inverted camera during Miles's leap visually maps his transformation. Combined with environmental motion, warping

buildings, reversed gravity, these techniques allow space itself to react to character growth. Notably, the film balances stylization with physical believability. While the motion is mostly keyframed, moments of grounded action suggest subtle motion capture. Guo and Zhong (2022) argue that blending mocap with hand-drawn elements can yield emotionally resonant movement. The analysis supports this: Miles's motion often feels caught between natural physics and stylized exaggeration, just like his identity. Movement in hybrid animation is not just how things move but why they move that way. It encodes character arcs, emotional rhythm, and narrative stakes into visible form.

### **5.3.3 Narrative: Visual Language and Structural Innovation**

The story of *Spider-Verse* unfolds through both narrative progression and visual organization according to the research findings. The external visual methods of Hybrid animation represent psychological conflict, while it collapses time and space and uses visual logic to dramatize transformation. The research goal to analyze how hybrid techniques create narrative meaning receives validation through these findings.

Comic grammar plays a vital role. The combination of speech bubbles with text boxes and segmented panels functions as a structural element to stand for internal thoughts. During Miles' self-doubt, the screen breaks into multiple visual pieces which mirror the story's conflicting elements. The visualization of internal monologue in hybrid media follows the principles of narrative theory as Yuanliang & Zhe (2024) explain. The narrative effects function as the main narrative progression instead of disrupting it.

The structure of the story depends on the distortions which affect both time and space. The visual distortions during multiverse collapse and collider sequence represent both instability and loss of control and unresolved identity. The analysis interprets these visual effects symbolically and research by Wu et al. (2023) supports the interpretation that hybrid aesthetics merge cause and effect into emotional content.

Through pacing the story achieves its purpose as a storytelling mechanism. The film uses fast edits together with jump cuts and flashbacks and abrupt rhythm changes to control emotional tempo. The film uses visual rhythm instead of dialogue to express changes in tone. The use of montage and timing as narrative punctuation methods is supported by Hayes (2013) in his work.

The narrative conclusion occurs through both formal elements and movement patterns. Miles experiences both spatial confusion and narrative arrival during his inverted descent in the

“Leap of Faith” sequence. The scene demonstrates the main finding of the research, which shows that hybrid animation transforms transformation visualization from cause-effect logic to a visual metaphor.

#### **5.4 Final Synthesis and Conclusion**

The research investigates how *Spider-Man: Into the Spider-Verse* employs hybrid animation techniques to create meaning through visual elements and motion sequences and storytelling elements. The research proves that hybrid animation functions as a storytelling technique which directs character development and emotional expression and narrative structure.

The study shows how 2D textures including halftones and caption panels and RGB misregistration combine with 3D models to display inner states. The stylistic elements serve as narrative cues because they appear at specific moments when the story experiences ruptures or when characters make decisions or undergo identity changes. The research confirms existing findings while adding new evidence through its demonstration of how formal disruptions match character emotions and plot developments during transformational scenes.

The analysis shows how frame-rate choices together with animated elasticity and camera paths create external representations of Miles’s internal transformation. Movement transcends physicality to become an expressive element. The study shows how hybrid movement expresses emotional states and character development through its evolution of asynchronous frame rates and squash-and-stretch techniques, and actor-driven camera motion across different sequences. The research confirms movement as a fundamental element for both narrative development and emotional design.

The narrative techniques of hybrid methods transform time and space elements to depict personal experiences. The visual elements of glitch effects and panel layering and visual ruptures create spatial representations of psychological conflict while controlling the story’s pace. The visual strategies in the story show Miles’s transformation into Spider-Man through his visual rhythm and stylized rupture and compositional change.

The research shows that hybrid 2D/3D animation in *Spider-Verse* functions as more than an aesthetic choice. It is the narrative engine. The animation functions to establish identity while depicting emotions and constructing narrative meaning through its internal structure. The

film sets up new boundaries for animation by using its design elements to create affective and symbolic storytelling throughout its entire structure. The research provides a concrete framework for how formal and expressive techniques can collaborate to create dramatic transformation effects in hybrid animation.

The “Leap of Faith” sequence shows how hybrid animation unites visual design elements with movement and narrative components in perfect harmony. The form fractures when cityscapes become inverted and panel lines disrupt perspective while Miles’s figure appears through misregistered RGB lines. The graphic distortions in the scene represent his mental transition from uncertainty to belief. The animation of Miles through space becomes emotional code which matches his new rhythm and confidence as he moves smoothly through ones. The camera’s inverted position while tracking upward turns a descending motion into an ascending movement. The narrative meaning develops through the combination of motion and form composition instead of dialogue. The study shows its main point at this moment because Spider-Verse hybrid animation uses visual elements to create the story instead of simply decorating it. The combination of 2D and 3D aesthetics creates visible identity and emotional expression, and agency, which transforms stylistic choices into narrative architecture.

## **5.5 Contributions to Knowledge**

This study advances the field of animation studies by:

- Hybrid 2D/3D animation shows how visual form and expressive movement, and symbolic design work together to create psychological depth and narrative tension.
- The study shows how Panofsky’s three-tier method of iconographic analysis can be applied to animated film to analyze hybrid visual languages that combine spatial realism with graphic abstraction.
- The study provides a model for how transformation sequences in hybrid animation work narratively and emotionally through formal elements such as frame-rate modulation and color shifts and spatial distortion to express inner change.
- The research bridges the existing knowledge gap by linking animation techniques to character development through a detailed analysis of an individual case, which helps both animation theory and film narrative studies.

## **5.6 Limitations**

The research provides an extensive examination of *Spider-Man: Into the Spider-Verse* through a single case study. The detailed analysis of hybrid animation through this close reading method reveals its formal and narrative functions, yet does not examine how different studios and cultural frameworks and genres use hybrid techniques. The research primarily examines visual analysis and symbolic meaning but lacks a comprehensive investigation of audience reception and production workflows, and technological constraints. Generalizations about hybrid animation need to be tested through comparative studies of multiple hybrid animated films to find if the observed patterns exist across different animation practices.

## **5.7 Recommendations for Future Research**

The research used one film as its case study, yet the results create multiple opportunities for additional research. The use of hybrid animation in *The Mitchells vs. The Machines* and *Arcane* and *Puss in Boots: The Last Wish* could be studied through comparative research. The visual strategies from the first study appear again in new narrative settings or do they transform into different approaches? Future research should combine formal analysis with viewer reception studies to study how hybrid aesthetics influence perception and emotional response. The production side of research should investigate how artists and studios create hybrid pipelines through their design processes and tool selection and decision-making about style and output limitations. The research directions would enhance our knowledge of hybrid animation as both a formal system and an active production and perceptual language in modern animation.

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