

# Embodying Conceptual Metaphors in Mainstream Non-linear English Film Narratives An Analytical Study

A thesis submitted in partial fulfilment of the  
requirements for the

Degree of Doctor of Philosophy

by

Sheetal Madhav Gokhale



Department of Design,  
Indian Institute of Technology Guwahati  
Assam, India 781039

January 2024



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*Under the Guidance of*

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January 2024



## DECLARATION

It is certified that the work contained in this thesis entitled '**Embodying Conceptual Metaphors in Mainstream Non-Linear English Film Narratives.**' It has been carried out by me, a student in the Department of Design, Indian Institute of Technology Guwahati under the guidance of Dr. Debapriya Basu for the award of Doctor of Philosophy and that this work has not been submitted elsewhere for a degree.

Date: \_\_\_\_\_

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## CERTIFICATE

The research work presented in this thesis entitled '**Embodying Conceptual Metaphors in Mainstream Non-Linear English Film Narratives**' has been carried out under my supervision and is a bonafide work of Sheetal Gokhale. This work submitted for the Degree of Doctor of Philosophy is original and has not been submitted for any other degree or diploma to this institute or to any other institute or university. She has also fulfilled all the requirements, including mandatory coursework as per the rules and regulations for the award of the degree of Doctor of Philosophy of Indian Institute of Technology Guwahati.

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**Sheetal Madhav Gokhale**



## Abstract

This research is primarily concerned with the ways in which the advent of digital technology influenced the design of a film narrative and brought about innovation in the execution of cinematic storytelling in recent popular English language cinema, especially that of Hollywood. The study shows that not only does the ease of technology lead to new approaches to visual storytelling (viz. non-linearity), but that these novel experiments remain comprehensible to a lay audience by transforming our imagination of the world. Without a linear and teleological understanding of narrative time, imaginative engagement and narrative comprehension must depend upon other kinds of commonalities of language and culture such as embodied cognition and cognitive metaphors. This study sought to show that the newer understanding of the world that non-linear cinema seeks to elicit, is not only based upon embodied cognitive metaphors derived from language in filmic content but is executed at the level of design and form by manipulating the filmic container itself to facilitate an alternative understanding. In this respect, the study is located at the juncture of narrative design, digital humanities, digital media studies, and cognitive film theory.

While I situate the methodology used for the analysis of the film texts within the Conceptual Metaphor Theory framework laid down by CMT scholars in linguistics as well as film, advertisement, and games genres, I also draw generously from the formalist approach of film scholars from the cognitivist traditions to help parse the film texts and find the granularity required for a hybrid approach to this analysis. A comprehensive list of non-linear films was compiled from which high grossing, critically acclaimed and films with mass appeal were chosen. It was noticed while studying the temporal expressions at

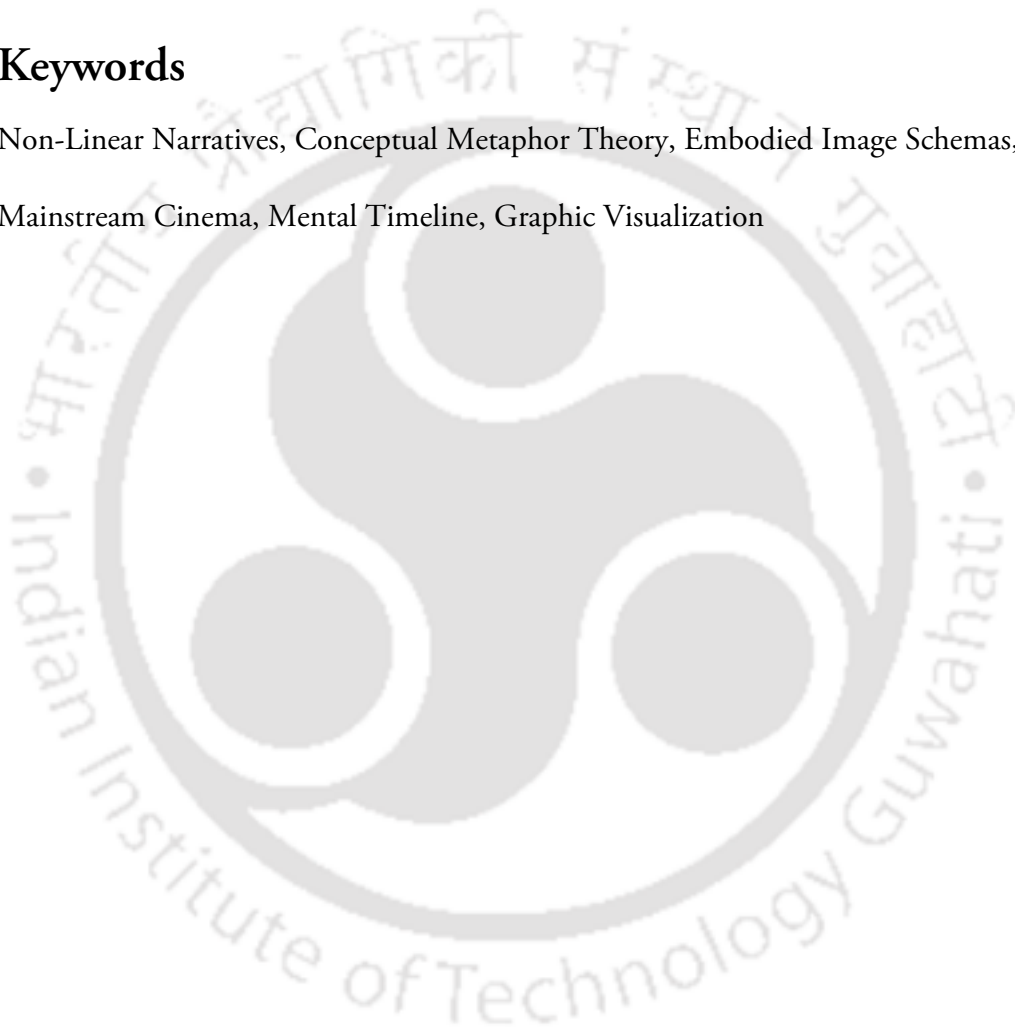
the level of the film edit that films like *Sliding Doors* (Peter Howitt, 1998), *Memento* (Christopher Nolan, 2000), *21 Grams* (Alejandro Iñárritu, 2003), *Arrival* (Denis Villeneuve, 2016) and *Dunkirk* (Christopher Nolan, 2017) seem to reflect and embody in their narrative structures the overarching thematic metaphors used in their content, making it possible for the viewer to arrive at a double understanding of the story, first by the motifs deployed in the narrative and second by the mode of temporal narration, or the non-linear arrangement of chronology. Using CMT, embodied image schemas, and graphic visualization, this study is able to demonstrate the CONTAINER, SOURCE-PATH-GOAL, FORCE schemas making use of metaphors about time, memory, journey, object and quantity in the narrative expression of the films. In addition to this, the thesis constructs a taxonomy of cinematic transitions that encourage comprehension of story strands in a non-linear representation. This taxonomy is a promising addition to the discourse and offers significant scope for future work in the domain of both linear and non-linear film narratives.

In conjunction with the analysis of film texts, this study suggests a methodology for future researchers to analyse any of the 290-odd films that have been collected in the course of the project and also for filmmakers who may wish to incorporate metaphors in their own storytelling. An essential part of the methodology is rendering the metaphoric representation into a visual manifestation. These visual representations can also aid the viewer's burdened cognitive resources while also possibly assisting in the discovery of previously unknown areas of meaning or previously overlooked connections and patterns. Consequently, this study proposes that conceptual metaphors derived from the theme/content of the film narrative can be used as building blocks for the design of the structure and presentation of non-linear time. The analyses of film texts of the non-

linear variety appear to be just a handful of steps away from asking future filmmakers to use specific metaphors in their own films. It is the aspiration of this study that the insights from this research be converted into directly actionable points for creators to use as a compendium while conceptualizing cinematic narratives.

## Keywords

Non-Linear Narratives, Conceptual Metaphor Theory, Embodied Image Schemas, Mainstream Cinema, Mental Timeline, Graphic Visualization





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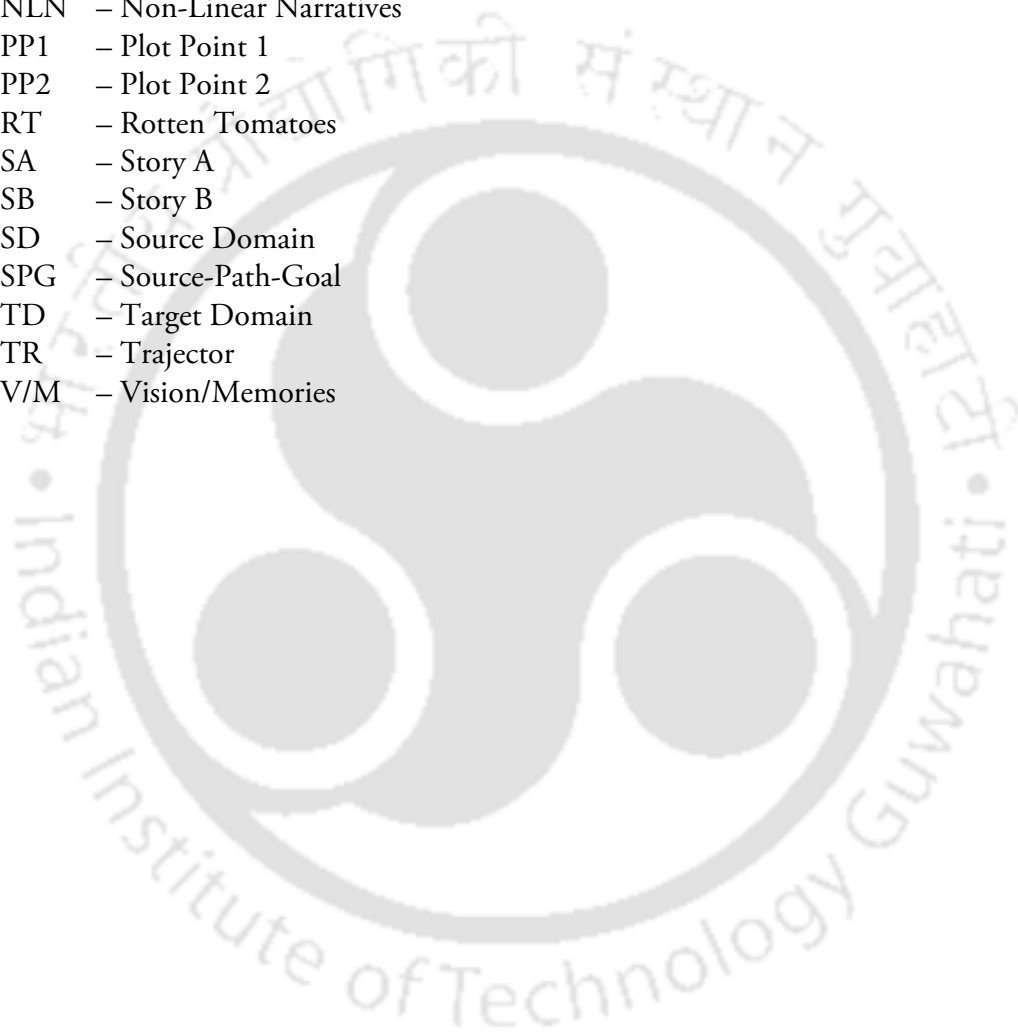
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## List of Abbreviations

|      |                               |
|------|-------------------------------|
| B&W  | – Black and White             |
| CMT  | – Conceptual Metaphor Theory  |
| DVR  | – Da Vinci Resolve            |
| FM   | – Future Memories             |
| FTN  | – Fractured Tandem Narratives |
| IMDb | – Internet Movie Database     |
| MML  | – Master Metaphor List        |
| MTL  | – Mental Timeline Theory      |
| NLN  | – Non-Linear Narratives       |
| PP1  | – Plot Point 1                |
| PP2  | – Plot Point 2                |
| RT   | – Rotten Tomatoes             |
| SA   | – Story A                     |
| SB   | – Story B                     |
| SD   | – Source Domain               |
| SPG  | – Source-Path-Goal            |
| TD   | – Target Domain               |
| TR   | – Trajector                   |
| V/M  | – Vision/Memories             |



# Chapter One

## *Introduction and Literature Review*

In his 1988 lecture *The Crisis of Linearity*, the media philosopher Vilém Flusser linked an observable transformation of contemporary discourse to the advent of the digital age<sup>1</sup>. He suggested that the identity of western culture, which is shaped by the linear structure of the alphabetical, then alphanumeric code, is being replaced by other codes that are structured differently. This change is significant because the way we think, feel, desire, act, perceive, and understand the world is heavily influenced by the structure of this new code. If future generations experience the world and themselves through the non-linear codes of technical images like photos, films, and television or through digitization, they will experience the world in a way that is different from us and our ancestors. Therefore, the fundamental cultural framework of sequential order is facing a challenge and is being replaced by computational procedures that, due to their heightened accuracy and lack of spatial or temporal dimensionality, threaten the linearity of the past: 'Linear, process-oriented, historical thinking sooner or later had to fall victim to analytical, structural, zero-dimensional, point thinking' (2003, 6).

The advent of digital tools in the past two decades for all avenues of production has affected filmmaking immensely too (Thompson and Bordwell 2010). In analogue

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<sup>1</sup> Delivered on March 20 at Kunstmuseum Bern translated into English by Adelheid Mers, (2003)

editing systems, an editor would cut and paste physical film stock together, and the entire process was fraught with the fear of damaging the delicate material substrate. On the digital platform, however, the ability to reorganise, shuffle, duplicate, manipulate, accelerate, or decelerate the progression of events in a film narrative may have afforded the editing process an unprecedented degree of freedom and control.

New media theorists like Lev Manovich (2001) have said as much, pointing out how the fundamental nature of the medium has changed by making it possible to manage, analyse and manipulate the data with more ease. Digital filmmaking has also led to an evolution of storytelling practices, with the design of the narrative now being more intuitive, innovative and in tune with the content of the film itself. This has led to many experiments in the realm of non-linear narratives, interactive narratives in the domains of film, television series and video games, further leading to a rise in complex narratives and puzzle films (Cameron 2008a; Buckland 2014; Willemsen and Kiss 2020; Elsaesser 2021). Simultaneously, empirical studies in text comprehension have now demonstrated that a reader constructs a mental model with a series of propositions to understand the conditions of a narrative text set (Zwaan 2016).

This research is primarily concerned with the ways in which this ease of play in film editing may have influenced design vision and execution in cinematic storytelling in recent popular English language cinema, especially that of Hollywood. The study shows that not only does changes in the technology of film editing facilitate new approaches to visual storytelling (viz. increase in the incorporation of non-linear plot elements), but that these experiments remain comprehensible to a lay audience by transforming our imagination of the world. Without a linear and teleological presentation of narrative time, imaginative engagement and narrative comprehension must depend upon other

kinds of commonalities of language and culture such as embodied cognition and cognitive metaphors. This study seeks to show that the newer understanding of the world that non-linear cinema seeks to elicit, is not only based upon embodied cognitive metaphors derived from language in filmic content but is executed at the level of design and form by manipulating the filmic container itself to facilitate an alternative understanding. In this respect, the study is located at the juncture of narrative design, digital humanities, digital media studies, and cognitive film theory. The following sections outline the scholarship in these and allied fields that are pertinent for contextualising this research.

The neo-formalist David Bordwell, whose work this study draws upon, and Kristin Thompson define a cinematic narrative as ‘a chain of events linked by cause and effect and occurring in time and space’ (Bordwell, Thompson, and Smith 2020). A story begins with a situation that is faced by a protagonist, who reacts to the circumstance, creating a series of changes that are dictated by cause and effect, eventually ending in a different situation which is a result of all the actions of the characters. Space, time, and causality, therefore, become important components of a cinematic narrative structure. According to Bordwell, a viewer makes sense of the narrative by linking cause, effect, time, and space. Rolf Zwaan observes that the late 1900s saw the introduction of a theory in the domain of language comprehension within which a reader constructs a mental model with a series of propositions to understand the conditions set up by a narrative text (2016). This theory has also been used to understand narrative comprehension in a cinematic medium, in which the viewer constructs a situation model based upon the propositions put forth by the narrative. According to Zwaan’s event-indexing model (events being the specific elements within a situation) ‘[e]vents are thought to be related

to one another on (at least) five dimensions: time, space, entity, causation, and motivation'(1028). This means that if there is an event taking place in any of the five dimensions, there is an overlap of the incoming clauses which integrate into an event representation. To put it simply, the viewer makes sense of the narrative with each piece of information they get and constructs a causal relationship amongst the events to create a full understanding of what they are seeing. Of course, this is not a novel idea in the domain of filmmaking (nor in traditional oral and literary narratives such as epic poetry). In the 1920s and 30s, Russian formalist filmmakers Sergei Eisenstein and Lev Kuleshov, while experimenting with the montage effect in film (see below), formalised the same effect in a series of experiments designed to show how subjective our comprehension of the narrative is and how dependant it is on the linearity of the medium and the order in which we get the information. A viewer actively participates in meaning making by making inferences and assumptions, and harbours expectations based on the order of the events in the plot.

Further, Willemsen and Kiss's work in non-linear storyworlds<sup>2</sup> demonstrates that even in complex narratives like in the film *Inception* (Christopher Nolan, 2010), viewers comprehend in spatial terms those plots which have a high degree of embodiment (2020). This relates to a concomitant development in the field of linguistics and psychology that changed the way we look at comprehension: the shift from traditional cognitivism to conceptual metaphor theory (henceforth CMT) and embodied cognition, in which, instead of looking at the brain as akin to an information processing unit, researchers now look at the way humans experience the world by virtue of possessing a

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<sup>2</sup> Non-Linear storyworlds are stories in which non-linearity is an inherent quality of the world, for e.g., films that involve time travel.

body. Conceptual metaphors are pervasive in both language and action as demonstrated by the works of CMT scholarship. Metaphoric representations like GOOD IS LIGHT and EVIL IS DARK have been used in visual narration in the filmic medium since its inception. While directors rely on metaphors to convey deeper meaning in the narrative form, film critics and theorists have analysed the incidences of these designs in film since the birth of cinema.

So far, research in cinematic metaphors has largely been corpus-based, in terms of analysing the image in the context of the story. Scholars such as Charles Forceville, Maarten Coëgnarts and Peter Kravanja, Kathrin Fahlenbrach, and Maria Ortiz have a career-spanning body of work on metaphors and image schemas in film, animation, and advertisements. During the literature review, I have found enough evidence for the use of the metaphor within the frame, with the use of camera movement, techniques, composition, sound, light, and colour.

In recent times, Miklos Kiss and Steven Willemsen (2020) have studied the metaphors of TIME IS SPACE in non-linear storyworlds, which is a relatively rare and niche field of study. By applying CMT and mental timeline theory (MTL) frameworks, both discussed more fully below, they demonstrate the manifestation of the CONTAINER schema and the SOURCE-PATH-GOAL (henceforth SPG) schema in the film *Inception* (Christopher Nolan, 2010). While this is an exciting turn in using CMT and MTL to look at metaphors in non-linear narratives, the work in this domain is sporadic to say the least.

The principal objective of this research is to contribute to the discourse around conceptual metaphors in film and extend its scope by applying CMT to the form rather

than the content of visual narratives as embodied in complex non-linear mainstream English language films. Non-linear narratives seem to fit into this search query innately since filmmakers experiment with the form of the narrative to depict the character's mental state as in, for e.g., the retrograde structure of *Memento* (Christopher Nolan, 2000). Cinema is regarded foremost as a medium of storytelling, and it is possible for a designer to ascertain the medium taking its shape by the dictates of its content. It was noticed while studying the temporal expressions at the level of the film edit that texts like *Memento*, *Irreversible* (Gaspar Noe, 2002), *21 Grams* (Alejandro Iñárritu, 2003), and *Arrival* (Denis Villeneuve, 2016) seem to reflect and embody in their narrative structures the overarching thematic metaphors used in their content, making it possible for the viewer to arrive at a double understanding of the story—first by the motifs deployed in the narrative and second by the mode of temporal narration, or the non-linear arrangement of chronology. Given these remarkable developments, a filmmaker now can engage in an arguably more exciting, challenging, and better-nuanced communication with a wider audience. Thus, a close study of the technical design of select existing film texts in the non-linear mode was considered important to show how this entangling of form and content results in value addition to visual storytelling and how the insights generated through such a study could be of use to future scholars and practitioners of the medium.

## 1.1 Literature Review

As the cinematic medium evolved, so did the makers, the tools, and their audience. Concomitant with technological advances came breakthroughs in understanding the human mind and perception. In this section, I offer a brief overview of literature across

cinema studies, narrative theory, linguistics, psychology and some theories of comprehension and perception that are considered in studies of how an audience is found to experience the viewing of a film.

### 1.1.1 Cinema and Cinematic Techniques

Within a century of the birth of the medium, immense technological advances changed the trajectory of cinema from a very tangible analogue format to the seemingly limitless digital. This paradigm shift also saw a change in pacing and storytelling that was reflected in the form of the film itself (Bordwell 2006). The nascent years from 1910s to the early 1920s demonstrate how fragments of action caught on film went from documentation of people and places to the seamless storytelling, offering an almost complete immersion into a different world, of today. With all the latent potential, the consumers of this new medium had to be taught to understand the cinema space.

One of the first documentaries shown by the Lumière brothers, the *L'arrivée d'un train en gare de La Ciotat*, ('The arrival of a train at the Ciotat station,' 1896) had such a lasting impact that it created the following apocryphal story—when the audience first saw the train pull into the station, they leapt out of their seats and ran away in fear, mistaking the train for real. Whether it really happened or not, the train did create a lasting impression in the minds of people who had never seen moving images before (Cousins 2020).<sup>3</sup>

After the medium had gripped the collective imagination of viewers across the world, elaborate stories and an atmosphere suited to viewing became the need of the hour

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<sup>3</sup> The sections dealing with the history of cinema unless stated otherwise, have been paraphrased from *The Story of Film* by Mark Cousins (2011,2020), which to date is the best source of information on the topic.

(Cousins 2011a). Stories of these films came from popular literature of that time, like *Hamlet*, *Oliver Twist*, and *Sherlock Holmes* so much so that between 1909 to 1912, *Oliver Twist* was filmed 8 times. In India, the Phalke Studio was making films based on the epics popular in the country, namely the *Mahabharata*, the story of King Harishchandra, and even one film on the life of Christ. Similarly, all over the world filmmakers were looking for inspiration in the classics of literature.

However, very quickly, filmmakers realised that in order to tell a coherent story, whether fiction or non-fiction, there needed to be a form or structure, a way of telling. Much like how a story is told in written or oral traditions, the medium demands a context and a flow. The smallest unit of the medium, the 'shot,' which was a discrete piece of the recorded film, could be combined with more such shots from another sequence to direct a viewer's attention to a pre-existing consistency in the narrative across time and physical location to create a coherent story. Audiences also began demanding more than just documentaries. This demand for narrative very quickly gave rise to techniques in storytelling that were intended to make the experience of watching a story play out on screen immersive. The resultant multiple character/place arcs gave rise to a need to preserve spatial and temporal continuity, which in turn developed into a concept called 'continuity editing'. In the period between 1903 to 1918, many ingredients of western storytelling fell into place as conventions: continuity cutting, close-ups, parallel editing, expressive lighting, nuanced acting, eye-line matching and reverse angle editing.

## The Continuity Edit

In order to look at the scholarship in non-linear narratives in cinema, we must first take a closer look at the genesis of the abovementioned continuity edit which was a

combination of cinematography, editing and storytelling. One of the first instances of this backbone of modern cinematic storytelling is popularly believed to have been *American Fireman* in 1903, in which director Edwin Stanton Porter cut between the exterior of a burning building and the interior where the fireman bravely saves a child for the distraught mother waiting outside which reminded audiences of the seriousness of the danger, thus contextualising the fireman's act and intensifying the desired emotional responses of fear and admiration. From this instance on, cinema had learnt to tell a story fragmented through space but following a temporal structure. This technique came to be known as the parallel edit.

Another important component of the continuity edit was the reverse angle edit. In 1913, Ralph Incé made an actress on a boat look at a crewman fighting in *His Last Fight*. With his innovation, Incé could make the audience feel the story from a chosen character's viewpoint. Reverse angle editing has now become one of the most important techniques in mainstream filmmaking.

At its inception the movie camera was an ungainly device, needing an operator and a steady base. Italian filmmaker Giovanni Pastrone is widely credited with being the first filmmaker to move the camera in a frontal, backward or a diagonal movement instead of being fixed on a pedestal in one spot according to established practice. His 1913 film *Cabiria* was remarkable in its innovations and spectacular sets and besides creating a sensation all over the world and the tracking shots came to be known as 'Cabiria Movements'. According to Cousins, Yevgeny Bauer in Russia was also taking the tracking shot further in *Twilight of a Woman's Soul* (1913) by infusing a melancholic tone to the action unfolding on screen.

Another prolific filmmaker of note is the American director D. W. Griffith, who made 400 short films from 1908 to 1913. Griffith worked with top actors and cinematographers in the industry and collaborated with actresses to bring a unique blend of gentleness and ferocity to their movements (2011b, 73). Griffith's *The Birth of a Nation* (1915) was a historical film with a wide-reaching appeal, featuring epic battle scenes and running for an impressive three hours. His next film *Intolerance* (1916) took the history of intercutting to the next stage. He would take storyline A to a point, stop it and show storyline B, then switch to storyline A and return to B at the point he had stopped. The film had a tremendous impact on filmmakers worldwide.

In cinema's early days, directors were influenced by theatre, presenting frontal action for an overall view, but making it difficult for the audiences to see emotions. As actors grew more popular, filmmakers used closer shots to capture their expressions better and this came to be known as the 'American Shot'.<sup>4</sup> With this evolution of the language of film making, early filmmakers devised the grammar of shot taking, ie. starting with the establishing shot and gently easing into the space with the purpose of easing the audience into the story, thus creating a structure in which it was necessary to establish the space/time of the narrative. For e.g., the 'establishing long shot' showed us the space and the time, maybe even showed a key character's entry. From then on, the shot framing and the camera movement were designed to usher the audience into the narrative space.

## Montage

In the decade spanning the 1920s and the 1930s, a group of Marxist filmmakers became fascinated by the power of editing to incite an intellectual response in the viewers. They

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<sup>4</sup> Opposite to the trend developing in the rest of the world, Japanese cinema kept up the theatre-inspired frontal visualization of space almost till the end of World War I

began to juxtapose shots that had little to do with each other in the flow of the narrative, rejecting the techniques of continuity editing and reverse angle editing. The attempt was towards disturbing the audience and forcing them to look for a possibly metaphorical or political connection between apparently unrelated images. In theory, they wanted to kick-start the audiences' thought processes and thereby make the medium an ideal conduit for the enlightenment of the working classes. This editing technique came to be known as montage.

Lev Kuleshov led the Soviet film industry during a period of experimentation and collaboration, creating a cohesive community, focused on generating new ideas. In a paradigm shifting experiment, Kuleshov, with his students, edited together shots of an actor, a bowl of soup, a woman in a coffin and a woman on a sofa. The ordering of the shots, which he shuffled as a part of the experiment, had a marked effect on an audience's interpretation of the actor's neutral expression demonstrating the medium's ability as an art form to conjure specific reactions from the changing of the relationship between indexical images. This was known as the 'Kuleshov Effect', an integral part of montage editing (Thompson and Bordwell 2010, 122).

The montage theory holds that the dialectical collision of images creates meaning in the film. The technique is less concerned with the script and more with the synthesis of associations between shots. Sergei Eisenstein codified the use of montage and expanded his theories to encompass the internal nature of the image (1949).

## **Editing Process**

Between the continuity edit, the reverse angle editing and montage, the blocks of cinematic storytelling fell into place. The form of the film, in the meantime, also

underwent transformation with the evolution of editing processes. We look at the process of editing spanning from pre-digitization to post-digitization below.

**Linear Editing** in film, before the advent of the digital platform, was done manually, using the original negative that was printed as a positive to enable viewing. The exposed film was then cut and pasted together with tape or glue making the process very ungainly and delicate. It also meant destroying the original negative to create the final edit of the film. In cases of the need to reuse some shots, the process of negative and positive making had to be repeated, leading to generation loss, i.e every time the negative was reprinted, the grains in the image increased, making it fuzzy. This manual set-up was called 'linear editing', and the editors needed to be expert film handlers.

**Non-linear Editing:** Before the advent of complete digitization of the editing process, came the non-linear setup, which made many things easier than the earlier methods. In a step called 'telecine,' the original developed film was digitised by scanning (earlier by transferring to tape) and then worked upon on an intermediate digital platform (G. Chandler 2012). Software like AVID® and FINAL CUT PRO™ became industry standards. In this, the software generated was called an Edit Decision List (EDL) and the actual physical film could be handled without generation loss and therefore became much more malleable. This technique was also called the non-destructive edit. Later, armed with the EDL an expert could cut the original footage and hot splice it together. The films could continue to be shot on film stock but edited on the digital platform, and then projected back through the original negative.

**Complete digitization** of the shooting, editing and post-production process came about with the introduction of better digital sensors to record video footage<sup>5</sup>. Without the need to handle actual stock and the ease of transfer, the process of filmmaking from shooting to editing to postproduction became much more streamlined. These days, it had become common practice to find mainstream films being shot on High-Definition Resolution (HDR) cameras with digital recorders. There are two schools of thought about the usage of digital cameras, one who believe that shooting on film stock, while recording lesser details, gives richer blacks and more depth to the image, and other believes HDR recording yields more details and therefore richer images. It comes down to the director's or cinematographer's preference and the budget at the end of the day.<sup>6</sup>

Films in the last decade have been increasingly shot in the digital format, to also cater to high resolution digital projection and the popularity of 3D viewing technology.

### **The Writer, the Director, and the Editor**

With most big budget, high production value films, it is very important to start with a bound script. This does not necessarily mean that critically acclaimed films haven't been made without bound scripts. But the money riding on the success of a big budget film necessitates the following of a standard procedure that big studios have evolved and swear by. Many studios insist on scripts that are of a specified length, in a specified format. 'A two-hour long script is a standard length, and today, when a contract is written in Hollywood between the filmmaker and production company, it states that when the

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<sup>5</sup> Parts of this section have been summarized from David Bordwell, Kristen Thomson and Jeff Smith's compendium on filmmaking *Film Art: an Introduction* (2020) and Bordwell and Thompson's *Film History: an Introduction* (2010) unless otherwise indicated.

<sup>6</sup> Director Christopher Nolan eschews the digital format and prefers to shoot on film stock exclusively, so much so that he went to the extent of dissuading Eastman Kodak Company from discontinuing its photochemical film operation in 2015. (Danowski 2017)

movie is delivered, it will be no longer than 2 hours and 8 minutes. That's approximately 128 pages of screenplay' (Field 2005, 22).

Before shooting, the directorial team puts together a shot breakdown and a shooting script in consensus with the cinematographer and the set designers. Even then, at the time of the shooting, a director might find themselves unable to stick to the shooting script. In such cases, improvisation on the part of the cinematographer, actors and directors is brought into play. Subsequently, on the edit table, the editor and the director may both feel that it becomes necessary to change the order of shots to enhance the narrative, for e.g., in cases of building suspense or chase sequences. As indicated in the account of the technique of montage above, the order in which the shots come onto the screen affects the semantics of the sequences. It then becomes crucial for an experienced editor to work in tandem with the director. It isn't unusual to see a whole lot of the film structure change on the edit table.<sup>7</sup>

## Cinematography

One of the main tenets of filmmaking, cinematography, is more than just the art of photography. It is taking ideas, words, actions, emotional subtext, tone and all other forms of non-verbal communication and rendering them in a visual format<sup>8</sup>. It could be said that the primary task of cinematography is to build a unique world for the characters to live in, and no other can approximate it. World-building ensures that the audience believes that in this world, these characters would do exactly what they are being shown

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<sup>7</sup> While there are many anecdotes, an infamous example is Francis Ford Coppola's *Apocalypse Now* (1979). Editor Walter Murch Spent the better part of 2 years editing and mixing 230 hours of footage into a 153 min film (the other versions spanned to between 153 to 202 mins). Coppola had shot so much footage that it can be said the film got constructed entirely in the editing suite (Murch 2001).

<sup>8</sup> Parts of this section have been summarized from Blain Brown's *Cinematography: Theory and Practice* (2012) unless stated otherwise.

to do and nothing else. The conceptual tools of cinematography could be largely seen as the following: the frame, light and colour, the lens, movement, texture, establishing, and point of view.

The frame directs the audience's attention, giving us information about the situation and the character. By choosing to show or omit, the director/director of photography can endow the characters/situation with emotions that the viewer can empathise with. A lone character on an empty beach, another in a crowded railway station: framing such sequences allows the layering of meaning onto the narrative, making it richer and more poignant.

The optics of the lens also have the power to alter our perception of the world, the resultant effects—contrast and sharpness, depth of field, space distortion—can withhold or affect the exposition of information in the narrative. Light and colour are upheld as powerful tools, having the ability to reach the audience at an emotional level. Movement, so inherent to the cinema, manifests in cinematography as the tool to imbibe the shot with kinesis that is capable of conveying emotions, and establishing the story via camera is considered the best way to keep the audience hooked on the narrative by revealing the story a shot at a time.

‘Point of view’, is essentially the camera as the perception of the viewer. It is almost impossible to get away from the camera/eye analogy. Therefore, the point of view of a character can be established by the camera and allows the audience to connect to the characters. Different types of points of view can have different meanings, for example forcing us into the shoes of a character running for his/her life, or making the audience feel omniscient by given them all the viewpoints.

The cinematic techniques outlined above, combined with each other and more, have been used to create infinite dimensions of narratives, affecting audience perception to varying degrees. They can be used to add visual subtext and visual metaphors to the sequences.

## Narrative Structures

Narrative forms are many and varied. According to French semiotician and literary theorist Roland Barthes, a prodigious variety of genres branch out into a variety of media; amongst which the vehicles of narrative manifest in an infinite variety of forms (Barthes and Duisit 1975). Furthermore, it is almost impossible for human beings to understand themselves without history. It is only when we tell stories that we have a history, and it is only when we have a history that we have an identity. Like the great mythologies of cultures across the world, early cinema also had its roots in the storytelling of the written and oral form. Early Russian and Japanese films came from a strong root in the art of the theatre, so much so that Japanese filmmakers were using the medium as an extension of live theatre and live narrations almost till after World War I. (Cousins 2011a)

Traditionally and historically, the understanding of the narrative has been tied to a particular type of plot. Aristotle's *Poetics*, formulated as a comment on the art of tragedy, informs us that a tragedy is impossible without action. A work should be long enough to allow of the hero's passing through a series of probable or necessary stages from misfortune to happiness or vice versa (Altman 2008).

In the early 1940's, Vladimir Propp's *Morphology of Folktales* went on to influence scholars like Claude Levi-Strauss and Barthes and was a breakthrough in terms of a study of the structure of folktales. He identified eight character-archetypes and 31

narrative functions that appeared in a particular order in a story. The character archetypes are widely used in media education even today. More importantly, they form the basis of characterisation in popular cinema, even, for example, the archetype of a villain and a hero.

In 1949, literary theorist Joseph Campbell published his magnum corpus, *The Hero's Journey*. His 'monomyth' was greatly influenced by psychoanalyst Charles Jung's theories of dream interpretation. The monomyth theory sees all myths as being variations of one great story. Campbell observed that all narrative elements of great myths have a common pattern, regardless of their origin or time of creation. These patterns most popularly were depicted as the 17 stages of the hero's journey and could be categorised under the three linear headings of *Departure*, *Initiation* and *Return*. What both Propp and Campbell were seeking was a unified theory of narrative structures. While applicable to popular Russian and world folktales, these structures seem too constrictive for other genres (Haring 2016). That doesn't undermine the impact of Propp's Archetypes and Campbell's Hero's Journey. Both are still taught in premier film schools as the first tools for screenwriting.

It is interesting to note that historically, despite tremendous changes in technology and methods of representation, the fundamental structure of the narrative has not varied much from the traditional 3-Act structure. With high financial stakes in the final product, big Hollywood studios insist on a formula to guarantee the success of the films. Partly in response to this, and essentially because the cinematic medium was starting to resemble a juggernaut with a life of its own, the prescriptions of screenwriters and theorists like Lajos Egri (1946), Robert McKee (1997), Syd Field (1997), Linda Aronson (2010), and Blake Snyder (2005) further cemented the narrative structure used

in popular Hollywood filmmaking. Beyond the 3-Act structure, other forms such as Freytag's 5-Act Structure from the late 1800's (the 3-Act is considered a simplification of the 5-Act model), Joseph Campbell's Hero's Journey, the 7-Point Structure which lays out 7 critical milestones that a film should follow, Dan Harmon's Story Circle, Christopher Vogler's Hero's Journey simplified from Campbell are all fairly well used in popular screenwriting (Freytag 1894; Campbell 2008; Raftery 2011; Vogler 2007). The 3-Act structure itself has roots in Aristotle's *Poetics*. One can say that it all comes down to the simplified three parts. As is evident, mainstream films exhibit this simplified set-up-conflict-conclusion structure and the audience is familiar with it. So much so that audiences grow critical if it appears obvious and oblivious if it is applied with subtlety. I agree with the scholarly consensus that non-linear films (while uncommon) create a complex and interesting viewing experience for the audience precisely due to the overuse of the linear structure.<sup>9</sup>

### **Units of Film**

A small digression regarding units of film, in both making and analyses of the texts would possibly be helpful here. Like language, the film text can be broken down into its constituent parts. As indicated above, the smallest is the frame with its origins in photography.<sup>10</sup> Film conventionally runs between 24 to 30 frames per second, depending on the video encoding and transmission formats followed. After the frame comes the shot. This is the length of the footage between two cuts. Typically, a single shot will depict action recorded in the same temporal slice. Shots are also a good unit for

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<sup>9</sup> See, for example, Warren Buckland (2009, 2014), Allan Cameron (2018), Kathrin Fahlenbrach (2018), H.C Wojciehowski (2018), Willemsen and Miklos Kiss (2020), Kristen Thompson and David Bordwell (2020), Julie Eckel (2013), Thomas Elsaesser (2021), and Linda Aronson (2010) among others.

<sup>10</sup> Although Gerald Mast believes the frame has no filmic value until it is joined by other frames to create motion (Mast 1983)

quantitative analysis of films. Barry Salt, in what he calls ‘cinematics,’ has studied the changing average shot lengths (ASL) of films over time. ASLs have been found to be indicative of different genres, the changing pace of filmmaking, a director’s personal style and the advent of technology (Salt 1974). Adelheid Heftberger, in her collaboration with Lev Manovich demonstrates how the films of Dziga Vertov can be analysed by looking at stills from each shot and the durations of the shots to discern a visual rhythm or pattern in Vertov’s cinematography and narrative style (2019).

The next unit of measurement is considered to be the scene which is staged action constrained to a time and a location. One scene comprises many shots but will be fixed in a single location. This is also the unit in which the screenplay is written. If there is a change in location or time, then it is considered as the next scene. Finally, we have the sequence, which can be comprised of many scenes. For example, chase sequences may span a short time but may have many different locations. Conventionally montage sequences (not to be confused with montage theory) show the passage of time in a character’s life, with many thematically connected scenes. Examples include prologues, epilogues, training, the passage of time (coming of age, budding romance etc.), high-intensity activity, processes (a heist) and such. Each of these units are temporal in nature and thus, the structure of a film text from the smallest to the largest temporal unit is frame-shot-scene-sequence.

In screenwriting, beats drive the action while scenes form the elementary units. Aronson states: ‘a plot is a chain of events—a series of beats—leading to a climax’ (2010, 134). In theatre, these are also acting units, the smallest complete action in a play. The simplest categorization of beats is events, realizations, resolutions and interactions (Masterclass, 2021). Narrative beats are not a higher unit of measurement for a film text

but rather something that indicates an intentional change in the story. Narrative beats are difficult to quantify and are generally delineated by the screenwriter.

### 1.1.2 Film Analysis and Cinema Studies

Ever since the birth of cinema, the makers, the theorists, philosophers, linguists, semioticians alike have tried to understand the mechanics behind the power exercised by the medium.<sup>11</sup> In this section, I would like to briefly cover some steps of development in film theory, and how they either fit or don't fit the brief for this research with special attention to film analysis.

The most exciting aspect of cinema is the ready analogy to be drawn between film and language. The smallest unit of the film, the frame (later the shot), has been traditionally likened to the phoneme in linguistics. Linguists have been analysing the structure of language for millennia, and here was a medium with all its exciting possible analogical relations (Stam, Burgoyne, and Flitterman-Lewis 2005).<sup>12</sup> Two contemporaries, American philosopher Charles Sanders Peirce (1839–1914) and Swiss linguist Ferdinand de Saussure (1857–1913), founded the science of semiotics and semiology respectively. While both these terms are sometimes used interchangeably, they are studies of signs, symbols in meaning making and communication (D. Chandler 2022).<sup>13</sup> Peirce categorised signs into three kinds: iconic, indexical and symbolic. For de Saussure, signs had two types of fundamental relationships: paradigmatic and

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<sup>11</sup> For further detail see Charles Sanders Peirce (1839-1914), Ferdinand de Saussure (1857-1913), Boris Eikhenbaum (1962), Christian Metz (1971), Andre Bazin (1918-1958), Claude Levi-Strauss (1964), and Algirdas Greimas (1990), Roland Barthes(1977), Jacques Derrida(1980), Gerard Genette(1972), Giles Deleuze(1983,1985), Gerald Mast (1977)

<sup>12</sup> Parts of this section are summarized from *New Vocabularies in Film Semiotics* 2005 by Stam, Burgoyne and Flitterman-Lewis unless stated otherwise.

<sup>13</sup> Parts of this section are summarized from *Semiotics: The Basics* 2022 by Daniel Chandler, unless stated otherwise.

syntagmatic. He emphasized that meaning arises from the differences between signifiers, which are of two kinds: syntagmatic which concern positioning, and paradigmatic which concern substitution. In film, this was comparable to precise kinds of selecting and combining content while making a film. A syntagmatic analysis could be analysing how each frame, shot, scene, and sequence related to others whereas a paradigmatic analysis could be an interpretation of an individual shot comparing it with the use of alternative kinds of shots. Analogous to those used in linguistics, the linguistic model often led semioticians to search for units of analysis in audio visual media. The cinema, according to Boris Eikhenbaum, was 'a particular system of figurative language, the stylistics of which would treat the filmic "syntax", the linkage of shots into "phrases" and "sentences".' (2005, 23). In 1971, there was an attempt to identify a typology of such phrases by Christian Metz, in his formulation of the concept of the 'grand syntagmatique' of narrative cinema. It was through de Saussurean linguistic structuralism that narrative semiotics or narratology emerged. Claude Levi-Strauss, and Algirdas Greimas worked on a generative matrix of narratives, the elementary articulation of the story form, which tried to provide a universal narrative grammar. Roland Barthes examines the correspondence between the structure of a sentence and that of a larger narrative, allowing the narrative to be viewed along linguistic lines. Although he believed that structuralism could be a useful tool, he did not think it could take on scientific rigour.

The structuralist semiotic approach to film analysis did not hold for too long, with scholars like Metz himself, admitting that one cannot compare a word in languages with anything analogous in cinema (Mast 1983). Gerald Mast dismissed the semiotic approach to film, stating that it may bring little to the true understanding and

appreciation of the medium. He had a simple justification for his argument: films are complex and shots cannot be equated with words or phonemes as they are flexible, fundamental, and have multidimensional connotations. (Linden 1978).

In the 1950s auteur criticism originated in the films and the writings of the French New Wave. The term was derived from the analogy that the director is to film that which an author is to a novel or a play. Notable contributors were André Bazin, Françoise Truffaut and Roger Leenhardt. A director, under the auteur theory can bring his thoughts, emotions, ideology, and worldview into his film by using lighting, camerawork, staging and editing and the product bore the unmistakable imprint of his / her style or artistic personality. Over time, auteurism changed significantly in theory due to pressures of post-structuralist theory, feminist interventions, racial and cultural distinctions, globalization and the challenges of new media (Palis and Corrigan 2018).

In the 1980's there was an attempt by theorists like Noël Carroll and Bordwell to offer an alternative to the prevalent structuralist and post structuralist film theories in the field. They labelled the alternative approach as cognitivist film theory and this study is primarily grounded in the cognitivist model. Cognitivism emphasises the efficacy of models that exploit the role of cognitive processes in the explanation of cinematic communication and understanding. Cognitivist film theory is not a unified theory by any means; it is an umbrella term accommodating several interdisciplinary perspectives. For example, it takes into account what psychologists call the primacy effect: the likelihood that the first item or the first few items in a series tend to form a benchmark for what follows. Another example is the fundamental attribution error: a well-supported finding of social psychology that points at why we make snap judgements about characters. The audience tends to assign behaviour to character traits rather than consider contextual

factors. Bordwell states that filmmakers and other story tellers, being intuitive psychologists, design stories to make use of the primacy effect, fundamental attribution error and the like. Sometimes, they will induce surprise in the narrative by either subduing the character traits or offering strong ones that can be later countermanded. In short, many of the experimental results in the cognitive sciences could explain the tactics that stories use to engage us (Bordwell 2008).

### **Plot (Syuzhet) and Story (Fabula)**

As briefly indicated during the discussion of narrative theory above, structuralism argues that a narrative has two parts: the story and the discourse in which the story is the content, containing a chain of events, and the existents, i.e., the characters and the settings. Discourse is the expression and the means by which the story is communicated. Seymour Chatman, in his work, *Story and Discourse* (2007), points out that while this kind of distinction has been recognised since Aristotle's *Poetics*, the Russian formalists too made this distinction. They used the binary terms fable (fabula), i.e., the basic story, the sum of events to be related in the narrative, and the plot (syuzhet), the story as told by linking the events together. Another way to look at that fabula is what has in effect happened and the syuzhet is how the reader becomes aware of what has happened, i.e. the order of the work. Gerard Genette, a post structuralist French literary theorist and narratologist, who devised a framework of enumerating the properties of narrative analysis surmised that narratives rested on a not-uncommon dichotomy of the diegesis (narrative content) and the récit (the narrative discourse). Gerald Mast terms these two significant dimensions of the film medium as mimesis (that which embodies content) and kinesis (its dynamic form). He emphasises that for film to be significant these two dimensions should function as mutually enhancing (Mast 1983).

The distinction these scholars put forth is significant because the instance of non-linearity in the cinematic medium can be analysed by looking at the difference between the story order and the narrative order. This point is elaborated in the sections below.

## **Non-linear Storytelling in Film**

As has been cursorily indicated above, one of the fundamental experiences of cinema is of that of time (Tarkovsky 1989). This abstract dimension, which is measured only by man-made divisions, whether on the face of a clock or in the slices of recorded film that are called shots, manifests in the medium in countless ways. One begins filmmaking by deciding how to handle time. Every narrative has its own chronology which begins at one point (at the equilibrium), undergoes disruption, and attains a new equilibrium (vide the 3-Act structure). Typically, a linear progression in film narrative sequence results in a product that renders the medium almost invisible and can produce a relatively objective film (Arnheim et al. 2012; Rabiger, Hurbis-Cherrier, and Mercado 2020). Causality is maintained in this way by effect following cause. While the medium by nature is highly deterministic (the end of the narrative is concrete since the film is already complete), it still retains an aspect of contingency. The illusion that anything can happen is maintained while watching a film for the first time. The linear approach is also more likely to concentrate on a character's actions rather than their motives (Cameron 2008a).

In contrast, the non-linear form 'deconstructs a character, complicated event, situation, or a combination of these elements by reordering the time sequence and creating a new arrangement of time for dramatic, and thematic, purpose.' (Cowgill 2013). This brings the action or the event to the foreground. A linear, goal-oriented plot generally puts constraints on a character while the non-linear structure can unravel a

complicated event. The unconventional structure does not mean that the narrative is not understood as a process of cause and effect by the audience. Each piece of information affects what comes after and before, creating a relationship between various time segments to form a specific meaning when taken together. In a study of *Arrival*, H. C. Wojciehowski calls the film a 'puzzle', claiming that 'puzzle films raise important questions about the nature of memory and about the ways in which filmmakers challenge their viewers' memories through complex narratives' (Wojciehowski 2018).

Compressed time has the power to give the story intense meaning, reveal ironies, and achieve brevity. Time expanded gives the audience the space to reflect on something significant that comes to pass. In a non-linear progression, the film's narrative is rearranged according to a character's subjective recall or to make a better narrative that could be deterministic in nature. For e.g., in Gasper Noe's *Irreversible*, we see the aftermath of the violent rape of one of the protagonists first. Then we see the lives of the two main characters unveiled as a backward progression, the beginning of the story is the last scene of the film. The effect of this approach is that it becomes impossible to escape from what will happen (as the title also indicates), making the audience reconsider the smallest aspects of the characters' lives, now tinged with the tragedy that will mar them in the future.

Critically acclaimed French director Alain Renais has throughout his career made numerous films that have explored the means of fragmentation in the perception of time available to cinema. His fascination with how human memory distorts and edits time has been depicted repeatedly in various films. In *Hiroshima Mon Amour* (1959) he portrays the traumatic memories of a Frenchwoman and her Japanese lover. The film is told in fragmented sequences, positing that extreme lives are propelled by extreme trauma,

posing questions about the effect of personal history on present behaviour (Arnheim et al. 2012). Trauma theorists like Cathy Carruth describes the structure of the experience in the following terms: 'the event is not assimilated or experienced fully at the time, but only belatedly, in its repeated possession of the one who experiences it' (1995, 4). The individual's initial failure to cope with a traumatic event may lead to the re-emergence of the same experience at a later time, typically through dreams or flashbacks. As a result, the past can manifest itself as a symptom in the present (Cameron 2012).

Linda Cowgill uses the differences between cinema and literature as media to explain why non-linear narratives are relatively rare in films. According to her, while the author introduces a character engaged in action, she can very well pause the plot and parcel out the necessary exposition by launching into a backstory, dramatizing earlier actions to explain motivations and their consequences (Cowgill 2013). In the spectrum of non-linear narratives, from the simplest device, i.e. the flashback, to a complete fragmentation and distortion of the timeline is observed in the medium.

### **Tropes of Non-linearity**

There are several tropes of non-linearity. A flashforward in a narrative provides a glimpse of something to come, and the conditional tense shows an imagined or projected outcome in the character's mind. Literal time is seldom used because of the complications of keeping the audience involved in the storyline when the time passed on screen is real time.<sup>14</sup> An example of retrograde time is Christopher Nolan's *Memento*, in which the whole film plays backwards and forwards to emulate the protagonist's amnesia.

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<sup>14</sup> A notable exception is the highly popular American crime drama series *24* (2001) which depicted simultaneous events taking place in the consecutive 24 hours in the life of the protagonist. Each season showed one 24-hour span and the show ran for 9 seasons and a total of 204 episodes. The episodes also used a running clock to keep count of the minutes passing by, adding to the intensity of the drama.

Repeated time, as in Harold Ramis's *Groundhog's Day* (1993) in which the same day is repeated, is another device to allow the audience to see the realm of possibilities explored.

Scholars like Gerard Genette, Barry Salt, David Bordwell, Allan Cameron, Julie Eckel, and Linda Aronson have tried to categorise the aspects of non-linearity in cinematic narratives. Allan Cameron's book *Modular Narratives in Contemporary Cinema* offers another typology of non-linearity: anachronic, forking path, episodic, and split-screen narratives, thereby putting explicitly more emphasis on the temporal aspects of disorienting narratives (2008b). Building on Cameron's work, Julie Eckel posits a more detailed categorization: reversed time, multilinear time, multi-perspectival time, encapsulated time (nested timelines), circular timelines and randomised/chaotic time. According to Eckel, what she wants 'to show by means of these categories and examples is that the fictional cinema of the last 20 years especially offers a full array of mechanisms and patterns that experiment with the relation of story and plot chronology and that thereby raise and negotiate questions of temporal disorientation. Thus, film as such becomes a kind of playground for dis and re-orientation that draws pleasure' (Eckel 2013, 285)

**Foregrounding of Theme:** Gerald Mast considers the theme as one of the two fundamental principles of film theory. Everything, including plot, shot, action, representation should follow, contribute to, reveal, or enhance the theme (Mast 1983).

According to Cowgill, the key ingredient in all great non-linear films is their dependence on dramatic unity, the synthesis of thematic ideas and plot movement. In most films, the actions of a single protagonist unify the story, with a specific goal governing the plot structure and the change in the character as a result of the conflict

providing the meaning. While action plays a fundamental organising role in the plot, it does not dominate the entire structure of the film.

She also posits that dramatic unity is achieved by the intersection of a controlling theme or idea and a framing action. Theme is what defines the choices of incidents and events are to be included and also what the experience of a non-linear film is about: the more diverse and out of sequence the incidents, the more a coherent theme is needed to hold the segments together. Framing action is used as a context in non-linear films, creating continuity and establishing a space to tell the story (Cowgill 2013).

Kiss and Willemsen posit that foregrounding of the thematic is one of the ways to counter the effects of narrative dissonance caused by the non-linearity. When viewers prioritize the thematic function during interpretation, they can recognize the complexity of a work as an expression of its underlying concerns beyond its surface-level story. This attribution of meaning can make seemingly conflicting elements in the work harmonious, contributing to a thematically coherent whole (Kiss and Willemsen 2017). This brings us to the most important side-effect of non-linearity—dissonant cognition.

**Dissonant Cognitions:** Willemsen and Kiss discuss what they call dissonant cognition in their book *Impossible Puzzle Films* (2017). By looking only at the underlying principle of cognitive dissonance theory, they rationalise the ‘puzzling conflicts in narrative comprehension’ (2017, 67). NLNs by their inherent scrambled progression, cause the viewer to constantly question the incoming propositions. Further, if we consider coherence as a primary imperative of mainstream cinematic storytelling, then non-linear narratives are evidently, narratives of dissonant cognition. ‘[M]aking elements cohere and establishing meaningfulness can be claimed to be the core task of narrative as a cognitive

instrument (and, consequently, one of its key functions as a social tool)' (Kiss and Willemsen 2017, 108). Kiss and Willemsen also posit that viewers primarily strive for 'consonance', an innate desire to understand a complex phenomenon, or to unravel a puzzle. There is a basic assumption that the viewers make: all elements in the film are related to each other. Bordwell calls this the hypothesis of 'minimal coherence' (Bordwell 1989). When confronted with confounding clues or structures, viewers still tend to associate them with having some meaning in the context of the narrative. The choice of whether to make it more difficult for the viewers or to design just so much that there is a pleasure gained at the end of solving the puzzle, is in the hands of the filmmaker.

Non-linear narratives in mainstream cinema tread the fine line between narrative dissonance and coherence. If non-linear structures are made exceedingly complex, then they are relegated to the categories of abstract-art house films which find only a niche audience. According to Ben Shaul, the key elements that make movies popular are the challenge they pose to viewers' cognitive abilities, the ability to construct a coherent story from the audio-visual flow that leads to closure, and the use of suspense strategies to create and regulate tension, which results in emotional arousal and control (2012). Thus, it is critical to ensure that NLNs adhere to certain criteria for the mainstream medium, namely conventional narrative beats and transitional elements that create the narrative strands.

Further, Willemsen and Kiss also hypothesize that the viewers often make sense of the abstraction of unfamiliar concepts in NLNs by resorting to concrete concepts

building to an argument for the cognitive principles of conceptual metaphor theory and mental timelines.<sup>15</sup>

### 1.1.3 Theoretical Context

#### Embodied Cognition, Conceptual Metaphor Theory, and Image Schema

The structuralist, formalist, post-formalist, neo-formalist, and cognitive theory discourses in cinema studies constitute the background against which this work operates but, as has been indicated above, it directly draws upon conceptual metaphor theory, which is based upon the concept of embodied cognition. A prevalent theory in different domains of philosophy, psychology, phenomenology, linguistics and even robotics, the concept of embodied cognition rose as a response to the then widely accepted cognitivist theory of the early 1980s. Cognitivist theory relied heavily on the analogy of the disembodied brain to a computer, making the brain the centre of cognition (Johnson 1990).

The theory of embodied cognition, on the other hand, posits that our understanding of the world around us is derived from the experience of possessing a human body and its dynamics with objects around it, i.e., embodiment<sup>16</sup>. Human cognition is dependent on the aspects of the body such as sensory perceptions, motor systems, interactions with different phenomena in the environment, and in-built assumptions about the nature of the world. These sensory-motor capacities are further entrenched within a larger envelope of psychological, biological, and cultural context.

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<sup>15</sup> They use the example of TIME IS SPACE metaphor in the film *Inception* (Christopher Nolan, 2010) in their article 'Keeping Track of Time: The Role of Spatial and Embodied Cognition in the Comprehension of Nonlinear Storyworlds' (2020)

<sup>16</sup> This study looks at embodiment as understood in the scholarship of embodied cognition and embodied metaphors without reference to how the term is described and discussed in other academic disciplines such as philosophy

Together these form 'concepts' that are inbuilt and acquired by the nature of the organism's body and aid in faster cognition. This is the basis for the abovementioned conceptual metaphor theory.

CMT was formalised in George Lakoff and Mark Johnson's book, *Metaphors We Live By* (1980), which became a starting point to further scholarship until it evolved into a well-developed field of study. The most recent and definitive description accepted in the field which seeks to include an updated understanding of the term from Lakoff and Johnson's original work was provided by Zoltán Kövecses in 2020: 'A conceptual metaphor is understanding one domain of experience (that is typically abstract) in terms of another (that is typically concrete)' (2020, 13). In this definition conceptual metaphors are considered to be processes in which the understanding of the domain leads to a conceptual pattern that becomes the product (ibid).

Further research by Lakoff and Johnson and others found conceptual metaphors to be prevalent in most forms of discourse, used not only in deliberate ways but also often inherently, unintentionally, and inescapably. Lakoff and Johnson's famous example is the conceptual metaphor ARGUMENT IS WAR. They show how, when we speak of arguments in language, we use terminology that is reminiscent of war with sentence constructions like '*your claims are indefensible;*' '*he attacked every weak point in my argument;*' '*he shot down all of my arguments;*' '*I've never won an argument with her.*' Furthermore, we don't just talk about argument as war, but we actually win or lose arguments, plan or strategize, and abandon a position or attack (Lakoff and Johnson 2011). There is typically a source domain (SD) and a target domain (TD) in CMT, as in

the example above, war is the source of the metaphor from which we map some attributes to the target domain of argument.<sup>17</sup>

Besides discourse, the mainstay of CMT that excited researchers outside the domain of linguistics was the fact that metaphors are prevalent not just in language but also in thought and action. Human perceptions, ways of navigating the world, and relations with other people are all structured by metaphorical concepts. To take another example from Johnson (1990) our experience of containment and boundedness comes from the most basic experience of having a body. Things go in and come out of this delineated space; there is a discreet inside and an outside, a distinction between our own and the other; similarly, we also experience containment while traversing spaces like rooms, buildings, cities, and states. This also extends to our experience with objects that we manipulate to open, use as storage, and close. In relationships, we often say that we get into one, or need to get out of one. Marriage has its boundaries, and a family is contained within itself with people who are insiders and outsiders. Mark Johnson, in his later work *The Body in the Mind* (1990) termed these as image schemata or image schemas which are repeatable spatial and temporal organizations.<sup>18</sup> Schemata in cognitive science are defined as organised units of general knowledge structures based on past experience which are often accessed to guide current understanding or action (Pankin 2013). These developmental schemas are dynamic, they change according to new input. They influence how new information is interpreted and can store both declarative and

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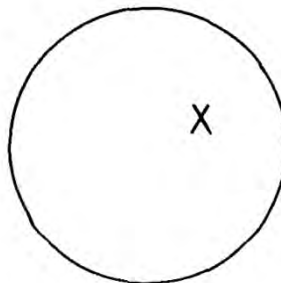
<sup>17</sup>Not all attributes, however, can be transposed from the source domain to the target domain, and neither can the SD and the TD swap places. These ideas of unidirectionality and metaphoric inference are explored further in Zoltan Kövecses's *Metaphor: A Practical Introduction* (2007).

<sup>18</sup> Parts of this section are summarized from Mark Johnson's *The Body in the Mind* (1990) unless stated otherwise.

procedural information. Most importantly, schemas help the sender of a message make assumptions about the receiver (ibid).

A schema in its basic sense is a conceptual framework that individuals have about the nature of the world they live in. These schemas may appear in many forms such as agent, event, and space. An agent-based schema in film would be something like a doctor character for whom the audience will make assumptions based on their own knowledge of the medical professionals they have encountered in their lives or their exposure to such people. Viewers make such kinds of assumptions about the protagonists of the film and operate on this schema from the get-go. For example, Daniel Barratt, while analysing the narrative of the film *The Sixth Sense* (M. Night Shyamalan, 1999) applies the concept of the primacy effect and priming of the viewer that come into play with the use of agent-schemas that the audience access to assume the protagonist's character (2009).

For Johnson, image schemas are dynamic patterns that function like an abstract structure of an image and can link a gamut of experiences that demonstrate the same recurring structure. The experience of containment and boundedness can translate from the body, and speech to the frame in a film.



**FIGURE 2. CONTAINMENT**

*Figure 1.1 Containment Schema Reproduced from Mark Johnson's Body in the Mind (1990), p. 23*

Lakoff and Johnson demonstrate the conceptual metaphor VISUAL FIELD IS CONTAINER i.e., ‘*the ship came into view*’, ‘*get out of my sight*’ in language. Figure 1.1 reproduces their diagram to illustrate that the container schema in CMT is an ontological type of metaphor, which are entity and substance metaphors bounded by a surface, for example VISUAL FIELD IS A CONTAINER or LIFE IS A CONTAINER (2011). The metaphor MIND IS A MACHINE and MIND IS A BRITTLE OBJECT show how the experience of mind is elaborated in our culture. For example, ‘*he broke down*’ (machine) and ‘*he cracked up*’ (object) show two ways in which different aspects of the experience are highlighted. A machine simply ceases to function when it breaks down, and a brittle object shattering could send its pieces flying with possibly dangerous consequences. In this way it is possible to see that metaphors embody the physical experience which is then used to explain the target domain’s own experience (ibid.).

Taking from CMT and image schematic structures, Coëgnarts and Kravanja analyse a scene from the film *Spartacus* (Stanley Kubrick, 1960) in which the character of Caesar is shown to move from the neutral centre of the frame to the left as the conversation about taking sides goes on between three characters. The frame is the container, and the men occupy positions that signify the two viewpoints plus a neutral centre. The movement is inferred as Caesar taking the side of the character on the left as a counter to the argument of the character on the right (Coëgnarts and Kravanja 2012). This is an example of the CONTAINMENT SCHEMA and is one of the ways in which the schema can be used visually in a cinematic narrative. Maarten Coëgnarts in *Film as Embodied Art* (2019) conceives of film ‘as a container for many other sub-containers: one for each mode of representation it contains (a visual container, a gestural container, a musical container, a linguistic container etc.)’ (2019, 6). Since comprehension of each of

the meanings contained within happens via many different entry points and at different times, the containers influence each other in various ways.

Another schema relevant to this study is the SPG. This derives from the physical experience of movement with purpose along a path, for e.g., the path from one's bed to the living room, from home to the workplace or from one city to another. In each of these instances, there is an intention, a direction and a destination. Some of these are physical paths across a surface, while others, like the path of a ball thrown towards someone else, are projected paths. Johnson posits that there is a source or a starting point, a goal or an endpoint and a sequence of locations connecting the two (1990). While these paths are not inherently directional, we tend to impose directionality with our purposeful experience of traversing such paths. Our travel also brings with it the temporal dimension, we start at a certain time, and we arrive at the destination later. According to Johnson, the internal structure in this schema allows us to move from a concrete spatial domain to abstract ones, like getting to the end of the day, going through a year of hardships, writing a book, getting a PhD, or losing weight. And just as physical paths can have obstacles or get side-tracked, so can abstract paths take detours, such as going through an experience unrelated to the main path.

Some metaphors at work with the path schema are PURPOSES ARE PHYSICAL GOALS, and STATES ARE PHYSICAL LOCATIONS for e.g. '*She has a long way to go for finishing her PhD.*' '*He needs course correction if he wants to get where he's going on his fitness journey.*' Johnson concludes that the path schema is the most pervasive in our daily experiences, with a simple and effective structure and is well understood by the virtue of familiarity. In films, the SPG schema manifests in many ways such as the movement of the protagonist from left of screen to right of screen signifying passage of time. For

instance, in *Notting Hill* (Roger Mitchell, 1999) when William, the protagonist, is shown walking from screen left to right while the seasons change around him, which indicates the amount of time that passes while he tries to recover from a heartbreak. Coëgnarts and Kravanja offer more excellent examples of the SPG schema that depict filmic metaphors, such as ageing, a shift from a flashback to present time, a shift from metaphorically feeling like a child to adult and so on (2012). As will be shown below, this is the discursive framework within which I place the material of this study.

**Master Metaphor List:** Among the conventional and unconventional resources available for CMT, this research uses the Master Metaphor List (MML) extensively to identify the metaphors observable in the design of the films chosen for close analysis. The MMT is a lexicon of metaphors that were first put together by George Lakoff, Jane Espenson and Adele Goldberg in 1989. This corpus is maintained and added to by the Cognitive Linguistics Group at the University of California at Berkeley. This is an online resource now and accessible to all CMT researchers. The list is a compilation taken from published books and papers and in Lakoff's own view only represents 20% of the material that they have, and which needs to be compiled (Lakoff et al. 1991). 'Compiling' includes reanalyzing the metaphors and fitting them into something resembling a uniform format and is an ongoing effort by the scholars and students.

**MetaNet Metaphor Wiki Database:** Supplementary to the MML is The MetaNet Metaphor Wiki Database, which is another work-in-progress database of conceptual metaphors. The MetaNet system is located at the University of British Columbia and is managed by Elise Stickles in the English Language and Literatures department. The objective of the MetaNet project as a whole is to examine the metaphors used by individuals to discuss and reason about various topics and fields in a structured manner.

A tool has been developed that utilizes a set of formalized frames and metaphors to automatically recognize, group, and study metaphors in extensive text collections. Their English, French, and Spanish metaphor databases are open to the public and can be accessed online.

Both these databases form the corpus from which researchers can locate the basic conceptual metaphors at work in the English language for various purposes. As has been stated above, these databases are constantly being expanded and serve as a source for the analyses of metaphors in film for the present study.

### **Mental Timeline (MTL)**

As cited above in Williams and Kiss' work, among the theories of perception that this research draws upon is MTL. According to Rolf Zwaan's (2016) event-indexing model (events being the specific elements within a situation) '[e]vents are thought to be related to one another on (at least) five dimensions: time, space, entity, causation, and motivation' (2016, 1). This means that if an event takes place in any of the five dimensions, there is an overlap of the incoming clauses which integrate into an event representation. To put it differently, the viewer makes sense of the narrative with each piece of information they get and constructs a causal relationship among the events to create a full understanding of what they are seeing. MTL, which has its roots in psychology, also demonstrates that the mental conception of time has 'culturally specific spatial representations' (Fuhrman and Boroditsky 2010). Experiments by Casasanto and Boroditsky clearly show that there is a predisposition to using a mental timeline for mentally representing time (2008). Further, MTL also derives its understanding of time from spatial and embodied image schemas. Kiss and Willemsen demonstrate how this

works in their study of the diagram director Christopher Nolan made of the film narrative using the schemas of CONTAINMENT and VERTICALITY.<sup>19</sup> Each dream level in the film represents a world inside another world and that the protagonists have to descend or ascend following an UP-DOWN schema (Willemsen and Kiss 2020). Thus, Mental timelining can serve two important purposes. Firstly, it can help people understand abstract and nonlinear concepts by providing a cognitive tool to mentally represent them in a tangible way. Secondly, it can provide a framework for organizing new information and integrating it into existing mental models. This makes mental timelining a valuable tool for building and refining mental models over time.

## The Metaphors of Film

As discussed above, the body of the film text itself lends itself to many metaphoric expressions. These form the basis of our metaphoric interpretations of the selected film texts. Warren Buckland in his book *Cognitive Semiotics of Film* (2000) discusses Etienne Souriau's categorisation of filmic reality into seven different levels, namely, afilmic reality (the reality that exists independently of filmic reality), profilmic reality (the reality photographed by the camera), filmographic reality (the film as physical object, structured by techniques such as editing), screenic or filmophanic reality (the film as projected on a screen), diegetic reality (the fictional story world created by the film), spectatorial reality (the spectator's perception and comprehension of a film), and creational reality (the filmmaker's intentions). Buckland further discusses this categorization with the help of the CONTAINER and the IN-OUT schema. We come across the IN-OUT schema primarily when we perceive the first boundary i.e the afilmic and the filmic, or reality

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<sup>19</sup> We also see the SPG schema in affect here—the descent and the ascent along the levels happens while the narrative moves from the source to the goal.

outside of the film domain and the reality created by the film itself. Next, filmographic reality may be understood as a container schema when the film is treated as a physical object that is manipulated by filmic processes which then contains the screenic reality, i.e. the projected film on a screen which in turn is the container for the diegesis or the story (Buckland 2000). At every level, we can see the containment schema and the IN-OUT schema at work via the frame of the film. Buckland concludes that the CONTAINER schema exists on three levels: the frame, which is the container of the image i.e. the on-screen space, the off-screen space and the diegesis, which is the container that holds the story.

The IN-OUT schema and the CONTAINER schema give us the material understanding of the film's embodiment as an object. The SPG on the other hand gives us the understanding of cause and effect and the diegesis as a journey. The temporal nature of the film medium, its inherent characteristic of a beginning, a middle and an end, and the containment schema all come together to suggest the following metaphors, which this research uses as the contextual material within which editing design is studied:

FILM/STORY IS A CONTAINER: *'John Ford has acted in 13 films,' 'what happens in the story?' 'Michael Bay stuffs the film with many comic moments.'*

FILM/STORY IS AN OBJECT: *'This is my story,' 'He has more than a hundred films under his belt'* (possession).

FILM/STORY IS AN ENTITY: *'The film grabs you by your throat,' 'the story then jumps some generations into the future.'*

FILM/STORY IS A JOURNEY: ‘*The film meanders and plods along.*’ Any narrative telling may be straightforward or it may meander, a narrator sometimes digresses, or, particularly in film, events occur in fast forward, alternatively lose tempo in slow motion, or start in medias res (Forceville 2012).

An additional kind of source domain knowledge, looked at by later researchers is called ‘metaphorical inference,’ or ‘metaphorical entailment.’ Zoltan Kövecses gives the example of the case of ANGER IS FIRE: ‘He took revenge and that *quenched* his anger.’ If anger is metaphorically viewed as fire, then we can make use of our further knowledge of anger-as-fire and infer that the fire can be quenched (Kövecses 2020). Following this line of thought, if we consider the film text as an object, we should be able to demonstrate the manipulations that the object can undergo. Similarly with film as a journey metaphor, force schemas can be demonstrated to slow down, accelerate, block etc.

### **A note About Linearity**

The fundamental attribute of the cinematic medium is temporal linearity. A conventional film runs from the beginning to the end in one go, at one set speed. For theatre projections, the audience has no control over the film, besides the interval break, the film runs start to end, in a literal sensory deprivation chamber (except for the other members of the audience) closed off to the rest of the world. Streaming platforms offer an option to pause and resume the experience of films and series, even so, they still adhere to the linearity of the telling. In such a scenario, this medium specific attribute of linearity becomes our first constraint to non-linearity. Whatever experiments need to be done, should be done with this end goal in mind. However the image schema comes to

play in the structure—the hairpin bend, the circle/cycle, the zigzag, the fragmentation, all of them will eventually collapse into a single undeviating timebound narrative thread.

The linearity of the cinematic medium is inescapable in the sense however a film is made, it will still have to be watched in a theatre/screen in a single run. The popularity of streaming devices has also taken away the need to visit theatres for this purpose, and yet, the linearity persists. One exception to this are split screen narratives like *Timecode* (Mike Figgis, 2000), *Conversations with Other Women* (Hans Canosa, 2005) and the pilot study (Bokil and Gokhale, 2007). I would like to call these soft exceptions. Even split screen narratives will eventually adhere to a linear presentation. The viewers' attention is being diverted by more than one frame of action, thus creating complexity in the narrative. Plus, there is no concrete controlling what the viewer focuses on at any given point of time. In such a state the narrative is not entirely in the hands of the filmmaker and is open to interpretation.

Interactive or a hyperlinked narrative like *Bandersnatch* (2018), which was streamed on Netflix, is another exception in which reportedly 250 segments of the narrative make a trillion possible narrative paths (Reynolds 2018). Again, such a design leaves the experience of the story open to the viewer's choosing of the options while adhering to a linear telling at its core. A hard exception is something like a story told on different screens at different times so that the viewer gets the narrative cues in various ways. But keeping in mind the logistics of the presentation, this cannot really be replicated on a mass platform. Many art installations do use multiple projectors with staggered videos playing simultaneously.

For a hundred years of cinema, the format, the resolution, and the immersive aspects of the medium might have changed, but the temporal experience remains the same. Thus, we note that the use of non-linearity is bound by the nature of the medium. This is the reason why the design of the non-linear experience of time becomes rewarding to study. The editor at the behest of the director, plays with film units to create an illusion of non-linearity and the techniques that may be used to replicate this illusion is the interest of this research. The question then remains, how much can we experiment within this constraint of linearity? I think, the avenues for soft experimentation are still as many as there are metaphors in any given language.

This overview of the literature connected to the study we propose is a very brief overview of the relevant areas of research that we have tapped into for this study. By no means comprehensive, I attempt to lay the foundation for the argument that I build below.

## **1.2 Research Motivation**

The consumption of English-language media by the world is not relegated to English-speaking developed countries. At the time of writing (April 2023), the English content audience has grown 124% since 2020 just in India. That is about 85.2 million subscribers to streaming sites, with Disney+Hotstar leading in the number of subscribers in the country (Jha 2023). Unsurprisingly, the audience is not simply the well-heeled urban population of metro cities but also sub-urban and rural populations who consume dubbed versions of English content. Indian language subtitling has led to an increase in English content consumption. A 2021 report hypothesises that the streaming market in

India will be worth \$15 Billion by 2030 (Jha 2021). The demand for content is on the rise as each 'over-the-top' or OTT platform tries to hold on to its subscribers. In such a scenario, where new content is being generated on a daily basis, there is a need for novel yet mainstream ways of storytelling to catch audience interest. Non-linear narratives in the cinematic medium, at their best, are films that compel the audience to return to solve the puzzles it embeds in the narrative telling. In terms of sheer content, complex films have more information in them 'because they are disorderly and unpredictable (or more innovative) than a classical film which has less informational content because it is more orderly and predictable' (Buckland 2014, 7). The consequence of this, Buckland observes, is that the audience, go to great lengths in trying to unravel the film's mysteries with cult fandoms, blog/forums and detailed theories about the content. This aspect of complex films deserves to be tapped for possibilities. But as a technique, non-linearity in mainstream media is hitherto unpopular due to its demand on comprehension. Adding to this is the uncertainty of whether breaking the formula will bring in the audience to the theatres or to OTT platforms. Thus, a methodical study of the design and form of such cinematic narratives will aid in generating content for future consumers.

### **1.3 Research Gap**

As the overview of literature above shows, while there is substantial work in the field of film studies by semioticians, philosophers, film historians, CMT experts and other cine theorists, and many filmmakers have experimented with non-linear storytelling techniques, there is insufficient evidence of a design-oriented analysis of non-linear storytelling, in terms of its narrative structure as it relates to cinematic diegesis, in well-received films within the CMT framework.

## 1.4 Aim

The aim of this research is to see whether conceptual metaphors and image schemas can be found in the design of non-linear narratives (henceforth NLN) in popular mainstream Hollywood cinema. The existent work linking the structure of NLNs to conceptual metaphors is undeveloped and accordingly, what we propose is a novel and hybrid design-based approach.

## 1.5 Objectives

1. To collect a corpus of non-linear films that can be used by future researchers to attempt similar studies.
2. To study the current use of non-linear narratives in mainstream cinema in terms of storytelling, production, and postproduction of the films of a select few directors.
3. To understand the relationship between the story/content and the discourse/form in NLNs in the selected texts.
4. To read and interpret the film design for conceptual metaphors and test if the identified metaphors reflect the way the stories are told via its visual representations in the timeline.
5. To list and generate a taxonomy of the techniques that maintain the narrative flow in the selected film texts' structural units (shots, scenes, and sequences).
6. To formulate a base methodology for future analyses of other non-linear film texts (from language to image to film and then to narrative structure and then to design of the narrative).

## 1.6 Scope of research enquiry and limitations

One of the first tasks of this study was to collate a nearly comprehensive list of non-linear narratives in cinema across the world. The base for this dataset is a crowdsourced list from Wikipedia.com under the non-linear narratives category for a century spanning from 1916 to 2017 (updated to 2023). This list comprises early cinema, experimental, and auteurist films, and mainstream cinema in many languages. During this study, the list was refined, expanded, and trimmed where required. Currently, the list stands at 291 films with metadata on critic and audience ratings, language, year, director, and a short synopsis (Appendix 1). Most of the films fall on a spectrum which ranges from simple NLN techniques like flashback and flash-forwards to the other extreme, where films are highly fragmented and intentionally made difficult for mass consumption. From this list we selected a few as representative for closer study. The delimiting parameters and rationale for choosing the film texts for the purpose of this inquiry are as follow:

**Films post-1990:** As mentioned above, this study uses only films that underwent digital edit since I surmise that digital editing practices led to increased interest in experiments in narrative structuring on the editing platform. Therefore, the films chosen for study are all post-1999.

**English language films:** the first reason for this choice is that the CMT database currently is a corpus of commonly used metaphors in the English language; the second is the linguistic competence of the researcher (the other language options of Hindi or Marathi available to the researcher do not currently possess a robust corpus of non-linear films, nor a database of master metaphors compiled through scholarly debate and consensus).

**High critic/audience/ box office ratings:** The metric for whether a film does well or not is firstly the box office collections/ratings, then the critic ratings, and after that, the audience ratings or score. These parameters are a good indication of whether the film is mainstream and has a mass appeal. While it would be easy to find radical experiments in narrative structures in short films, student films or other auterist and niche genres, for the benefit of a larger audience, we looked at only the highest grossing, most acclaimed films.

After studying several options, we chose *21 Grams* and *Arrival* for a close analysis and *Dunkirk* (Christopher Nolan, 2017), *Sliding Doors* (1998) and *Memento* (2000) for identification of a primary embodied structural metaphor. A more detailed rationale for the choice and the employed approach is provided below.

## 1.7 Methodology

The American philosopher of film Noël Carroll (2007), while studying Buster Keaton's work, used two distinct routes to understand the underlying metaphors used in them. These he characterised as the dramatic level and the iconographic level (Carroll 2007). In dramatic terms underlying themes are revealed by focusing on the conflict in the text and then pinpointing the schema at work; while the image approach considers the visual content and tries to locate the themes of the film through an evaluation of its imagery, the arrangement of its visual elements and the use of intra-filmic devices. Similar analyses can be found in the other works of Carroll (2007), Coëgnarts and Kravanja (2012) and Forceville (2012). Of note is the adoption of the careful parsing of film narratives from works of scholars such as David Bordwell and Barry Salt. To formulate a methodology that could operate at a more granular level and offer insights into the structure of the NLNs, it was necessary to look at well documented analyses of film breakdowns by

scholars. Thus, I draw the methodology of this study from a hybrid of these approaches with modifications as outlined below.

This research looks first at the dramatic level, which includes the context and the content, and then we study the construction of the narrative via visualizations to find a parallel within conceptual metaphors. While studies that are wholly image-based have the image itself (that is, the shot or scene) as the substrate for investigations into metaphoric expressions, scholarly work engaging in the overall visual structure of a film such as the present one, are difficult to find.<sup>20</sup> We must then look at the dialogues, screenplay, original source content to amass evidence for the expression of the metaphor. In the next step I utilize the Master Metaphor List and the MetaNet Wiki to find a connection that leads us from the conceptual metaphor to an image schema at work in the film texts chosen for analysis.

### **1.7.1 Rationale for Film Selection**

As the goal of this research was to draw out a link between the story and the narrative discourse with a wider audience appeal, the scrutiny needed to focus on mainstream films made for a larger audience and not experimental or auteur films.

Many of the films in the original Wikipedia list (which, as mentioned, I used as the starting point for my own database) only take into account the use of flashbacks and flashforwards to define non-linearity. This is a very broad definition and therefore most comprehensive and accommodating. At first glance, it seems like all the films fall on a spectrum between the two extremes of simple non-linearity to almost incomprehensible

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<sup>20</sup> The pilot studies and preliminary work discussed below work at this level. The films chosen for the actual project, which are considered at the level of overall edit design and engage at the level of overall structure, are subjected to a hybrid analysis.

non-linearity. The spectrum is such that as we move further towards the latter extreme, the story becomes unreadable, for e.g. Alain Renais's *Last Year at Marienbad* (1961), a film which confounds the mainstream audience. Films falling within the former extreme use straightforward flashbacks and flash forwards following an obvious linear progression as the majority of mainstream cinema does, for e.g., Derek Cianfrance's *Blue Valentine* (2010), *Captain Marvel* (Anna Boden and Ryan Fleck, 2019) and *You Were Never Really Here* (2018) by Lynne Ramsay.

It is beyond the scope of this research to comment on every film in the list at this juncture and therefore, we narrowed down the focus within the post-1990s delimiter according to the following parameters: box office ratings, critic scores, importance in secondary academic research, and directors who seemed open to taking calculated risks within industry parameters in their oeuvre. However, while the available current academic literature engages with singular instances of non-linearity in the chosen and other texts as evidence for arguments and hypotheses related to post-modernist concerns, the rise of the database, the digitization of the media and the changing processes in the film-making industry (Cameron 2008a), none consider them in terms of structural design.

### 1.7.2 Film Data Sources

Currently there are many databases and ratings aggregators available on the internet from which information can be extracted. This study uses data from the two that are most widely used, comprehensive, and arguably best representative of trends.

## **Internet Movie Database (IMDb)**

This database came into existence in 1990 and is now a subsidiary of Amazon Inc. Most of the information is contributed by registered users who volunteer their time in submitting ratings and reviews, and the entries are allegedly reviewed before being displayed on the site. Users can rate any movie on a scale of 1 to 10, and these ratings are then converted into a weighted mean-rating that is displayed next to each title. Online filters are in place to prevent ballot-stuffing. Along with providing primary data such as the director and year, user ratings are also taken into consideration. This is because IMDb is the oldest internet database and has around 83 million registered users as of May 2019, as well as over 6 million titles and 9.9 million personalities in its database. Unlike other crowd-sourced sites, contributors are unable to make impulsive changes to the data or text, as manipulation is overseen by IMDb technology and salaried staff. IMDb has an ALEXA rank of 53 in global internet engagement (Alexa 2019).

## **Rotten Tomatoes: Tomatometer**

RottenTomatoes.com was launched in 1998 at the University of Berkeley, and it is now owned by Fandango. Its purpose was to provide a platform on which people can access movie reviews from various film critics in the United States. Reviews are initially collected from certified writers of different guilds or film critic associations, with top critics usually writing for major newspapers. The reviews are uploaded by the critics themselves, and the numeric score required for the rating is not an automated process. Each film's reviews are counted, and a percentage is calculated for the positive reviews. Each review is accompanied by a short excerpt and a hyperlink. The site provides three user-friendly icons: 'Certified Fresh,' which requires a tomatometer rating of 75% or better and at least 80 reviews, 'Fresh,' for a positive review percentage of over 60%, and

'Rotten' for anything below. Films with a 100% positive rating will not receive the 'Certified Fresh or 'Fresh' rating unless they meet the required number of reviews. Top critics are identified in a separate sub-listing that calculates their reviews separately. Films also feature an audience score, which is a user average that calculates the percentage of registered users who have rated the film positively on a 5-star scale, similar to the calculation of recognized critics' reviews.

According to several independent studies, major Hollywood studios have begun to view Rotten Tomatoes as a threat to their overall projected scales. One study claimed that the website, combined with social media, was going to create increasingly serious complications for the film business (Lee 2017). Another study found that seven out of ten people said they would be less interested in seeing a film if the Rotten Tomatoes score was between 0 and 25, and the site has the most influence on people aged 25 and younger. 'Rotten Tomatoes is like the truth serum on the entire [promotional] campaign: are all the things you're telling me about the movie true or not?' says Jon Penn, chief executive of the movie research firm National Research Group (NRG), which has tracked Rotten Tomatoes' influence on audience behaviour since 2010. 'These scores are almost like a lubricant one way or the other. If it's good, it helps you more than it did in the past. But if it's bad, it hurts you even more' (ibid). While some criticize the site's largely white-male makeup of reviewers or the over-simplification of its score, the critic ratings are taken into consideration for the significant number of critic reviews aggregated for each film.

### 1.7.3 Film Selection

After the data sources were identified, and information from the databases was collated, we also looked at popularity in academic research and eventually came up with an initial list of films (Table 1.1).

| Name of Film             | Director                    | Year | IMDB | Tomatometer <sup>21</sup> | Audience Score <sup>22</sup> |
|--------------------------|-----------------------------|------|------|---------------------------|------------------------------|
| <i>21 Grams</i>          | Alejandro González Iñárritu | 2003 | 7.7  | 80%                       | 86%                          |
| <i>Amores Perros</i>     | Alejandro González Iñárritu | 2000 | 8.1  | 93%                       | 94%                          |
| <i>Arrival</i>           | Denis Villeneuve            | 2016 | 7.9  | 94%                       | 82%                          |
| <i>Babel</i>             | Alejandro González Iñárritu | 2006 | 7.4  | 69%                       | 77%                          |
| <i>Dunkirk</i>           | Christopher Nolan           | 2017 | 8    | 92%                       | 81%                          |
| <i>Irreversible</i>      | Gaspar Noe                  | 2002 | 7.4  | 57%                       | 80%                          |
| <i>Memento</i>           | Christopher Nolan           | 2000 | 8.5  | 92%                       | 94%                          |
| <i>Sliding Doors</i>     | Peter Howitt                | 1998 | 6.7  | 65%                       | 77%                          |
| <i>The Burning Plain</i> | Guillermo Arriaga           | 2008 | 6.8  | 38%                       | 56%                          |

Table 1.1 Selection of films from the list of NLN

This list was further curtailed to arrive at a cluster of primary texts for film container design visualization, two of which were subjected to a closer analysis in the first two chapters of the study. A cursory first look at the films brought forth the first insights summarized below:

<sup>21</sup> Tomatometer rating is from the review aggregator site RottenTomatoes.com.

<sup>22</sup> Audience score is also from RottenTomatoes.com and the two different scores distinguish from certified top critics reviews and the audience ratings.

**Memento (2000) and Dunkirk (2017), dir. and writer Christopher Nolan**

*Memento* was a path-breaking film for non-linear storytelling precisely because it went on to have a much wider appeal than anyone would have predicted (Mottram 2002). With its near mathematical puzzle of an edit structure, the story, although straightforward, is presented to us like a scrambled jigsaw puzzle. Split into two at its halfway mark, it creates what the director calls a hairpin bend (Nolan 2001). The first half of the story in temporal space is then presented as B&W sequences that run linearly, interspersed with the second half of the story which is a coloured sequence running in backward order. For eg. the 44<sup>th</sup> scene in the linear story is shown first, then scene no.1, then 43<sup>rd</sup>, then scene 2 and so on. This creates a pattern that seems difficult to follow in text but is intuitively comprehensible while watching. This design, in Nolan's own words was meant to emulate the protagonists' disability—he is unable to form new memories—and thus radicalises the conventional first-person point of view. It seems almost an answer to the question: what can we do to show in film that the first-person narrator is unreliable (a common literary strategy) without verbal cues?

Nolan wrote the film as a non-linear script, along with his brother Jonathan who seeded the idea. One of the remarkable things about this film is that the non-linear representation did not evolve after the shooting on the edit table and was a conscious choice on the part of the director/writer. The final edit comes across as fragmented, and unreliable, much like the protagonist's memory. The audience is constantly at the edge of their seats, as they await revelations about the protagonist, trying to make sense, never knowing who friend or foe is.

Christopher Nolan later went on to make *Batman Begins* (2005), *The Dark Knight* (2008), *The Prestige* (2006), *Inception* (2010), *Interstellar* (2014), *Dunkirk* (2017),

and *Tenet* (2020). All films are firmly in the category of Hollywood blockbusters, winning multiple awards and critical acclaim. It is obvious, that within all his films is an attempt to explore the nature of the self, of knowledge and of time (Kania, McKenna, and Levine 2009).

Unlike *Memento*, *Dunkirk* was a film most of us were fortunate enough to experience on screen. I remember being surprised when I figured out the nonlinearity of the narrative while watching the film in the theatre. The battle of Dunkirk, historically so significant, was portrayed in this film from three perspectives: Air, Water and Sea. We follow some significant characters across the three spaces and times, for the three perspectives also follow their own time, with the battle in the air being the shortest and the one on land being the longest. This stacking of time and then interweaving to create a continuous narrative was an intricate experiment. As a viewer, I felt at a few places the narrative did falter in terms of exposition coming in earlier or later. Both these films represented a span of 17 years in the director's career. A rough idea of the image schema was visible in the edit structure and thus both of these made the final list.

***Babel* (2006), *21 Grams* (2003), *Amores Perros* (2000), dir. Alejandro Gonzalez Inarritu, writer Guillermo Arriaga**

In 2000, Alejandro Gonzalez Inarritu directed *Amores Perros*, co-written with Guillermo Arriaga. The duo went on to collaborate on two more films, all three hinging on a non-linear narrative. Together, *Amores Perros*, *21 Grams* and *Babel* are called the Inarritu-Arriaga trilogy. *Amores Perros* went on to win accolades, especially in the western part of the world. An Oscar nominee, the film tells three interlinked stories that span across social classes in Mexico City. These stories are viewpoints of the same event from the

characters involved in the narrative with a small overlap. The overwhelming idea here was of fate, how the three stories come to collide at the same moment in time. However, they may be considered 3 discrete linear films with no crosscutting. *21 Grams* again relates three different stories, which are interlinked by an accident that shatters the lives of the three protagonists respectively. These three stories are crosscut and non-linear in time, making them seem disjointed; the effect is likened to that of shattering of glass in an accident. Iñárritu and Arriaga completed the trilogy with *Babel*. This film spans three continents and four separate tales which Bordwell calls a network narrative (2006). Juan Pellicer compares the structure of *Babel* to 'a kind of "stanza pattern" that alternates the different tales by the order of appearance and disappearance of the fragments. Each fragment becomes the equivalent of a sequence—or stanza—while each sequence is formed by a number of scenes—or verses—and finally each scene is formed by a number of shots—or images'. (2010, 243). Pellicer further finds the structure similar to that of 23 stanzas in a poem whose order adhered to a strict symmetric pattern. While this is an interesting insight, we find that between the title of the film, the themes running through the stories and the structure, it could not be read from an embodied metaphoric design structure. Therefore, *21 Grams* was the only film selected from this trilogy.

### ***The Burning Plain* (Guillermo Arriaga, 2009)**

Guillermo Arriaga publicly parted from his partnership with director Alejandro Iñárritu and set about his first directorial venture with *The Burning Plain* (2009). The film followed a similar non-linear narrative to *21 Grams*, but despite having a stellar cast and acting, it failed to impress critics and audience alike. The film has a 38% score on Rotten Tomatoes critics rating with just about 79 reviews. Initially I explored the possibility of comparing two non-linear films of the same director to understand what worked for one

film and what didn't for the other. But given the rarity of this form, we went ahead with a specific selection of films. A directorial oeuvre-based study is one of the ways in which this research may be expanded upon.

### ***Irreversible* (Gasper Noe, 2002)**

Gasper Noe's *Irreversible* (2002) presents its plot in reverse chronological order, in an attempt to drive home the idea that the incident in the film that changes everything of the main characters will happen, and there is no reversing fate. One cannot call this a mainstream blockbuster film. In fact, the very influential film critic Roger Ebert, called it 'a movie so violent and cruel that most people will find it unwatchable' (2003). If told in linear fashion, the story will show a day in the life of a loving couple, moving on to the woman finding out that she's pregnant, a nightclub visit with friends which ends with the woman being brutally (and possibly fatally) assaulted and ending with the boyfriend vowing revenge and beating up a man he mistakes for the rapist. In the actual non-linear edit, we see the order of the scenes reversed, making the last scene first and the first scene last. This treatment produces a fundamentally different narrative. According to Ebert, there are many ways in which this happens. He observes that the film doesn't build up to violence and sex as its payoff, showing us the worst at the very beginning and then tracking back into lives that are about to be altered forever.

The reverse chronology further creates a different kind of interest in the earlier scenes, which we are privy to, but the characters are not. Their simple happiness, in ignorance, leaves the audience with a poignant melancholy since they know that the happy couple does not know the dark but inexorable fate waiting the in the very near future. This chronology also forces the revenge to precede the crime. Ebert likens the opening rape scene and the enforced omniscient voyeurism that the audience faces to

pornography in his scathing review. Allan Cameron, raising questions of determinacy and contingency, and observes that this is a film where the ending is already given. Cameron compares the transformation of the animal savagery of the film's hectic unsteady camerawork in the beginning to the reflective peace of the visuals at the end to that of Stanley Kubrik's *2001: A Space Odyssey* (2008b, 57). We decided not to include this film in our study because firstly it was in French and the possibility that we would miss some linguistic cue while watching with English subtitles made it not a strong contender. Secondly, as the reviews show, it did not work for a mainstream audience. In a future study of retrograde narratives where we don't have the constraint of a mainstream film text, this film will be an important text to analyse.

### ***Arrival*, (Dennis Villeneuve, 2016)**

*Arrival* is a science fiction film based on a short story called 'The Story of Your Life' written by Ted Chiang in 1998. The central story line of the film is around the idea that learning an alien specie's language changes the protagonists' perception of time. What is fascinating about the presentation of the film is that the concept of time being non-linear is depicted in the design of the structure of the narrative. While the original short story makes very subtle use of linguistic cues to explore a similar avenue in non-linearity, the concept of the narrative representation is unique to the film.

### ***Sliding Doors* (Peter Howitt, 1998)**

*Sliding Doors* is a romantic comedy-drama following the two parallel lives of a woman named Helen, played by Gwyneth Paltrow, after a pivotal moment in her life: whether she catches a train or not. The film explores the different paths Helen's life could take depending on this event, and examines themes of fate, choice, and consequences. The film received mixed reviews upon its release. The edit of the two narratives criss-crosses

from one to the other using interesting transitional elements which are a part of the mise-en-scène itself. This in turn embodies the idea of sliding doors, which metaphorically allows the audience passage from one reality to another. David Bordwell uses this film along with three others to illustrate and categorise forking path narratives (Bordwell 2002). Further this is a film that theorists love to make an example of by virtue of being one of the first popular films to feature a forking path narrative structure and it is thus entirely suitable for the analytical structure of this study (Branigan 2002; Ben-Shaul 2012; Barratt et al. 2009).

Finally, the following metaphors/image schemas in the selected films were preliminarily identified:

**Hairpin Bend:** Christopher Nolan's *Memento* (2001) is represented forwards and backwards at the same time, forcing the audience to experience time and memory like the protagonist does. The ending (middle of the story), which is the hairpin bend is a turning point which skews everything we have seen so far, making us doubt our own understanding of the events passed.

**Zigzag:** *Sliding Doors*' parallel storylines, involving the same character is edited in a crisscrossing manner from one narrative to the other using interesting transitional elements which are a part of the mise-en-scène itself. This in turn ties into the idea of sliding doors, which metaphorically allow the audience passage from one reality to another.

**Circle:** *Arrival* features an edit that seems like a continuous loop, or a circle, which goes with the idea that the aliens introduce us to their language which is in the form of circular ideograms that the protagonist eventually decodes to come to the realization that

time is non-linear and begins to see future events as visions in the way that conventional narratives use flashback to show past events or memories.

**Fragment:** The story of *21 Grams* is laid out temporally, resulting in at most parallel cutting between three linear storylines, but the film has a complex jumble of scenes that are completely out of order. This edit is reminiscent of pieces of shattered glass (metaphorically what happens to lives in the aftermath of a fatal accident).

**Stack (of Time and Space):** *Dunkirk* contains three parallel stories set in three different spatial and temporal planes. The film demands that the audience synthesize their understanding of time in the real-life story of the battle through these three spaces simultaneously, almost omnisciently. There is a distinct dilation/contraction/stacking of time and space observed in the structure. The duration of the storylines reflects the time in which the stories take place.

Of the five selected films, *21 Grams* and *Arrival* were chosen for a granular, extended analyses that helped us explore the validity of our methodology. *Sliding Doors*, *Memento* and *Dunkirk* were then analyzed in brief to identify the metaphor at work.

#### 1.7.4 Analysing the NLN in Films

The following methodologies were explored for adapting to our own process for analyses.

##### Story Curves and Story Explorer

In ‘*Visualizing Non-Linear Narratives with Story Curves*,’ a group of researchers have drawn from Gerard Genette’s work to create a visualization technique called Story curves to reveal non-linear narrative patterns (Kim et al. 2018). They have also created a tool

called Story Explorer that allows users to curate the chronological order of scenes in a movie script and explore the non-linear narrative of the movie using this algorithm.

Story curves visualizes the non-linear narrative of a film by showing the order in which events are told in the movie (narrative or syuzhet) and comparing it to the actual chronological order (story or fabula), resulting in possibly meandering visual patterns in the curve (Figure 1.2). The tool Story Explorer automatically analyses movie scripts and extracts essential story elements such as scenes and characters as well as their semantic metadata such as dialogue sentiment and scene settings. It displays the movie script text alongside Story Curves with a set of visualizations of complementary information such as characters, time and places (Kim et al. 2018).

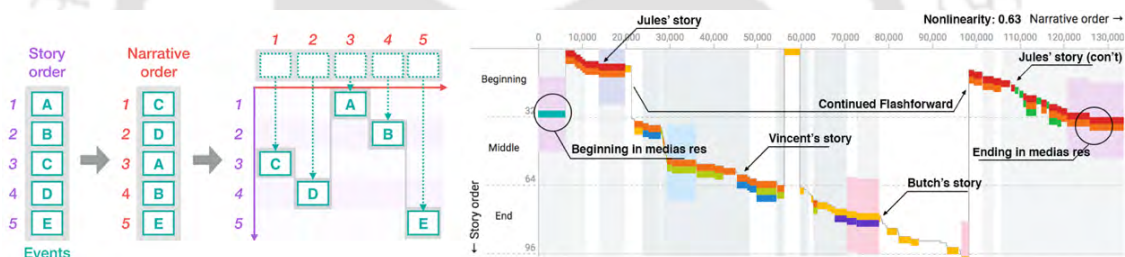


Figure 1.2 Story Curves visualization of *Pulp Fiction*; Reproduced from Kim et. al (2018)

Drawing from Gerard Genette's Typology (1972) the researchers identify seven categories of the relationships between the temporal order of the events that are being told (story order) and the pseudo-temporal order of the narrative (narrative order). These are the following:

- o 'Chronicle' or events narrated in a chronological order (most mainstream films belong in this category)
- o 'Retrograde' or events narrated in a reverse chronological order (Noe's *Irreversible*, the coloured section of Nolan's *Memento* are prominent examples)

- o 'Zigzag' or events from one timeline interwoven with those from another timeline as they are narrated in order, e.g., a narrative alternating between the past and present, or the narrative movement of *Sliding Doors*
- o 'Analepsis' or flashbacks, used at times to fill in a backstory, or to point at causality.
- o 'Prolepsis' or flash-forwards (*Arrival* extensively uses prolepsis to show events that occur in the future)
- o 'Syllepsis' or events grouped together based on some criteria (e.g., spatial, temporal, thematic kinship). Thematic groupings are often used in the classical episodic novel in which multiple stories are inserted and justified by analogy or contrast. Similar groupings are also found in films like *Pulp Fiction* (Quentin Tarantino, 1994) and *Love Actually* (Richard Curtis, 2003) that use multiple plotlines.
- o 'Achrony' or events that are randomly ordered. The relationship between the order in which events are narrated and the order in which they occur is difficult or impossible to establish, possibly due to lack of temporal information available from the narrative.

The comparison of the narrative and discourse order of story curves is particularly important to this research because it compares story time and narrative time making it possible to see the pattern that the relationship between the two create (Figure 1.3). The ten films they chose to analyse are from a varied spectrum. The research was primarily about creating the tool, and it is possible that using the basis of their analysis, a cross-section of films from the list of NLNs this study has compiled compared with each other might reveal interesting insights.

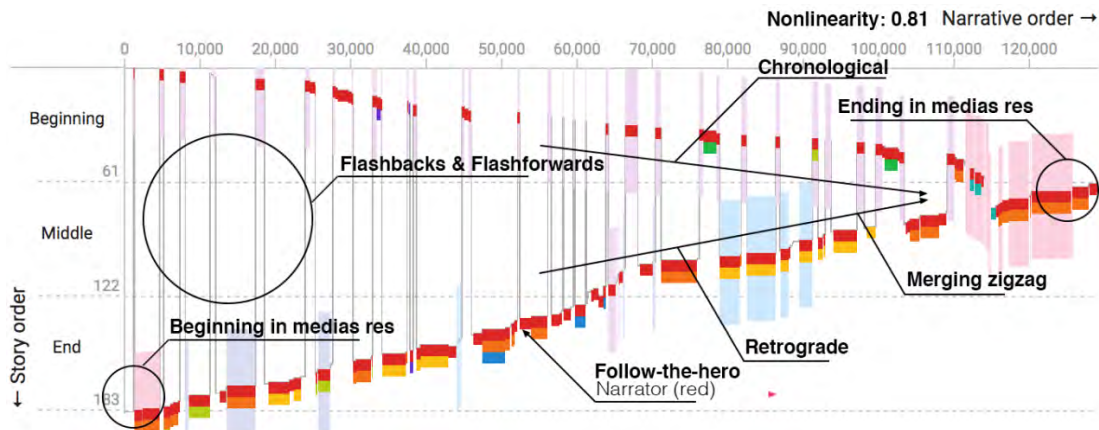


Figure 1.3 Story v/s Narrative, Reproduced from *Visualising Non-Linear Narratives with Story Curves*, (2018) by Kim et. al.

The researchers also conducted interviews with participants who were experienced writers and were able to grasp the idea of Story Curves<sup>23</sup>. All the participants agreed that being able to see the structure of a narrative was interesting and useful, with the visuals being compared to musical notes, having their own rhythms, noting that different directors have different patterns (2018, 8). One participant was even able to draw a connection between Woody Allen's stand-up comedy career to the patterns created by his film *Annie Hall* (1977). An application to teaching how to write non-linear narratives was also discussed. They surmised that non-linear narratives are often complex to understand due to the disruption of the direct causal relationship between events in order to increase suspense and it is possible that Story Curves and Story Explorer might help viewers and practitioners alike. This study draws from the Story Curves project's insights and methodology in the visualization of the filmic design of the chosen primary texts.

<sup>23</sup> The present research does not use user surveys in its methodology since its primary aim is film analysis through design visualization rather than tool development. Future work may lead to it this, however, thereby necessitating user participation.

## Cinematics

The Australian film historian Barry Salt has spent the last four decades establishing a statistical style of analysis as a research paradigm in film studies. In 1974, he published an essay in *Film Quarterly* called 'The Statistical Style Analysis of Motion Pictures'. This essay went against the prevalent theories in film studies which applied semiotics, Lacanian psychoanalysis, and Althusserian Marxism (Buckland 2018). He subsequently developed the framework he described in the essay in his book *Film Style and Technology* (2009).

In the abovementioned essay, however, Salt points out that many different directors have styles that are easily recognizable in terms of form as well as content. But so far, these auteurist claims were loose assertions and lacked demonstration. The other problem was that it is more difficult to recognize a director's individual style than previous studies acknowledge. He therefore proposes that a statistical style analysis might help in resolving the problem of identifying a director's style.

Auteur criticism (see above) occupies a major background assumption in Salt's work on cinematic stylistics. Salt uses Andrew Sarris' influential compilation of a list of 200 American directors outlining their thematic and stylistic attributes while also establishing a hierarchy as a primary point of comparison. For Salt, however, the loose and vague assertions made by Sarris can be corrected by using statistics, which by definition is detached, systematic and explicit. His working hypothesis was to systematically collect data from formal parameters of a shot. In this early work he limits his data collection to the following discrete shot parameters: duration of the shot (measured either in terms of feet or seconds); shot scale (seven categories, from big close-up to very long shot); and camera movement (six categories). For future research he

recommends collecting data on camera angles (three categories: high, low, eye level) and the more diffuse parameter he calls the strength of a cut, 'the nature of shot transition from each shot to the next'(Salt 1974, 13). He represents the data visually with histograms, making it easy to compare across films and directors. The collected data can be re-contextualized into broader frameworks, to characterize film genre styles, historical periods, trends in filmic style and so on. Salt and his collaborators have continued to collect and analyse data, identify new types of data and devise new methods to analyse it. The limitation of this approach, as Elliot Panek observes, is that while this style of statistical analysis may shed light on the visual style denoted by the shot durations and camera angles/movements, it fails to inform about the 'qualities of narration' (2014, 74).

Adelaide Heftberger, in collaboration with new media theorist Lev Manovich, has created visualizations from films made by Dziga Vertov. She posits that visualization and data analysis is an important tool for a researcher of the digital humanities (DH). The domain of DH lacks audio visual research as of now (2019). The analysis of formal elements of a film text, like shot duration, scene changes, visual motifs and camera movement comes from the notion of looking at film as a database. Lev Manovich elaborates on this phenomenon in his book the *Language of New Media* (2001). Heftberger with Manovich, creates 'a kind of a visual footprint' to gain 'at least superficial insights merely from looking at the montage of images'(2019, 8). They annotate eight films by Dziga Vertov for shot lengths and other parameters. Further, stills from the beginning of a shot and the end of a shot were used to create a visual map of Vertov's cinematographic and narrative style. In conclusion, she posits that this methodology allows for comparisons of many films and helps pick out patterns in a director's oeuvre.

While usage of these method might yield precise outputs in terms of style, the rigid structure is more suited for auteurist cinema or comparative analysis of styles and their evolution, it might not hold as true for non-linear filmmaking, as the conjecture of the present research it that the form of a non-linear film follows its content and would not necessarily reflect a director's style.

### Visualization as Interpretation

Simply put, data graphics are the combined use of points, lines, a coordinate system, numbers, symbols, words, shading and colour, to visually display measured quantities. Earlier used as a substitute for small statistical tables, modern data graphics are instruments for reasoning about quantitative information. According to Edward Tufte data visualization is the most effective way to describe, explore and summarize a set of numbers, even a large set, by looking at pictures of the numbers (Tufte 1990). As discussed above, data visualization can become a means of exploration that can provide a different approach to reveal potential connections and relationships that are not as obvious in non-visualized quantitative data. Data visualization can also reveal patterns, for e.g., with *Dunkirk* I was able to see the continuous buildup the director spoke about when he described his 'snowball effect' when we made the visualization for the narrative.

In the medium of film, in which structures may be found at various levels like narrative, music, editing patterns, it is likely that a graphic visualization of the films might yield interesting similarities at syntagmatic and paradigmatic levels. Panek, for instance, argues for diagramming complex narratives to aid discovery of patterns that would not be visible otherwise. In his essay '*Show, Don't Tell*' he diagrams the range of audience's knowledge of diegetic reality in *Inception* (Panek 2014). While diagrams help hypothesize some insights into a puzzle film, they also become evidence to support

critic's observations about the film text. *Inception* for example, is exposition heavy. The character of Ariadne shares the protagonist space with the character of Cobb who at first glance seems to be the actual protagonist of the film. Panek deduces this from the fact that both Ariadne and the audience have the same amount of knowledge about the world. The audience is meant to sympathize with Ariadne as she acts as the proxy for the viewer. He concludes that diagrams of film texts manage to convey more information in less time, they can also be used to identify complexity in narratives and can facilitate pattern recognition and quick comparison. While Panek confesses that the diagram is unable to do is convey the more complex workings of the film on a scene-by-scene basis, it succeeds in providing unique insights into the film (ibid).

For this research, the visualizations of the narrative structures were created primarily to identify and demonstrate the conceptual metaphor and/or the image schema at work in the narrative. Thus, we kept the level of diagram complexity the same as basic image schemas.

### **1.7.5 Foundation Work and a Pilot Study**

In this section we present 2 case studies that I have been involved with, over the course of my career. One is a student film and the other is a paper which helped solidify the methodology for this study.

#### **Through the Looking Glass (2007) dir. Sheetal Gokhale and Prasad B.**

In 2006 as a student in IDC School of Design, Indian Institute of Technology Bombay, Dr. Prasad Bokil (currently faculty in IDC, IITB) and I were commissioned by the Public Service Broadcasting Trust to make a short film about gender identity. The story chosen for this was from my book of photo essays and fictional accounts of the lives of

members of the transgender community in Mumbai. The process of the making of this film started with a linear format and after the first edit, we experimented with the non-linear format and a split screen narrative.

For the split screen treatment, the frame of the film was divided into 6 vertical parts, and at times every split showed a different shot, or the same shot out of sync (Figure 1.4).



Figure 1.4 Stills from *Through the Looking Glass* (2007)

The resultant effect was like that of water, refracting the visual in different ways. As the story is emotionally charged, the movement of the images, the associations created by the juxtapositions and the changing degree of synchrony between the splits in the screen helped us add layers to the narrative. Each sequence was designed with the emotion in mind, and the sync between the splits was tweaked according to what we wanted to say about the characters' state of mind. The split screen allowed us to depict the fragmented nature of his mind and his reality.

The film was broadcast on national television but turned out to be too complex for the audience and the medium. Further feedback from critics concerned the mismatch of the cinematography and the edit which was unsurprising since the film was not originally intended to be either a non-linear or a split screen narrative. The idea of an

NLN excited us, the split screen adding complexity, but excessive usage of the trope alienated the film from its audience and reduced it a student experiment. This film is available to watch at <https://www.youtube.com/watch?v=udMuw578Zs0>

The second preliminary study which was done in preparation for the present research in which the methodology was applied, and the steps taken to do so, is outlined below. The breakdown and visualization of the texts studied in this project in Chapters 2–4 have received similar treatment. Detailed discussion of the method applied in each particular case is discussed in detail in the individual chapters.

### **The Balance Schema in ‘Disco Pigs’**

While trying to test how to formalize the methodologies of analysis of the film texts, a brief review was performed of the current state of art in the domain of filmic metaphor research. This is offered as part of the literature survey above. During this literature survey, it was found that the study of metaphors in film was largely corpus based and focused on the visual manifestation of metaphor in the image (or sound). Only a few scholars, such as Miklos Kiss and Steven Willemsen (Willemsen and Kiss 2020) cited above, focus on the role of spatial and embodied cognition in the comprehension of non-linear story-worlds in films like *Inception*.<sup>24</sup>

While devising the methodology for the study of the metaphor in the structure of a narrative, a need was felt to conduct an image-based study of the metaphor on a film that was not a part of the final selection. The idea behind this was to explore established methodologies in such studies and to estimate the degree of customization necessary for

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<sup>24</sup> Story-world is the construct in which non-linearity is a feature of the time in the setting of the story, for e.g., in time travel films. This is not the same as non-linear storylines in which the non-linearity is manifested only in presentation (Willemsen and Kiss 2020).

each film. The driving factor behind conducting this test study was to understand whether the existing methodologies of visual metaphor analysis could be used for the study of the shape of the film container. The resultant visual analysis gave me a clearer picture of how to proceed with the methodology for the films that comprise the central thesis of the larger study.

The film selected for this pilot study was *Disco Pigs (2001)*, originally written by Enda Walsh as a stage play in 1996 and adapted into a film in 2001 by debutant director Kirsten Sheridan. Stills from this film have been used as evidence in Jenifer Van Sijll's *100 Cinematic Techniques (2005)* to briefly demonstrate the oft-followed visual principle of balance/imbalance in framing. This cinematic principle is suitable for the depiction of the conventional story structure: that of equilibrium, disruption and the transition to a new equilibrium. The story of the two characters, a boy and a girl, at the cusp of adulthood and discovery, is of the coming-of-age genre and there is a clear 3-Act structure which shows how the relationship of the characters changes over the course of the film. The objective of my test study was to answer the following questions: How is the central balance/imbalance schema visually communicated in the film *Disco Pigs* in terms of its visual elements? How does the change in the balance schemata denote the change in the character arcs of the protagonists? How is change denoted in the schema over the course of the film?

To answer these questions, a breakdown of the film text vis-à-vis its narrative structure and the presentation of the metaphor in the image was performed. The genesis of this breakdown methodology was in the initial informal scrutiny performed for both *21 Grams* and *Arrival* and formulated in a similar manner. The original story, stage play, and script were analysed. As I was looking mainly for the balance/imbalance schema in

this film, the content of the film, which would be reflected in the narrative structure, was given importance in the analysis.

With this in view, the film was broken down into scenes with the help of software and each scene was described briefly with details regarding the presence, absence or position (in respect to the frame) of main characters. After this the narrative structure was broken down and annotated for a conventional 3-Act structure as described by Syd Field (2005). Once the important events in the story were ascertained, the whole film was annotated in a tabular format with the screenshots from the relevant sequences with their descriptions to find evidence of the balance or imbalance schema. The resultant data was transferred to a spreadsheet and some preliminary graphs were generated to track where the schemas manifest and change.<sup>25</sup>

The visual analysis of the film helped categorize the ways in which the balance/imbalance schemas manifest in the film. Through this study we have observed that the schema is indeed at work in the selected text and comes to the fore when compositions from different points in the narrative are compared with each other. I found that

- The central balance/imbalance schema is visually communicated by first assigning the characters places in the frame to denote a bonded whole and then breaking the rule to evoke discomfort, imbalance and conflict. This is achieved by one of the three categories formulated in this study:

*Absence, Switch and Replacement* and/or a combination of all three.

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<sup>25</sup> Details of procedures undertaken and the technology used for each film text is discussed fully in the subsequent chapters of this study. Here and in the next section I outline the methods employed and the rubrics formulated which are applied to all the film texts chosen for close study.

- The change in the balance schema generally comes about when an important plot point occurs that fractures the unit that the two main characters make. And this is evident when one compares the change in framing with the change in the character or story.
- The initially established balance schema (symmetry) progressively gets imbalanced to come to a new equilibrium (switch/power). This is very much in line with how the 3-Act structure works. The decision to make these compositional choices in *Disco Pigs* is a very deliberate one and makes sense given the context. Such rules are usually set in place before the production begins and are followed as much as possible, given the constraints of the many variables that are subject to change in a complex and dynamic group activity such as filmmaking. The discussed balance/imbalance schema is one of the many cinematic devices that are used in the film, another notable one being the use of colour, which warrants a study of its own.

This study was presented as a paper in Humanizing Work and Work Environments (2021) conference<sup>26</sup>. It helped demonstrate that embodied balance schema can be applied metaphorically in order to express intangible and abstract phenomena such as love, loss, change, equilibrium in the film. The analysis confirms this and possibly helps to appreciate the complex image-making at work in this film. For a visual analysis of metaphors in the medium of film, the metaphor needs to be derived from the theme

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<sup>26</sup> This paper was added to an online bibliography maintained by Coëgnarts and Kravajna titled 'Bibliography on Conceptual Metaphor Theory and Cinema' updated March 2023 on academia.edu. [https://www.academia.edu/19903404/Bibliography\\_on\\_Conceptual\\_Metaphor\\_Theory\\_and\\_Cinema](https://www.academia.edu/19903404/Bibliography_on_Conceptual_Metaphor_Theory_and_Cinema)

and content of the narrative. One of the prime learnings from this study was the process of derivation of the metaphor from the narrative and the categorization of the types of manifestation in the film, which is central for the demonstration of the hypothesis.

### 1.7.6 Process of Film Analyses

We situate the methodology used for the analysis of the film texts within the CMT framework laid down by scholars in linguistics as well as film, advertisement, and games genres. As noted above, Buckland, Bordwell, Coëgnarts and Kravajna, Willemsen and Kiss, Forceville, Lakoff, and Johnson have been important scholars on whose work I have drawn heavily in order to establish the theoretical underpinnings of the present research.

In *The Cognitive Semiotics of Film* (2000) Buckland argues for looking at film analysis via embodied image schemata, while David Bordwell in *Narration in fiction Film* (1985) following his ‘cognitivism’ stance posits that more abstract schema come at play (such as cause and effect). Taking both these viewpoints into consideration Coëgnarts and Kravajna argue for a hybrid view of schemas, both bodily and abstract ones. For example, they surmise ‘if our understanding of abstract thought is structured in terms of our perceiving and doing, as Johnson (2005, 16) argues, then the same bodily structures must be appropriated to shape our understanding of abstract schemas such as cause and effect as well’ (Coëgnarts and Kravanja 2012, 88).

In the essay ‘Embodied Visual Meaning’ they lay out an excellent case for a combination of both. They surmise that the way to approach visual metaphors and image schemas in narratives is to look at the medium as multimodal. Charles Forceville describes film as ‘a multimodal medium par excellence and thus particularly suited for the manifestation of metaphors (2018). The medium of film engages the viewer via

spoken language, static and moving images, music, non-verbal-sound, and gestures. A scholar of film design must therefore look at all modes available to identify the metaphor.

At this juncture I would like to clarify that we look at metaphors from the viewpoint of all three of the stakeholders here—the filmmakers, the audience and the critic. CMT scholars have already shown us that the use of metaphors is inherent, inescapable, and unintentional. Central to CMT claims is the idea that the body is what drives the cognition of abstract and tangible experiences. Thus, I submit that by the virtue of having a body, the filmmaker first weaves the metaphor into the telling (with or without self-awareness), the audience member then internalizes the metaphor through their own experience of embodied cognition and gains a more affective understanding (again with or without awareness), and the critic can speculate on the existence of the metaphor at the junction of production and consumption of the object of art.

Since Willemsen and Kiss already establish the MTL approach while looking at narrative comprehension in non-linear films, we also tap into their study for our framework. Studies dealing with the structural analyses of NLNs are rare. I therefore offer here a procedural breakdown of the method founded upon the theoretical framework outlined above. This includes certain rubrics upon which future scholars can hopefully build their own approaches.

1. Basic study of the CONTEXT that includes crew interviews and insights, special techniques, critic reviews, and acclaim. Although not a stand-in for audience surveys, the collected data can offer deep insights into the minds and attitudes of both the maker (without committing the intentionalist fallacy) and the consumer

while avoiding unsatisfactory localized user studies that may or may not encompass the target audience for the film texts.

2. CONTENT: genealogy of the narrative (adapted from novel/short story etc.), overarching theme of the film, script, film breakdown, linearising, sequence annotation, story/discourse comparisons, narrative structure with event/situation models, intrafilmic cues for maintaining flow of narrative in non-linearity (transitions, mnemonic aids, leitmotifs)
3. Identification of theme, metaphor, and schemas in different modes, description, and interpretation of the image schema/metaphor at work.
4. Visual representation of metaphor in the form/presentation.

### 1.7.7 Taxonomy of Transitions

At this juncture, I would like to discuss a part of point two from above which is possibly the most original contribution that this research hopes to make in the discourse and practice of NLNs in film. During the film analyses, I was able to identify transitions in the films which were not exactly mappable to conventional cinematic transitions. By the end of the fifth film, I had enough data to undertake a preliminary classification of the observed transition types and was confident enough to put together what I call the ‘Taxonomy of Cinematic Transitions for Non-Linear Film Narratives.’

A close reading of the films demonstrated that the fragmented narratives are interconnected with a variety of transitions that are relevant to the metaphor at its core. These may be placed within a customised typology derived from the study of conventional transitions in script writing, film editing and cinematography that are popularly in use in the production of films.

As briefly discussed in the literature review above, traditionally, transitions are simple techniques to make a cut between shots or scenes smoother. The act of a cut between two shot is, as the word 'cut' implies, abrupt and violent. Over time, filmmakers have found various techniques to make the jump from one image to another seem smooth and effortless. Throughout the development of the cinematic medium, filmmakers formulated theories which are now imbibed in filmmaking. For e.g., Eisenstein advocated the montage edit in which he felt that a smooth transition was a wasted opportunity and drawing attention to transitions could be used to show the dialectical nature of existence instead, while André Bazin advocated minimal editing interference, preferring to keep the film realistic and allowing the viewer autonomy over what she should construct while experiencing the narrative (Bazin 2009; Eisenstein 1949).

Subsequently, mainstream cinema evolved what are now considered to be conventional film editing practices which reflect the hallmark of seamless cutting. The objective of a competent editor is to make the cuts between shots and scenes seem invisible. Karen Pearlman, however, echoing Eisenstein argues that editing is not meant to be invisible, but instead visibly creates movement across the narrative in three types, which she categorises as physical, emotional and event-based (2015, 93). This is achieved during all stages of the pipeline such as direction, cinematography, acting and editing. On the editing front, standard industry techniques like the straight cut, fade to/from black or white, dissolve to/from other shots and superimpositions, match cut/dissolve (in which elements like shapes, compositions, colours, sound are matched), iris, wipe, pass by, whip pan, smash cut, J-cut/ L-cut, jump cut, matching action, preserving screen direction, establishing the scene, matching light and colour, matching flow over a cut and

several others are used (Dancyger 2019). These have evolved over a century of cinema and still carry with them the remnants of the actual film stock editing techniques. These techniques explain how cutting is performed in film. The motivation/function of the transitions is intrinsically connected to what the director wants to say in that scene, what emotion she wants to convey or what pace the narrative should maintain. Of primary concern is the drive to maintain narrative continuity or flow.

A transition of whatever type, at its core, is a connection or movement between two disparate shots/scenes. This connection is what makes the narrative flow. As mentioned earlier, in order to achieve this flow, along with the techniques of cutting, a variety of visual/audio cues are also used to transition between shots and scenes. A transition between shots requires experienced editors to follow intuitive rhythms and the spatial or physiological logic that the scene might follow, while transitions between scenes requires a deeper understanding of the narrative flow. Between the last shot of the first scene and the first shot of the next scene, visual/audio links or cues can be provided. For example, the easiest way, is to make sound flow over the next scene or into the previous scene (also called J-cut or L-cut). Another method is to match the movement of camera or screen direction between scenes to facilitate a smooth transition. Sometimes, following a character with the camera from one scene to the next, or a straightforward visual cue like a prop, is used. I propose that in an NLN a larger transition in the form of semantic or dramatic manifestation can also be found. Given below are the broad categories of non-linear transitions that this study has identified.

### **Modes and Functions of Transitions**

My typology proposes five different categorisations for mapping shot sequences in NLNs with industry best-practices and the semantic/thematic content of the narrative. These

are adapted from common practices of editing, cinematography, and storytelling. A description of the categories is given below. Their incidence and context and detailed discussion is within the subsequent chapters of this study as a part of the film text analysis. Appendix II contains the full list of the mapping of transitions between the technique (the 'how') and the reason for a particular transition choice in terms of narrative/thematic focus (the 'why'):

1. *Type of cut between sequences*: The first category (Column 1 in Appendix), lists the industry-standard cutting method used for groups of transitions observed within the films.
2. *Technique of cut*: Column 2 of the Appendix lists the technique used for the cuts listed in column 1. For example, six cutting techniques have been observed as being used for straight cuts: abrupt cut, cut away, rapid cutting, cross cutting, eye trace and intellectual montage.
3. *Mode of manifestation of the link*: I categorise two modes of manifestation or means of communication: Visual and Aural (Column 3 of the Appendix). Anything that has a visual aspect to it comes under the first category, for e.g., lighting, colour, character, camera movement, and film grain, which may or may not have a semantic component to it. Under the second, anything with an auditory component in the film narrative is included for e.g., dialogue, foley and background music. Sometimes a musical leitmotif can also be used to highlight the connection between sequences.
4. *The Semantic and Narrative Context*: Under this category, I consider thematic or dramatic transitions used in narrative exposition. These may manifest using any mode or type of transition. In this context, the audience is provided with either spoken or visual

clues regarding the characters actions or backstory through various elements such as mise-en-scène, character dialogue, and actions or events. For instance, a character might ask a question in one scene, and the answer could be presented in the following scene as an action, effect, or reaction. Columns 3 and 4 of the Appendix maps these cuts and techniques (or the 'how' of the cut), to its 'why' in the film's narrative context. Thus, for example, the cross-cutting technique of the straight cut type is used to show action on multiple fronts at the level of the shot (column 3), and to alternate between scenes, create juxtapositions, irony, keep plot moving forward, create parallels at the level of the scene (column 4).

5. The *function of transition*: I propose that the function these transitions perform is binary or dialectical in nature, that is, of linkage and collision/conflict. Karen Pearlman describes linkage and collision as styles used in editing, borrowing the concepts from Eisenstein and Pudovkin. Eisenstein considered the collision of shots like a dialectical thesis and antithesis which results into a synthesis for the audience (Giannetti 2018). Collision/conflict functions actually result in generating non-standard linkages between shots/scenes and this characteristic is consciously used by the editors of the films under consideration. In the above example (Appendix column 5) the reason for using the cut away technique of the straight cut type has been observed to function as comparison, linkage, collision.

This categorisation was detailed and expanded upon during the course of analysis and forms an integral part of the research into why non-linear narratives work with mainstream audiences. The validity of this needs to be further tested with NLNs but they hold for the texts chosen for the study.

## 1.8 Structure of the Thesis

This introduction to the present research has provided an overview of scholarship across the fields of cinema studies, narrative theory, digital humanities, linguistics, psychology and some theories of comprehension and perception that help to understand audience reception to film narratives. It has also laid out the main objectives of the study, explaining the methodology adopted, and locating the work within existing research. The rest of the thesis follows the chapterization outlined below:

**Chapter 2**, titled '*21 Grams* (2003)' is a close analysis of the film with insights into the organising metaphor at work. It offers the most in-depth analysis of an NLN film text for the purpose of our research. We identify and describe the metaphor LIFE/STORY/FILM IS A FRAGILE OBJECT using the image schemas of CONTAINER/OBJECT and SOURCE-PATH-GOAL. The data upon which this discussion rests is attached in Appendices 3–5.

**Chapter 3**, titled '*Arrival* (2017)' looks at the film text in the context of the TIME IS A CIRCLE/CYCLE metaphor while expanding on metaphors of time, and also briefly looking at LIFE/FILM/STORY IS A JOURNEY. Continuing from the taxonomy of transitions, we add mnemonic cues and a visual metaphor to the understanding of what creates the connections and misleads the audience into forming a false image of the protagonist. Appendices 6 and 7 provide the data for this discussion.

**Chapter 4** titled 'Three Other Films' examines *Dunkirk* (2017), *Memento* (2000) and *Sliding Doors* (1998) for identifying and demonstrating the base metaphor at work. In *Dunkirk* we describe the image schemas of Cyclic Climax and SPG using visualizations and also the directors' own insights.

In *Memento*, we go one step further and look at the FORCE schema, especially blockages to comprehension due to the design of the structure. We also describe some metaphors such as FILM IS A MALLEABLE OBJECT, THE PAST IS A PLACE OF CONFINEMENT, and REMEMBERING IS RETRIEVING OBJECTS as they may be observed in the film's design. Finally with *Sliding Doors*, we describe the schema of SPG in a zigzag movement in the narrative space of the film.

Chapter 5 'Conclusion' summarises the findings, describes research contribution and offers observations about the future scope for this research.

## 1.9 List of Appendices

**Appendix 1** is the full list of NLNs collected as a part of this research. The following data for each film is listed: Film, Director, Year, Language, Country, IMDB Rating, Tomatometer Rating, Audience score from Rottentomatoes.com, Genre, Duration, Synopsis. This database will be made available online with open access for future research.

**Appendix 2** is the 'Taxonomy of Cinematic Transitions for Non-Linear Film Narratives' that have been collected and categorised so far in the study of the five film texts.

**Appendix 3** is the detailed breakdown of *21 Grams* with linearised numbering and narrative beats identified.

**Appendix 4** is the detailed sequence analysis of *21 Grams* with screenshots from the film.

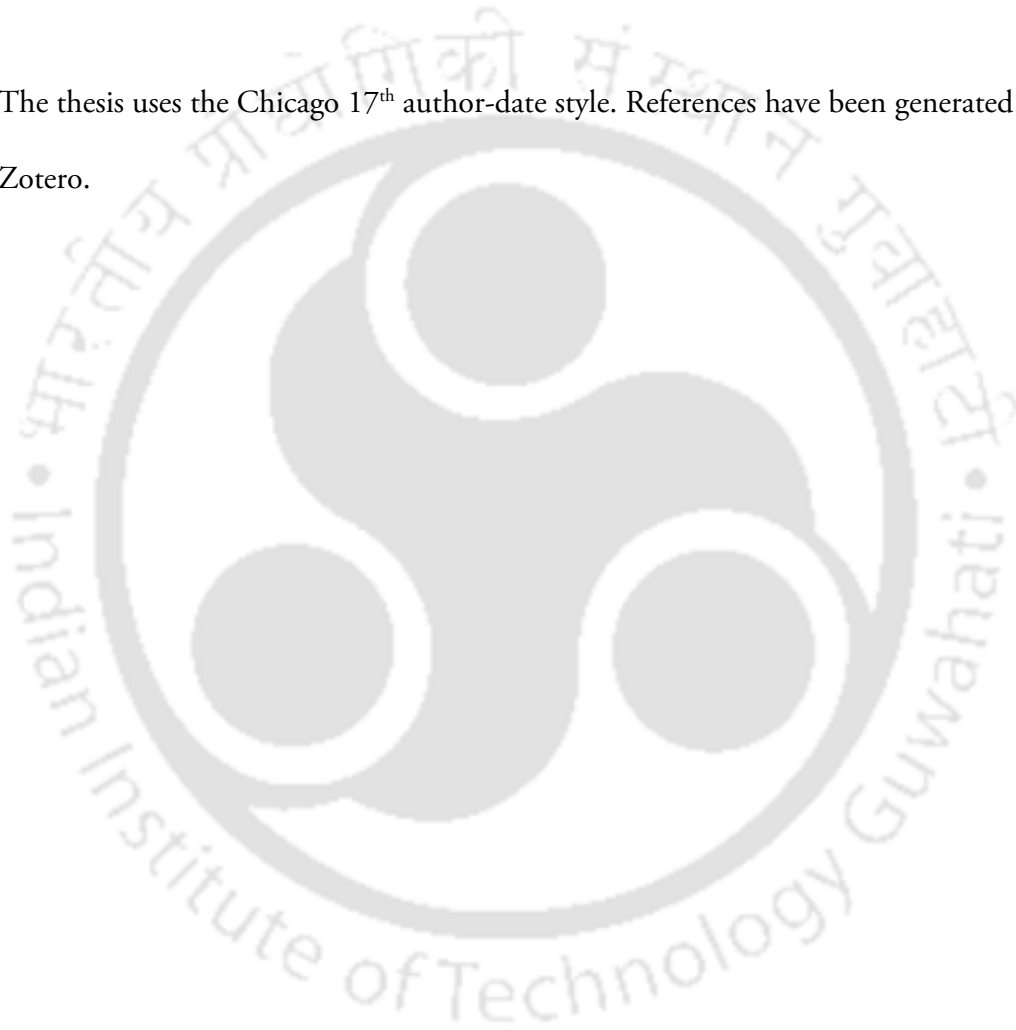
**Appendix 5** is the comparison of the *21 Grams* screenplay with transitions identified.

**Appendix 6** is the detailed breakdown of *Arrival* with linear numbering and narrative beats identified.

**Appendix 7** is the detailed sequence analysis of *Arrival*.

**Appendix 8** is the Response to Reviewers.

The thesis uses the Chicago 17<sup>th</sup> author-date style. References have been generated using Zotero.



## Chapter Two

### 21 Grams

'Like a smashed mirror, Alejandro González Iñárritu's enigmatic new movie shows us broken lives in shards of fear. At its centre is a terrible accident whose impact has shattered everyone involved, and the movie itself is picking up the pieces and reassembling the truth.'<sup>1</sup>

Over the years NLNs have continued to confound critics and audiences alike. In a medium with a structure so inherently time based, a non-linear narrative becomes a complex exercise for the viewer, causing a load on cognition and running the risk of losing the viewer before they become invested in the narrative (Willemsen and Kiss 2020). But given that in a century of the medium's existence, filmmaking has undergone so much evolution, the structure of the narrative at heart still largely remains a conventional storytelling structure (Aronson 2010). As discussed in the introduction, the study of NLNs that have made an impact on the box office and the ones that the critics have applauded becomes imperative to augment storytelling in the digital era (Dancyger 2019, 408–16).

With the advent of digital editing in the late 1990s came a lot of freedom for the filmmaker in terms of experimenting with the material form of the film and the narrative

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<sup>1</sup> (Bradshaw 2004)

structure. The earlier process of editing dealt with delicate film stock and was painstakingly slow and tedious. It was also constrained in terms of transitions and effects and left very little room for error. Films like *Memento* (dir. Nolan, Christopher, 2000) and *21 Grams* (Innaritu, Alejandro, 2003) would have been difficult to achieve if not for a telecine or a digital intermediate stage.<sup>2</sup> As noted in the introduction, after non-linear editing (NLE) platforms like Avid came into popular usages, a lot of filmmakers could push the envelope when it came to unconventional stylistic treatments. These ranged from interesting pacing in action sequences to impossible puzzle films like *Pulp Fiction* (Tarantino, Quentin, 1994) and *Memento*. There has been a distinct evolution of shot types and shot lengths just after the NLE platforms started being used. It became easier to cut according to the emotion, content and intention of scenes. Editors were no longer hobbled by ungainly processes in filmmaking (Bordwell 2006, 121).

In *21 Grams*, the NLN form made for such an interesting film for the audience and critics that many sought to understand and replicate the phenomenon, including the writer Arriaga himself, with reportedly limited amounts of success.<sup>3</sup> Notwithstanding a narrative so fragmented that, at first, it is difficult to discern what exactly is happening, the combined factors of an all-star cast, the backing of major Hollywood studios, and widespread publicity and distribution seem to have made sure the film got a wide release. Added to this was the fact that Iñárritu had impressed his critics with the success of *Amores Perros* (2000) and therefore received due deference. Since then, many researchers like Aronson (2010), Tucker (n.d.), Holland (n.d.) and Cameron (2008) have studied

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<sup>2</sup> Telecine and the Digital Intermediate refer to digitizing a film at the early or the later stage of its production for either editing or colour correction on a digital platform See Chapter 1

<sup>3</sup>See discussion on The Burning Plain further ahead

the structure of this film to understand how a story with this complex level of non-linearity still manages to generate cognitive coherence.

This chapter proposes that the non-linear structure of the narrative is intrinsically linked to a conceptual metaphor at work in this film, and the central theme of an accident and its aftermath is manifested in the narrative design also via identifiable image schemas and conceptual metaphors. To understand how this entanglement of form and content works, the following questions are sought to be investigated:

1. Is there a design (intended or incidental) to the fragmentation of the narrative in *21 Grams*?
2. How are the fragments connected to each other in the structure?
3. Can the NLN design be shown to be related/connected to the theme of the film?
4. How does the identified conceptual metaphor/image schema map onto the structure of the film?

In trying to answer these questions, this chapter also contributes towards putting together a methodology for analysing further NLNs in film with reference to works of other researchers like Coegnarts, Kravajna, Kiss, Willemsen, Aronson, Buckland, and Ortiz in the domain of film analysis.

The depth of analysis requires a breakdown of the film text, a manual linearization and identification of the individual characters' storylines. Further, I identify the plot points of a conventional 3-Act structure in the film and then map it onto the NLN, affording us a bird's eye view of the workings of the narrative. With a thorough reading of the film, I try to demonstrate how the seemingly fragmented narrative is actually interconnected with a variety of transitions, and all of them are relevant to the

metaphor at its core. While exhaustive in analysis, in implication, the output at the end of this process leads to several possible avenues for further exploration.

At the centre of this thesis is the connection we try to establish with the theories of embodied cognition, CMT and image schemata with the methodology evolving out of the said theories in the form of visualizations. Through the close analysis of this particular film, I try to understand not only the workings of its non-linearity but also to possibly arrive at some understanding of how it works at a structural level. Although this reading (or the others in this project) does not use alleged directorial intention as primary evidence in support of the analysis, the director's comments on his aims have been used where available to indicate both how the film may have achieved the proclaimed objective or to have created its impact despite not having fully achieved it. The study of this particular film could hopefully inform the film design of future artists and enable them to see how metaphors may be structurally worked into their own storytelling.

## 2.1 The Film

*21 Grams* was directed by the Mexican filmmaker Alejandro González Iñárritu and released in 2003. It was the second film of a 'trilogy of triptychs' that included the first *Amores Perros* (2000) and the last *Babel* (2006) (Romney 2004).<sup>4</sup> Iñárritu collaborated with screenwriter Guillermo Arriaga and much of the same crew on all three films. *21 Grams*, Iñárritu's first English language film, garnered rave reviews and went on to be nominated for two Oscars, 78 other nominations and win 30 awards (IMDb 2023b). As of February 2023, based on 183 critic reviews, the film is at 80% on the Tomatometer (Rotten Tomatoes 2023) and has a 7.6/10 rating on IMDb from 231,404 user ratings

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<sup>4</sup> Each film of the trilogy has three character storylines with different non-linear representations

(IMDb 2023a). Iñárritu was an ad filmmaker and worked extensively in television programming and music direction before he directed his first feature-length film— *Amores Perros*<sup>5</sup>. In Guillermo Arriaga, Iñárritu found a partner in storytelling, and the two had a long and rewarding relationship. Their first collaborative film was an international success, upon which Iñárritu was able to acquire support from top Hollywood actors and funding to make his next film. To round off the trilogy, the duo again collaborated on the film *Babel*. This trilogy launched a successful career for the director, who went on to move to the United States and make films with prominent Hollywood studios and actors. His most recent work includes the critically acclaimed *Birdman* (2014), *Revenant* (2015) and *Bardo: False Chronicle of A Handful of Truths* (2022).

### 2.1.1 The Writer

Before he ventured into films, Guillermo Arriaga had been an established Mexican author with three published novels and other short stories. For his debut film with Iñárritu, he wrote no less than 36 drafts of the screenplay. Arriaga maintained that he was deeply involved in every film project he worked on, and this trilogy was no exception (Iñárritu 2007). Unfortunately, his association with the filmmaker came to an end after a disagreement about work credit on *Babel*, and the duo parted ways in a much-talked-about split about which Iñárritu states in an interview in *Adweek* (2007) that he and Arriaga explored everything they had to say in the trilogy and had reached a natural end of a fruitful relationship. The three films that the duo collaborated on all dealt with the theme of death and are considered to fit into the multi-protagonist narrative category (Aronson 2010). After his split with Iñárritu, Arriaga went on to make his directorial

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<sup>5</sup>*AmoresPerros* is also a NLN, in the sense it is a story told in three interconnected parts that all revolve around one incident. See Linda Aronson's discussion on parallel narrative films in her book *21<sup>st</sup> Century Screenplay* (2010)

debut, *The Burning Plain* (2008), enlisting top Hollywood actors but failed to impress either critics or the audience, and the film was considered a commercial failure. What is noteworthy in this is that Arriaga tried to replicate his own non-linear style but failed to recreate the success of *21 Grams* (see comment on authorial intention above), with critics calling it a ‘major disappointment’ (French 2009) and ‘[...] a frustrating exercise in self-indulgence’ (Ebert 2009). As of 2021, Arriaga has directed four films and continues to be a screenwriter and an author.

### 2.1.2 Script, Theme & Treatment

Arriaga contributes the central theme of this film to an experience he had while driving down a road. He came across an accident in which a man had been run over and killed, and he started thinking about what would happen if he was the one who had perpetrated the crime. In an interview with Scriptmag.com, he explains how the idea of the film came about. ‘I thought: What if I ran over a man and his two daughters? What if I arrived late to my birthday party because I had killed a family? What would I say to my wife? How would I feel? That accident became the genesis of 21 Grams’ (Arriaga, 2004)

Coupled with this was his interaction with his own daughter, who was unable to grasp how people moved on after a death in their immediate family. His discussion of the first draft with the director Iñárritu yielded the following observations: that the film was about the death of a loved one and about coping with the weight of the guilt of survival. Iñárritu then suggested the name ‘21 Grams’, which referred to an experiment conducted in 1907 by a physician who claimed that at death, the body lost 21 grams in weight and therefore deduced that this was the weight of the soul. While the actual hypothesis was proven wrong, Arriaga stated that he chose to use it as a metaphor for the weight a dead

person has over the ones who remain alive. The three characters in the film, according to Arriaga, come from personal hells, from jail/child abuse, from drug addiction, and from bad health to a life where they have found a kind of peace— Jack with Jesus, Christina with her family and Paul with his failing heart, only to be thrust again into flux due to circumstances beyond their control.

‘They struggle, fight and suffer, but they end up finding hope. They discover that, beyond death and desolation, life has an enormous power—a power that allows us to move on, to continue living. The characters of *21Grams* have a final reconciliation with life, an acceptance of pain and fragility and a desire to move on.’

(Arriaga, 2004)

Of the film, he says it is a story of hope and love, wherein his characters find that the only way to rebuild themselves is by relating with others again, loving again and not forgetting the ones lost (ibid).

### 2.1.3 Writing Process

Arriaga often cites William Faulkner as the inspiration behind his style of storytelling (Arriaga 2010). He considers himself a serious follower of Faulkner’s style in which he says, ‘every story has a particular way it has to be told’. Arriaga strove to find the right design in the process of writing, even trying a cube-like structure that showed another side of the story at each iteration but found that it didn’t work. He finally chanced upon some of his old work and decided to tell the story the way people tell their own daily life stories.

‘We never tell them in a straight line. We jump from one point to the other. I also went back to an old short story of mine, ‘In Peace’ It also jumped back and forth in time. So, I started putting different scenes together with no time connection between one and the other. I jumped from one scene in the present to one in the past to one in the future to one in the past, and so on’

(Arriaga 2010)

His challenge, he says, was to have enough dramatic questions while trying to make it work as a narrative to keep the readers interested and allow them to construct a parallel story in their minds, filling in on their own the huge chunks of information that the structure left out. He states that he was aware that one scene has a meaning by itself and a completely different one when it is linked to a scene before and after, and that led to his symbolic choices. He wrote the scenes in a contrasting order so that the structure might help change the audience’s perception making it a much more emotional story. His next step, he claims, was to build large narrative ellipses with an emotional continuum, ‘a kind of a narrative yin and yang’, where he combines active scenes with passive ones, scenes that posed questions with scenes that answered them (Arriaga 2004). While the choices reflect the central themes of love, death, life, hate, revenge, and forgiveness, his juxtaposition was led by contrasting emotional themes, for. e.g. scenes of love followed by scenes of revenge.

Another interesting idea that he weaves into the design is that of light. The scenes are predominantly set in the daytime before the accident is revealed. After the accident,

he placed night scenes as a metaphor for death and in the final 40 pages, he used afternoon and evening scenes to depict the confrontation that was about to take place (ibid).

A parallel here comes from William Faulkner's book *The Sound and the Fury* (1929), which Arriaga himself often quotes when describing the style of this film. In Faulkner's book, the character of Benjy is one of the narrators with diminished mental capacity. His voice comes woven with the other characters in a stream-of-consciousness style without any breaks or punctuations to set it apart.<sup>6</sup> Faulkner purposely used italics for both actual scenes and remembered scenes to allow the reader to anticipate 'a thought-transference.' He lamented that publishing wasn't advanced enough at that moment to allow him to typeset parts of the text in different coloured inks to represent the character's 'unbroken surfaced confusion of an idiot.' and that he needs to make do with italics indicating a change of events (Faulkner 2014). In Arriaga's treatment of the film, the writer does articulate the need to give the fragments some coherence through the choice of time of day for when the scenes are set. At the script level, setting the scenes at particular times of the day was Arriaga's attempt to introduce such coherence similar to typographic signals in Faulkner. Before the release of the film, Arriaga, anticipating the criticism that would follow a fragmented narrative structure, often explained his motivations behind the structure and the treatment.<sup>7</sup>

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<sup>6</sup> Editor Micheal Gorra refers to the collected letters of Faulkner to his editor Ben Wasson who had partially edited *The Sound and the Fury*. In this particular letter, Faulkner is referring to highlighting or setting apart the stream of consciousness style he used of which Ben remarked that they were 'sheer technical outrageousness and freshness that made the Benjy section hard to follow.' (Faulkner 2014)

<sup>7</sup> See Arriaga's 2004 interview given to *Script Magazine*, published before the release of the film.

### 2.1.4 Reception

Alan Cameron observes that the film, in making use of the past tense, brings to mind traditional literary narratives which also deal with what has gone on before (Cameron 2008). Norman H. Holland, in his article about the film, notes that the director has abandoned one-dimensional past, present, and future for a two-dimensional time scheme that radiates out from the car crash on which all three plots pivot.<sup>8</sup> He describes this phenomenon as people-time instead of time-time (Holland, n.d.). David Denby (2007), writing for *The New Yorker*, describes this as a style ‘that can leave the viewer experiencing reactions before actions, dénouements before climaxes, disillusion before ecstasy, and many other upsetting reversals and discombobulations.’ Holland interprets another study by noted film critic Jonathan Romney and suggests that the director wants us to take a god’s eye view of the events in the film, to see all of it, from beginning to end at once, as if looking down at a map (Denby 2007; Romney 2004). As is evident, film critics themselves resorted to using metaphors to convey the structure of the film to the readers.

### 2.1.5 Film Synopsis

To summarise a film like *21 Grams*, one must unavoidably do the mental exercise of disentangling and linearising the three storylines from each other in the absence of a primer. The following is a linear summary of the three entangled stories:

Christina Peck, a recovering alcoholic, has two daughters and is happily married to her husband, Michael. Jack Jordon, an ex-convict, has now found Jesus and keeps a tight hold of his family. Paul Rivers is awaiting a heart transplant while his wife Mary

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<sup>8</sup> I follow this cue in the visualizations of the film structure.

hopes to be able to conceive a child with him. The three characters' storylines come together at an inciting incident: the accident. Jack Jordon accidentally runs over Christina's daughters and husband, fatally injuring them. This throws all the characters' lives off track. For Christina and Jack, this is a destructive force. With the loss of her entire family, Christina's life is shattered, and she slips back into drug and alcohol abuse to cope with the tragedy. Jack, unable to bear the idea that he killed two little girls and their father, turns himself in and questions his faith in God while he awaits sentencing.

While this accident brings about momentary good tidings for Paul, who gets Michael's heart, Paul is unable to let go of the idea that someone had to die for him to get the transplant. Against his wife's advice and also partly due to her insistence that they try to conceive against his wishes, he tracks Christina down and instils himself in Christina's life, gaining her trust. Christina, at first, cannot bear the idea that her husband's heart is in Paul River's body but embarks on a physical and emotional relationship with him, given the uncanny connection between them. Eventually, unable to cope with the tragedy, Christina instigates Paul to help her get revenge. Paul, in the meantime, has left Mary and is slowly following Christina in her substance abuse, possibly causing his body to start rejecting his transplanted heart. They track down Jack, who, after his acquittal (and a failed attempt at suicide), has left his own family to work as a day labourer. Paul reluctantly goes along with Christina's plan to kill Jack for what he's done. Wanting to spare her the actual act of murdering Jack, Paul tries to kill Jack himself but is unable to do so and lets him go. Jack sees the attempt on his life as his salvation and pursues Paul back to Christina, where all three get into a struggle, and Paul ends up shooting himself to snap Christina out of her murderous rage and stop her from killing Jack. At the hospital, the doctors are unable to save Paul. Christina, finding the

willpower to move on from the tragedy after being told that she's pregnant with Paul's child, finally (possibly) forgives Jack for the accident. Having received his own closure with Christina refusing to file charges against him, Jack returns to his family a humbled man.



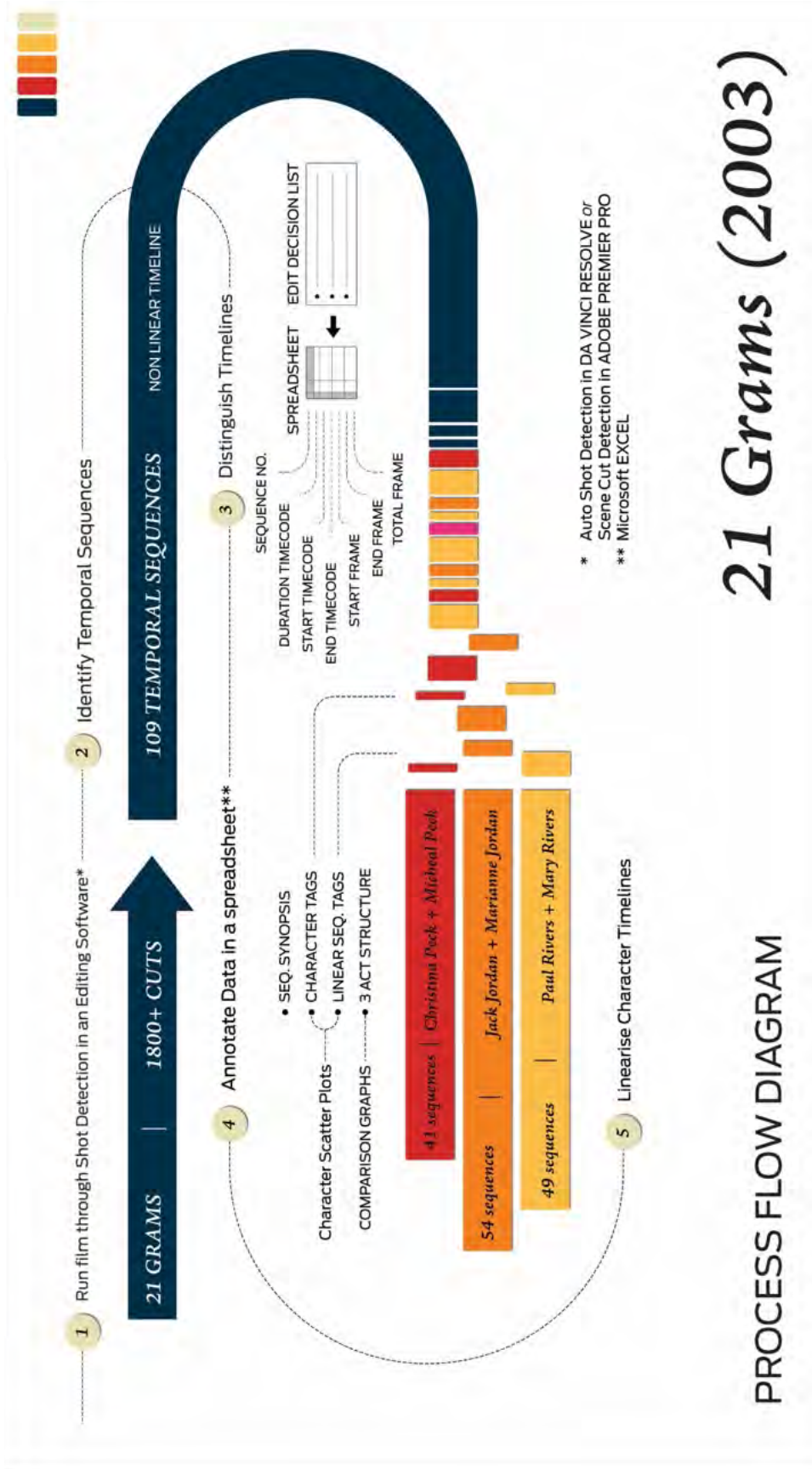


Figure 2.1 Process Flow Diagram for the Analysis of 21 Grams (2001)

## 2.2 Methodology

For the purpose of our study, I adopted an interdisciplinary approach to analyze the selected texts from the domain of film analysis and discourse analysis (Figure 2.1). I use Willemsen and Kiss's distinction useful in categorising two overarching types of NLNs—story-lines and story-worlds. For them, non-linearity is a function of the diegetic fictional world in non-linear story-worlds (like time travel films), while in non-linear story-lines, it is a feature of the discourse which is often justified dramatically or motivated emotionally (Willemsen and Kiss 2020). *21 Grams* is an NLN in the sense that it has a non-linear story-line and not a non-linear story-world. The film does not have time travel, nor is the story world affected by the non-linearity; only the comprehension by the viewer is. In films like *21 Grams*, viewers need to derive textual cues from the narrative information that is presented in an achronological format. These textual cues form a network of propositions and situations that contain linear relations and allow the formation of a mental model that represents a chronological real-world scenario. *21 Grams* can therefore be considered a chronologically re-ordered narrative.

As discussed earlier, a majority of NLNs have an inherent chronological order which is the story or the content and a forced non-chronological order, that is, the narrative or the discourse. Kim et al. have discussed this dualistic property in their story curves method, which allows one to visualize and communicate NLNs in films. Most films themselves do not come with any separate primer to allow the audience to see the temporal ordering of the story.<sup>9</sup> The story curves method was formulated for just such

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<sup>9</sup>Some films like *Memento*(2000) come with pre-programmed DVDs through which one can play the film in a linear manner.

occasions when the viewer or a screenwriter wanting to learn about the design of the NLN can see it visualized. Story curves compares the story, which has a temporal order to the narrative representation, which could result in meandering visual patterns. (Kim et al. 2018). They use published scripts as a dataset in this method to discern the order of the events.



Figure 2.2 *Fight Club* (1999) and *Memento* (2000) reproduced from *Visualising Non-linear Narratives with Story Curves* by Kim et al. (2018)

In Figure 2.2, we see a visualization of the narrative versus story order of the film *Fight Club* (1999) and *Memento* (2000). The x-axis is the story order, i.e. the linear story as it would be told in the order of the events happening. And the y-axis is the narrative order, i.e. the order in which the narrative is presented to us. In the case of a completely linear film, the line of progression of the scenes would be diagonal across the graph, as in *Fight Club*, in which only the first sequence of the film is out of order. *Memento*, on the other hand, is often described by the director Christopher Nolan as a hairpin turn where each alternating scene is from the opposite ends of the story order (Mottram, 2002). The resulting structure begins the narrative with the ending of the film, which is, in fact, the middle of the story. Since we are looking at metaphorical implications in the narrative on both the formal and the image level, I use the body of the film itself for this exercise instead of the script as used in the story curves method.

### 2.2.1 Process of Analysis

On a structure level, a film comprises sequences, scenes, shots and frames. Frames are stills, which, when run at an average of 25 frames per second through a movie projector, will give the viewer a seamless illusion of motion (Aronson, 2010, 47). Taking one frame out of a whole film and viewing it without context will not give one an idea of its purpose or its location. Shots, on the other hand, can be considered the most basic independent units of a film, which are the building blocks for all three stages of production (Dancyger 2019). During preproduction, they are storyboarded and used as a guideline for the production crew. At the production stage, each different shot will require some amount of resetting on the part of the actors, camera, lighting, sets/props etc. At the postproduction stage, shots will be considered as instances of the recorded film to be stitched together. In the days of analogue films, shots were literal pieces of film cut out from the exposed stock and hot-spliced together to form scenes (Bordwell, 2006). Shots can be identified as the part of the film between two abrupt discontinuities. This can come in the form of a cut (most common) to transitions (rare within scenes). Scenes are the next level of the structure, comprised of different types of shots.

Depending on what kind of scene it is, shots will also differ in terms of duration and number, for e.g., dramatic scenes may have longer duration shots which are lesser in number, while action scenes may have shorter duration shots and be more in number. Scenes are identified by a change of location or time. They are the higher building blocks of a narrative. Scenes will follow the diegetic time and will be constrained to one location.

For the analysis of this NLN, we looked at an even larger unit of organization, i.e. the sequence. The sequence can be made of many different scenes and is thematic in

nature in conventional filmmaking; for e.g., a chase sequence will involve many different locations and characters but will be considered one whole unit of the narrative. In *21 Grams*, these are more temporal in nature, i.e. all the scenes take place in a single linear time frame before the next sequence, which jumps to the past or the future.

In order to understand the non-linear structure of the film, it was necessary to break it down into its temporal sequences. Bordwell calls an exercise like this ‘segmentation’ (68). He argues that since films don’t come with a blueprint to help the researcher see the bigger picture, plot segmentation is required to get a sense of the overall design (2020). Of course, his way of segmenting the plot is by breaking it down into larger sections which may be categorised by place or event with sub-events within the main ones. This works well for a linear narrative. It can allow us to fathom the form of the film by plotting the patterns, styles, or motifs. In an NLN, such a task would first require one to linearize the narrative, and such an analysis would necessarily be a back-and-forth exercise. While tedious, this is the only way to understand what makes NLNs work. The methodology that was followed for breaking down the film into its temporal sequences is detailed below.

### 2.2.2 Film Breakdown

The following is the basic step-by-step process of analysis used for this film text:

**1. Extract Sequences from the film:** A digital copy of the film was processed through the open-source editing software DaVinci Resolve (DVR) by UK- based company Blackmagic Design. The reason for the choice of this software was an added feature it offered, viz., the Scene Cut Detector (SCD). This feature automates the process of detecting abrupt changes in moving images and marking them as cuts via an image

processing algorithm (Figure 2.3). Barry Salt's classic Cinematics tool, available on his website, performs the same procedure but expects the user to manually mark the cuts between shots with a click of a mouse button during a viewing of the film. Salt's endeavour in collecting data about average shot lengths goes much deeper into the breaking down of a film text to analyse the changing pace of films. For the purpose of our study, we did not need to delve into exact shot lengths. The process that was followed is akin to going back to the edit of the film as it would be at the editor's table. This process yielded approximately 1400 shots in our case. While the SCD automates the cutting to a high degree, it fails when it comes to jerky handheld cinematography or low-lighting shots (as is the case with *21 Grams*). The processed cuts were then visually confirmed one by one. This process was shortened by the need to only cut temporal sequences and not individual shots.

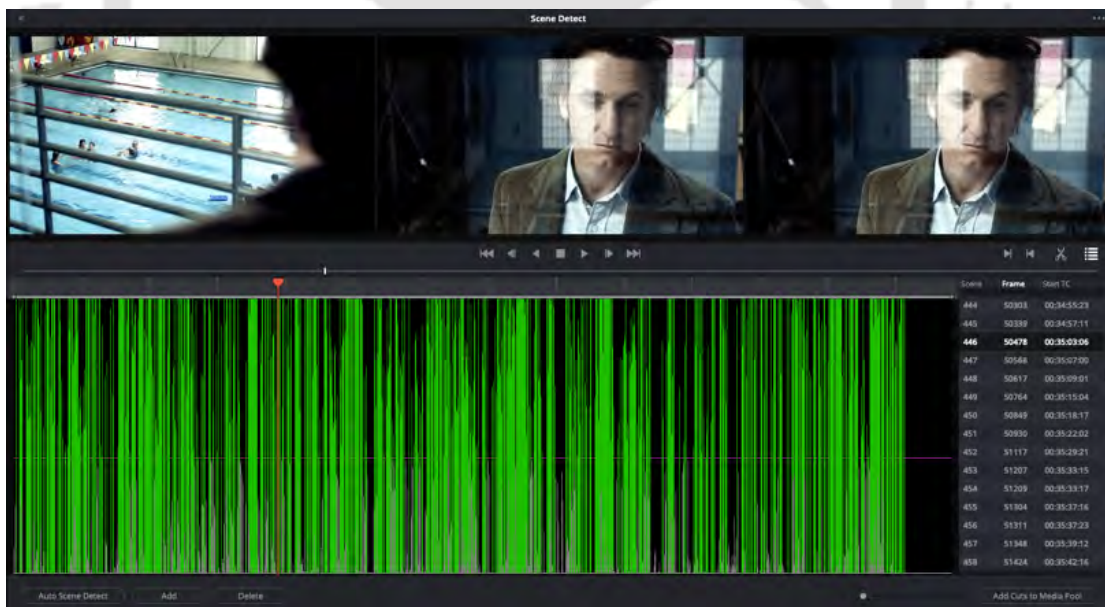


Figure 2.3 Interface showing Scene Cut Detector in Da Vinci Resolve

One hundred and nine sequences were extracted from a little over 1400. Linda Aronson has done a similar grouping, albeit manually, and come up with the same number of sequences she refers to as story beats, described as a step forward in the plot in

conventional scriptwriting parlance (Aronson 2010). This research will continue to refer to them as sequences as we are looking at visual manifestations of the written beats.

**2. Extract data from video sequences:** After processing, these sequences (now separate movie clips) were added to a timeline in DVR and the edit decision list (EDL) was exported as a Microsoft® Excel sheet. The EDL is an intermediary step used to communicate the edit decisions from the digital platform to the analogue platform, when working with actual film stock. It can be exported as a spreadsheet that offers detailed data about each clip in the footage and the edited film. The dataset extracted for *21 Grams* included details such as Sequence Number, Start Timecode (written as HH:MM:SS:FF), End Timecode, Start Frame, End Frame, Total Number of Frames, and Duration in Timecode. Of these, only Start/End Time code, Duration and Sequence Number were retained. Each sequence was then tagged, and given a number (between 1 to 109) and a one-line synopsis. This exercise helped separate the three interwoven timelines and offered ways to sort and create visualizations of the data.

**3. Annotate dataset in Microsoft Excel:®** For the next step, the list was annotated with categorical and attribute data like Character Tags and Numerical Linear Order Tags. The detailed list is included at the end of this dissertation as Appendix No. 3

**4. Colour Code DVR Clips:** With all the sequences now tagged with their linear progression, I went back to DVR and colour coded each character sequence first. Even at this level, colour coding helped with quick visual identification, segregation and ordering while also offering up some quick insights. DVR offers a set number of colours to mark clips, so the colours were assigned at random to visually segregate the clips (Figure 2.4).



Figure 1.4 Coloured Non-linear Timeline from Da Vinci Resolve

**5. Linearise DVR Timelines:** These sequences were then separated from the main NLN and three new edits were created which were a linear progression of all three character timelines separately. The linear timelines were then roughly plotted and visually marked against the conventional 3-Act structure to ascertain if they held up against conventional storytelling (Figure 2.5).

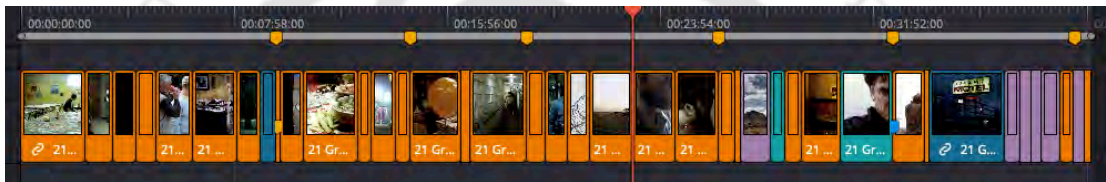


Figure 2.5 Linearised Character Timelines for Jack, 21 Grams

**6. Visualize linear and non-linear timelines:** The data from the Excel sheet was converted to scatter plots to see the trendlines of the stories in the linear v/s the NLN progression. These graphs were analysed to approximately gauge the degree of non-linearity and mark outlier fragments to be scrutinised.

**7. Plot narrative structure on the conventional model:** The linearised sequences were plotted on a conventional 3-Act structure to gain further understanding of the stories as standalone plots. Linda Aronson's own thorough analysis of the linear structures of the three stories was referenced for validation. While one can argue that pulling apart a NLN and rearranging it to be read linear is something that the director/screenwriter would not condone; it is still an important step of the analysis that needs to be performed to strengthen the idea that the form is justified in the face of the underlying metaphor.



position in the narrative in terms of frames and timecode. All these fields together are spatial as well as quantity data. This dataset tells us where in the film this particular sequence is and what its duration is in terms of hours, minutes, seconds and frames.<sup>10</sup>

The annotated spreadsheet in Appendix 3 has the following column headings: Columns from left to right- non-linear serial number, start frame, end frame, Labels: Christina Peck, Paul Rivers, Jack Jordan, Micheal Peck, Mary Rivers, Marianne Jordan, Rivers Linear Story, Peck Linear Story, Jordan Linear Story, Description, Sound Transition, Notes. This was the data received from the automated EDL after which the spreadsheet was annotated further with details regarding each sequence, the particulars of which are as follow:

- a. **Number:** After Sequences are numbered 1 to 109, their start frame and end frame is retained to be able to back-track to the non-linear edit on the DVR timeline.
- b. **Character tag:** Each sequence is tagged with any of the main three characters i.e Jack Jordan, Christina Peck and Paul Rivers or close, associated characters like the spouses i.e Micheal Peck, Mary Rivers and Marianne Jordan. After which, I first segregate, then calculate the number of sequences for each character storyline.
- c. **Narrative structure tag:** The next annotation was whether each sequence in each storyline came before the accident, the accident itself or after the accident. While this helped reorganise the whole film in a linear timeline, a further level of annotation by narrative structure was required to check if the individual storylines had similar story beats as in a conventional 3-Act structure.

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<sup>10</sup>The standard mode of describing film time is in Hours (99): Minutes (60): Seconds(60): Frames(25) written as 00:00:00:00 or as an example 01:59:59:24, one frame after which it will be read as 02:00:00:00; number of frames changes according to film formats which range from 24, 25, 30 etc.

d. **Linear number:** Each character (and their spouse) was taken in isolation and their sequences were numbered in a linear fashion, i.e., the story was reshuffled to its original linear form in DVR with the help of visual cues and descriptions in the screenplay. This numbering helped generate graphs for a quick validation of the hypothesis.



Figure 2.7. Annotated Linearised Timelines of all characters in 21 Grams

In figure 2.7, we see the linearised timelines of the three main characters on three different timelines, aligned to the only sequence (coloured brown) in which they are all present. The bottom purple is Christina's timeline, teal blue is Paul's timeline, which turns to neon green when he and Christina meet and the orange is Jack's timeline. The changing colours are meant to signify interaction with other characters. The light brown sequences are the all the scenes depicting the accident or the time of the accident.

### 2.3.1 Linearised Timelines

The purpose of the linearization was to understand how the individual character storylines held up on their own without the non-linear interwoven structure and how they are related to each other. By reordering the story, the features of a 3-Act structure were identified and marked (Figure 2.7). Each character sequence is inclusive of their spouses' individual scenes. While Paul's storyline ties the two other characters together, Jack's story seems to have more conventional story beats.

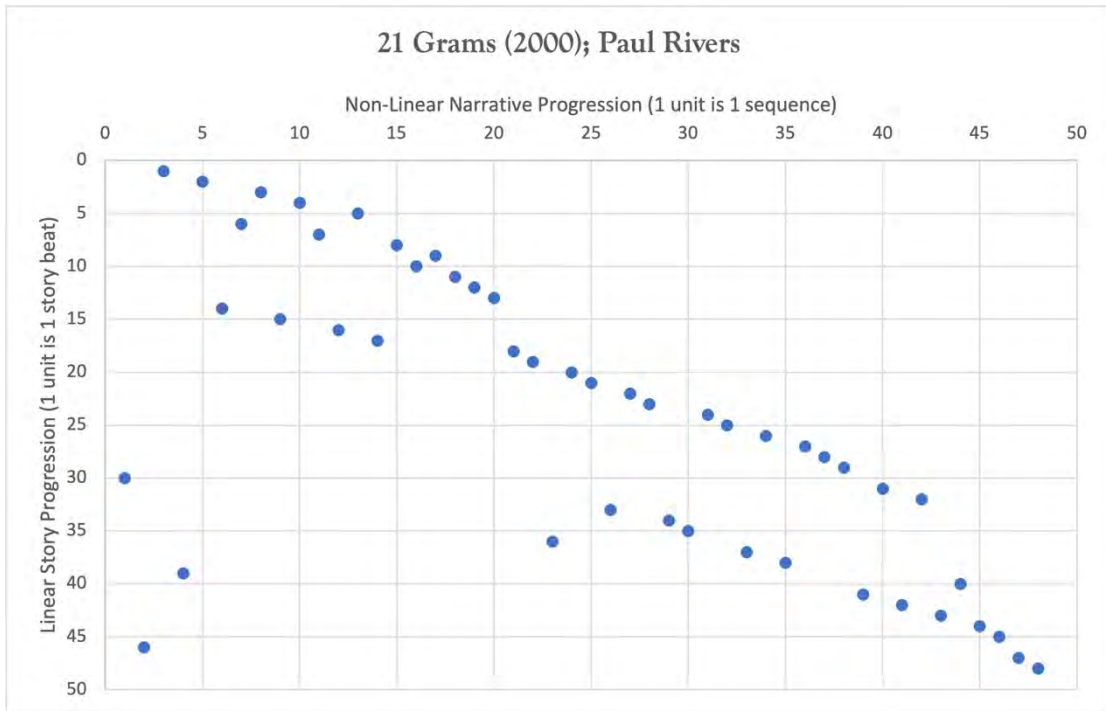


Figure 2.8 Linear to Non-Linear narrative progression for Paul in 21 Grams

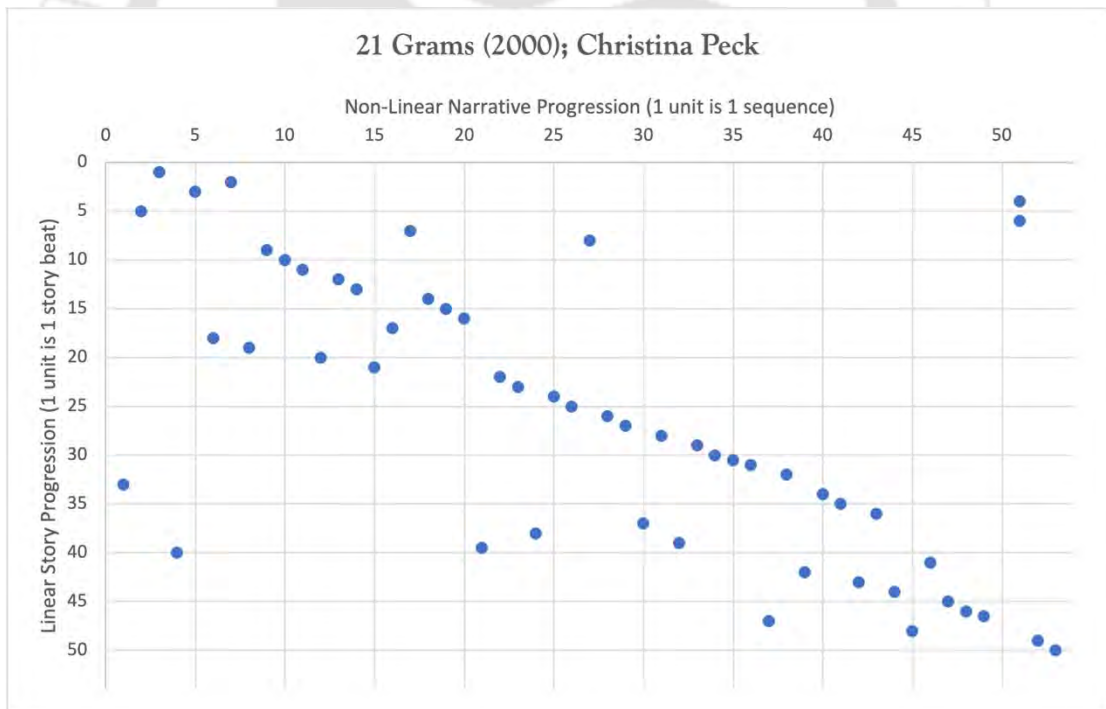


Figure 2.9 Linear to Non-Linear narrative progression for Christina in 21 Grams

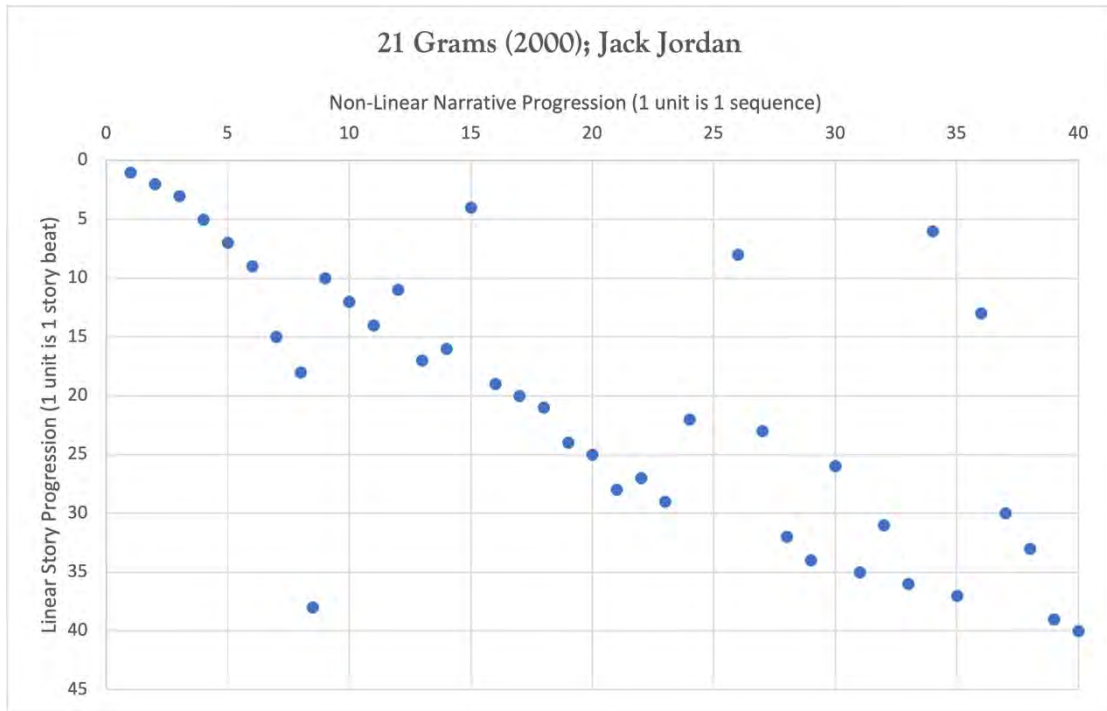


Figure 2.10 Linear to Non-Linear narrative progression for Jack in 21 Grams

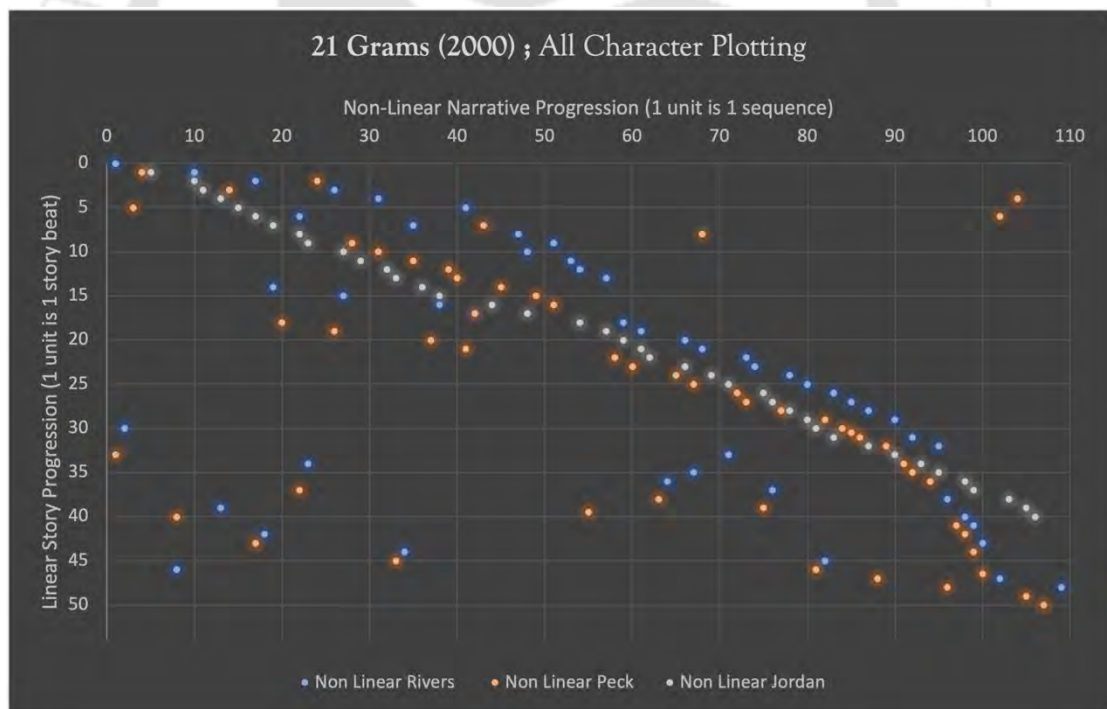


Figure 2.11 All characters together Linear Story vs Non-linear Plot Progression

Following the Story curves method, a plotting of the sequences was done for all three storylines in Microsoft Excel® as if they were three different films and scatter plots were generated for each. The graphs have been adjusted to remove the gaps that would have been visible had the sequences had been plotted with the other character sequences

coming in between (Figure 2.8 to 2.11). This gives us an idea of how non-linear or linear the narratives are. Compared to the *Fight Club* graph in story curves, *21 Grams* is more fragmented, but there is a distinct trendline that indicates that most sequences do tend towards linearity. This tells us that on the surface the chaotic narrative progression is actually linear except for the outliers. The narrative structure analysis that was done next, gave us more insights in the non-linearity of the film.

### 2.3.2 Narrative Structure

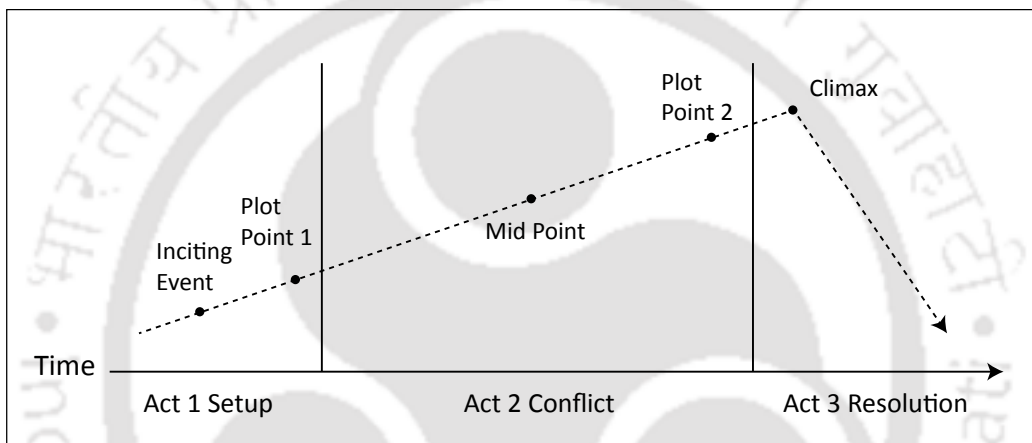


Figure 2. Conventional 3-Act structure adapted from Syd Field's *Paradigm of a Screenplay* (1984)

The screenplay paradigm (Figure 2.12) as dubbed by Syd Field in his seminal work *Screenplay: The Foundations of Screenwriting* (1984) is an oft-followed structure in mainstream filmmaking. While the structure itself seems simplistic and is much criticised (Bonnet 2020) for being overly rigid and for being followed blindly, the paradigm is still considered the basis for any kind of structure in a film narrative. According to Linda Aronson '[it] is the most prevalent model, the most streamlined model, the basic model and, crucially, the safest model (safety not being something to sneeze at in a high-risk, high-cost industry like film) because it builds in a fast pace and rising suspenseful chronological build to closure' (2010, 47).

A simplified 3-part structure, the Acts are themselves derived from stage plays and follow a setup-conflict-resolution format. Syd Field asserts that the paradigm is not to be used as a formula but as a form and that the structure is what holds the story together. In his words, a screenplay is a 'linear arrangement of related incidents , episodes or events that lead to a dramatic resolution' (2005, 29). In whichever way the writer decides to structure the expositions, the three parts of a story hold true. There is always a setup, whether it comes all together in the first Act, or is scattered all over the film.<sup>11</sup> The audience needs to be made aware of how life was for the characters before everything changes, or in other words, the SETUP or the EQUILIBRIUM.<sup>12</sup> The characters are introduced, their relationships are established, and the world of the story is illustrated. In a 90-minute film, the first 20 minutes or the first 20 pages of the screenplay are generally relegated to the setup (Field 2005, 22). The incident that comes towards the end of the setup is key and is called the INCITING INCIDENT. It sets the story in motion and in Field's parlance, 'grabs the attention of the reader and the audience'(131). This incident is what sets the conflict rolling, disrupts the equilibrium and thrusts us closer to Act 2.

In some structures, there are two key incidents that happen before Act 2 starts. The second is called the PLOT POINT 1(PP1). Sometimes both the key incident and the PP1 can appear as the same event. Syd field calls PP1 the true beginning of the story, which moves the script to the next level. This can be simplified to say that an incident happened, which resulted in a change in the character's life, which then led to the second act—the CONFLICT or the DISRUPTION. This Act contains the midpoint of the

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<sup>11</sup>New wave French filmmaker Jean Luc Godard famously said 'a story should have a beginning, a middle and an end, but not necessarily in that order' (Tynan 1966)

<sup>12</sup>EQUILIBRIUM-DISRUPTION-NEW EQUILIBRIUM from Todorov's theory of narrative structure,(Todorov and Weinstein 1969)

story which is conventionally when the protagonist moves from reaction to action.<sup>13</sup> The midpoint is also considered a turning point, a place in the narrative where the pace changes yet again. After this comes the second Act turning point, the PLOT POINT 2 (PP2), where the protagonist has failed/ lost everything and is close to despair. Act 2 ends soon after PP2, taking the audience into Act 3, building up to a CLIMAX and the RESOLUTION or the NEW EQUILIBRIUM.

### **Narrative Form in 21 Grams**

Linda Aronson, in her book *The 21st Century Screenplay* (2010) categorises this film as a 'Fractured Tandem Narrative' (FTN). In their simplest manifestations, according to Aronson, basic tandem narrative films tell multiple stories that may have equal importance. Each story has its own protagonist and unfolds simultaneously and chronologically in the same diegetic time frame. She holds that such films are more often than not didactic, with a strong socio-political background and typically showcase communities through lives of different characters on varied strata while highlighting the difference between the experiences of the characters affected by the same event or situation. Aronson calls this 'same theme, different adventures' (2010, 183).

These kinds of films possess an interwoven connection/plot line between the separate stories to justify the choice of the selected accounts or protagonists. Aronson uses an analogy to explain how this works: '[...] separate stories make the horizontal threads and different kind of connections between the stories provide vertical threads.' (185). Given this, the theme or the message then becomes the overarching umbrella that all the stories fall under. Further she notes that in most tandem narratives the characters connect

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<sup>13</sup>For a detailed discussion refer to Chapter 12 in Syd Field's *Screenwriters Workbook* (1984)

in the film's final moments through geography and time, in some cases this being the first time the characters occupy the same frame. Characters from different storylines also appear in other stories, providing the opportunity for connection or meaningful transition. She also observes that 'some kind of social catastrophe links all of the stories together' (186) offering the umbrella theme that can help create the connections required in tandem narratives. The drawback is that now the writer/director must squeeze in multiple stories in the same amount of cinematic time, leading to possibly one-act versions of the narratives, instead of the conventional narrative structures. This is evident in the structural analysis of *21 Grams* attempted below.

A further category of the FTNs according to Aronson, are tandem narratives which are 'chopped up and told in a non-linear way.' Arriaga begins in medias res, a conscious decision on his part and reportedly switches stories at high emotion points (Arriaga 2004). The device of in medias res is as old as Homer's *Odyssey* as explicated by Aristotle and has been used time and again to grab and hold the audience's attention. The high emotion points that Arriaga often mentions are but turning points in conventional screenwriting parlance. While Arriaga refuses to acknowledge the use of the 3-Act structure or screenwriting methodologies, it is quite evident from the analysis of his films that his narratives do eventually reveal the form at play (Figure 12).

Aronson further observes that an FTN is a viable alternative for story content that would not work in a conventional chronological linear narrative. FTNs can aid in the following ways: allow the telling of exposition heavy stories or stories that have a weak or non-existent second act, link different stories together, sometimes of different genres that would have ideally been completely separate films, conceal major time jumps, boost the energy in dark, depressing stories, and lend an interesting twist to a predictable or an

overly moral based story. This works when the stories are fractured and reorganised in a fashion that creates pace, interesting linkages, meaning and closure to assist in the telling of stories that cannot fit in the conventional screenplay paradigm. Despite the fragmentation, writers can still simulate a potent introduction, intriguing build-up and a satisfying climax (ibid).

While Aronson holds that the 3-Act structure applies only to a certain type of chronological and conventional narrative, for FTN, force-fitting the story in the conventional structure becomes an exercise in futility. Nevertheless, it is necessary for this research to try and identify the beats of such a structure in a non-linear film, simply because the 3-Act structure is the most followed structure in mainstream narratives, and as such most recognisable by viewers. Therefore, in order to analyse the film, we must try and identify key events and see if they fit in any way in the structure. Both Aronson and Roger Tucker try to fit the events of *21 Grams* in a 3-Act structure with Aronson describing the film as ‘three pensive, poignant one act films, featuring three interconnected protagonists, followed by one single act action-revenge bloodbath’ (2010, 380).

From the breakdown of the film text, I observed the following features of the narrative.

1. Jack Jordan (and spouse) has 40 sequences, Paul (and spouse) has 52 and Christina (and family) 49. All three characters come together in three scenes or sequences at the climax of the film in the linearised progression.
2. All three characters have almost equal weightage, and therefore, we cannot categorise any single character as the protagonist or a single-story arc to follow. But the film does

start with a broody, contemplative Paul looking at a sleeping Christina. This sets up an expectation that we are seeing the protagonist at some stage in the narrative. Roger Tucker calls the beginning of the film a ‘baggy, defocussed exposition’ which nonetheless centres around Paul’s character who is the ‘only one in a dramatic situation which needs urgent resolution’ (Tucker, n.d.). I therefore plot one story arc for Jack and one for Christina and Paul that come together towards the middle of the story progression. Given below is a breakdown of the narrative in a linear progression including the insights of the same.

### Jack’s Story:



Figure 2.13 Linear Visualization of Jack's Story with 3-Act Beats in 21 Grams

Jack is an ex-convict who has found faith in the Church and turned over a new leaf, so much that his wife is not on board with his change into a religious fundamentalist. As a family, everything seems changed and Marianne is uncomfortable with Jack’s blind adherence to everything to do with the church, including having a completely different social circle that comprises mostly of the church members. Jack also has a heavy hand when it comes to punishments for his children or the boy in the church and blindly follows the dictates of the Bible. He believes he won his truck in a raffle because Jesus wanted him to.

Jack gets into trouble at his workplace because of his past and loses his job due to no fault of his own. This is the setup of Jack’s story. On the day of his birthday and a

party arranged at his home, Jack accidentally runs over Michael and his two girls. This is the inciting incident (Figure 2.13). He comes home and confesses as much to his wife, who goes to check out the accident site. Devastated, she comes back to find Jack resolute in turning himself over to the police and she is unable to stop him. Jack is incarcerated and, while awaiting trial, gets progressively depressed. He speaks to the Pastor, and it is clear that he has lost faith in the church as he cannot understand why he won the truck and then caused the accident and killed someone. The pastor cannot convince him otherwise. Jack tries to kill himself and fails. Eventually, Marianne works out a deal with the lawyer and gets Jack released since the family of the deceased refuse to file charges. Jack does not want that. He goes home to his family but is unable to overcome the guilt and leaves in the middle of the night.

This, according to Aronson is PP1 (388). The conflict for Jack is that he wants to be punished but law won't do it and therefore Jack finds it progressively difficult to live with his guilt. Here starts his Act 2. In a linear single protagonist story, this would have been his journey towards forgiveness and salvation. Instead, we see maybe two scenes of him working as a day labourer and drinking himself into a stupor. Aronson notes that this is a truncated second Act, shortened almost to the point of non-existence. From here we jump to Paul tracking him down and trying to kill Jack. While Paul lets him live, for Jack this is his salvation, his death at the hands of someone he believes he has wronged. This is also his second Act PP2.

Just a short scene later we reach the climax: the moment when Jack confronts Paul and Christina at the motel and begs to be killed. Christina, in a fit of rage almost batters Jack to death, till Paul intervenes by shooting himself. Here is Jack's redemption, bringing a dying Paul and Christina to the hospital— something he failed to do for

Christina's children. Later, he turns himself in by taking on the blame of Paul's shooting. Christina, having just found out she's pregnant, refuses to press charges for the second time, and in a way forgives Jack. Jack moves on and is able to go back to his family. This is the resolution of Jack's story. As observed, the first Act or setup, takes up a lot of Jack's storyline with 9 Sequences of 40 before the inciting incident. Of the second Act there are virtually only 5 sequences and 5 more including the climax and resolution are a part of Act 3.

### **Paul and Christina's Story:**

When we start in medias res, it becomes clear that the couple is at the centre of the narrative. Roger Tucker considers Paul the protagonist and Christina's story line merges into Paul's soon after the first Act PP 1. To begin with, we see a longer setup for both Paul and Christina. We see Christina with her daughters in the kitchen, then at her AA meeting, waxing lyrical about her perfect family, then at the sports centre swimming with her sister, and finally we see her at home, getting ready for her family to return. Instead, she gets a phone call from the hospital. This is Christina's setup. At the hospital, barely two scenes in, she is confronted by the fact that her entire family is dead, and she must decide on organ donation for her husband. This is Christina's inciting incident (Figure 2.14).

At the same time, we see Paul at home, fighting for his life while waiting for a heart donor, and his wife exploring options for an IVF pregnancy. We learn that he isn't very keen on the idea but agrees to go along for the sake of Mary. The last we see of him before the organ donation is when he himself is donating sperm for the IVF procedure. After this, we jump to the inciting incident for Paul, i.e the heart transplant. In two

sequences, the operation is done, and Paul is recuperating. He expresses his wish to help the donor's family but is dissuaded by the doctors and his wife. Later at a party thrown for him with colleagues, Mary prematurely announces to everyone that they are going to be parents. Paul, unhappy about the public nature of her announcement, tells her that he has changed his mind, but Mary is adamant. At the clinic, the doctor lets slip information about Mary's past abortion which was a secret from Paul. Angry at Mary, Paul tells her that they are done, and he no longer wants to be with her. Eventually he relents and they have an uneasy truce.

After this he sets out to find Christina. Finding her contact through a private investigator, Paul starts to stalk Christina, trying to find a way to speak to her. Eventually he manages to convince her to have a meal with him. Christina at this point is still grieving the loss of her family and is overwhelmed by Paul's attention. She gives in to her confusion and calls Paul in the middle of the night, asking him to come over. At this, Mary is angry as Paul won't tell her who he is meeting. At Christina's, a highly emotional Christina succumbs and kisses Paul, at which he stops her and reveals that he has Michael's heart. Taken aback, Christina throws him out of her house. Next morning, upon seeing him still camped outside, she relents and goes to talk to him. Paul manages to convince her that he does not have ill intentions and he just wants to help. After this, they make love, and this is where PP 1 happens for both Paul and Christina. From here on, their storylines merge, with Christina having one individual scene of her own before the resolution.

This now, becomes the story of the widow falling in love with her dead husband's heart recipient. Paul goes home to see Mary packing her bags after having decided to divorce him. As she leaves, she declares that she will have his child against Paul's wishes.

From here on, we don't see Mary again, and Paul starts spending more time with Christina. Before the mid-point of the story, we get one more sequence where Christina is alone, when she goes to the site of the accident and interviews Lucio the gardener who was the only witness to the accident. Overwhelmed by the visit to the site Christina flies off the handle when Paul tries to stop her from doing drugs. She implores Paul to help her get revenge. According to Aronson, this is where the stories change genre and turn from a story of loss, grief, forgiveness to revenge (2010, 387).

This abrupt change, which would not have worked in a linear narrative, thrusts us straight to the end of Act 2, where we see an ill-looking Paul at the doctor's office, being told that his new heart is failing and that he must stay in the hospital till they find another. Paul refuses and commits himself completely to Christina's revenge plan. He gets a gun and in trying to spare Christina the sordid act of killing Jack, Paul confronts Jack on his own. He is unable to actually kill Jack and lets him go. The climax of Paul and Christina's story is the confrontation in the motel room, where Jack has tracked Paul down to ask him to finish the deed and Christina, who was led to believe that Paul had killed Jack, in a fit of rage, starts attacking Jack with a lamp. Paul, weak and unable to stop her, shoots himself in the chest. This is the climax of all three character storylines, with the resolutions being Christina finding out she's pregnant, forgiving Jack; Jack having found his redemption, going back to his family and Paul dying.

Aronson's analysis, with Roger Tucker's notes supports the fact that these stories are not conventional 3-Act structures. The structure conceals the following flaws from the narrative flow:

1. The three stories are exposition heavy, with the characters offering up explanations about their actions or other information that the film was unable to build for the lack of time given to each storyline.
2. There is a distinct weak second Act in all stories. Act 2 is where we are actually supposed to see character's grow, change and overcome challenges. In these three stories, we don't get to see the character arcs, instead we see a clumsy jump to PP2 and the climax. This makes the characters look as if they never convincingly changed, overcame their circumstances or synthesized their actions.
3. The elongated first Act is of a different genre than the truncated Act 2 and 3. The fractured structure conceals the deceit, as we get bits and pieces of both genres mixed in a diffusion that makes it difficult to build a convincing tone for each genre.
4. Conceals major time jumps for e.g Jack from his house to the motel where he's living a bare existence, Paul and Christina from a suburban couple to living like addicts in the same motel. The non-linear sequences make the audience familiar with the abrupt change in the characters states and during the course of the film, the viewer does not feel the discontinuity they would have in case of a linear narrative.
5. The structure boosts the energy in sequences which would have been very dark and depressing otherwise, like Christina's spiral into drug abuse and Jack's giving up of his home and family. This is done again by the diffusion created by interspersing other sequences of happier, better times, in the midst of the darker sequences.
6. The fracturing of the linear storylines, throws light on interesting comparisons and juxtapositions.

Aronson maintains emphatically that *21 Grams* would not work in a linear format and that it would be “long, slow, predictable and so depressing that audiences might well give up on it’ (2010, 386). We might say that Arriaga never intended or designed the narrative to be read in a linear manner. His interviews about the process inform us of his non-linear approach from the conceptualization of the project. While linearizing gives us the ability to see the structure of the core narratives, we cannot judge the entire film text based on how the linear plot reads, as the screenwriter never intended for us to see it any other way than the form it is presented in. The linearization is akin to taking apart the pieces of a complex object and trying to make sense of the whole by reordering parts by size or colour. One might see the individual parts, one might even recognise what they are, but the form is no longer present. While the exercise yielded linear edits of all three storylines, the viewing experience is more discordant and staccato than watching the film in its intended non-linear version. For this purpose, we refrained from getting an audience review of the linear storylines. The linearization was only to arrive at an understanding of the narrative structure underpinning the fractured style.

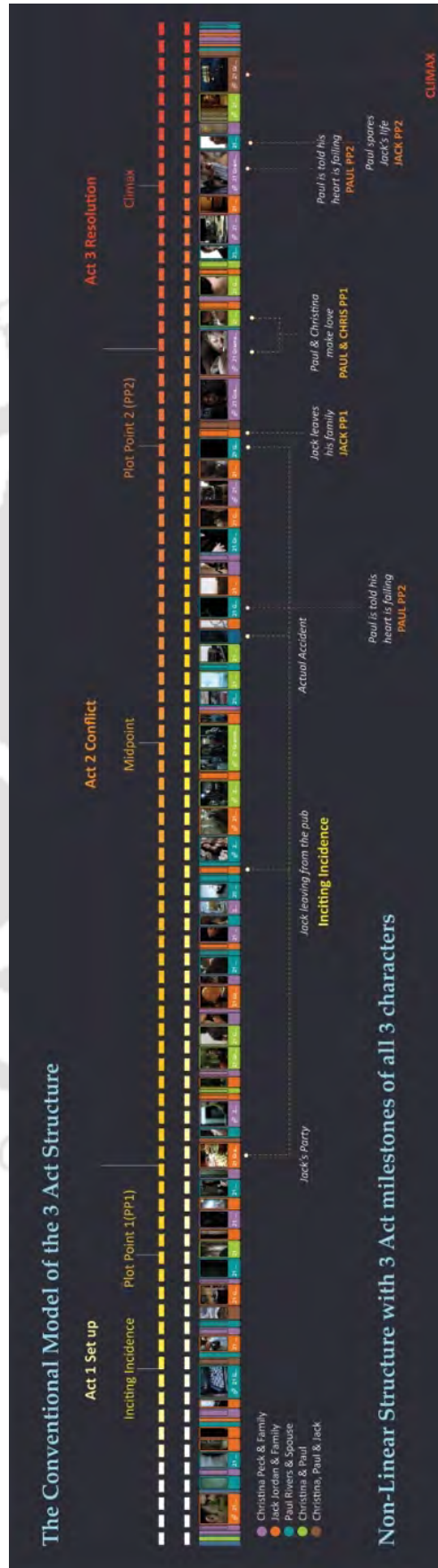
### **The Linear in the Non-Linear**

After identifying the 3-Act beats in the linearised storylines of all characters, I went back to the non-linear structure to plot the events in the film text. This visualization exercise was the biggest validation for the hypothesis of this study. I was able to answer the question ‘why does the narrative work in the fragmented structure?’ at least partially.

Figure 2.15 shows how reverse engineering the edit with the colorised timelines from DVR and identifying of the 3-Act beats it became possible to see that the structure was disproportionate and bloated in some places while shrunk in others. The inciting incident, the plot points and the climax do somewhat follow the 3-Act structure flow.

Figure 2.14 (Left) Linear Visualization of Paul & Christina's Story with 3-Act Beats in 21 Grams

Figure 3. (Bottom) The 3-Act beats in the Non-Linear Structure of 21 Grams



One can see the comparison between the conventional model and the structure in *21 Grams*. This also validates Aronson's claim that the film has an unusually long normality, a truncated second Act and an almost conventional climax and resolution. Next, I looked at the number of forward movements verses the number of backward movements in all the characters' storylines. Forward movements or beats are the times when the story progresses in a forward motion going from the first sequence in the linear story to the second, then to the third and so forth on the non-linear timeline. A backward movement would be when the progression jumps back in time on the non-linear timeline. The basis for this is the fact that narrative comprehension is heavily reliant on the linearity of the medium (or any other kinds of comprehension for that matter), so offering information in a linear fashion, the viewer is able to construct and hold the structure of the narrative in their mind as they watch ahead (Zwaan 2016). Figure 14 shows the story progression of Jack's storyline. This visualization is a derivative of Rajamanickam and Sharma's graphic of the film *500 Days of Summer* (2009) (2015) and also one of the options tried out by Kim et. al in their Story Explorer project. Jack has 28 forward beats and 12 backward beats, making it a more linear than a non-linear presentation (Figure 2.16).

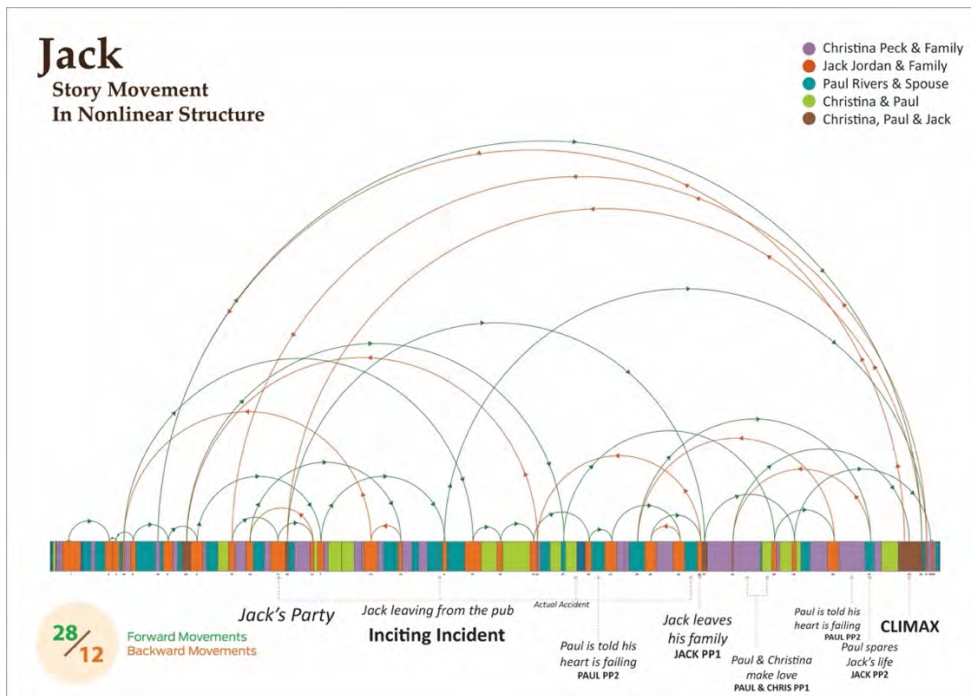


Figure 2.16 Jack's Storyline Movement in the Non-linear structure in 21 Grams

Similarly, Paul's individual storyline (which combines with Christina's later) has 39 forward beats (Figure 2.17) and Christina's in the same manner has 39 forward beats and 10 backward beats (Figure 2.18).

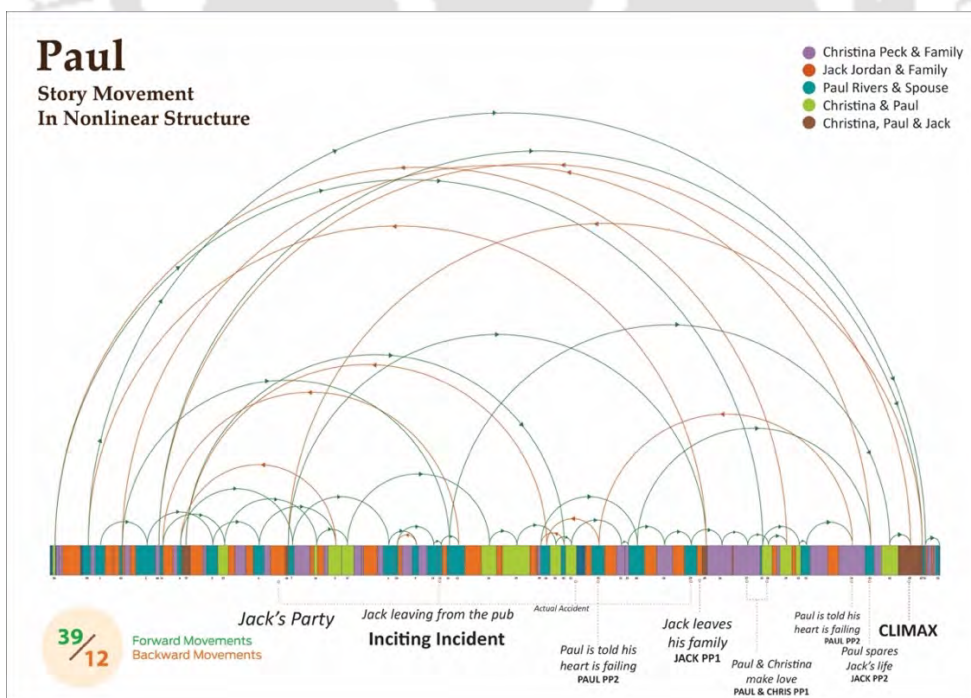


Figure 2.17 Paul's Storyline Movement in Non-linear Structure of 21 Grams

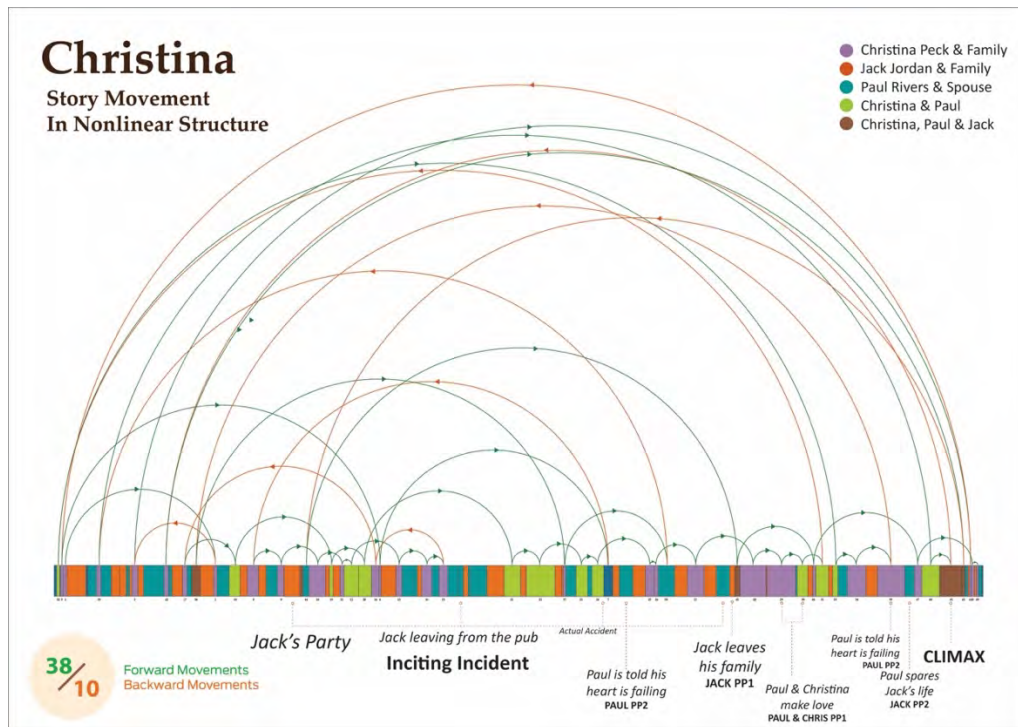


Figure 2.18 Christina's Story Movement in Non-linear Structure in 21 Grams

From the structural analysis of the narratives both in the linearised and the non-linear versions, we reinforce that within its fragmented, fractured appearance, the film still follows a recognisable structure and veers closer to linear than non-linear. While this cannot be the only factor in why the film works as a story, it is a strong foundation upon which other cinematic techniques might be used to build a coherent narrative flow. In the next step of the process, a close reading of each sequence in the non-linear progression and their connections or linkages are analysed in depth.

### 2.3.3 Non-Linear Sequence Analysis (with Script and Film)

Based on the understanding of the linear and the non-linear structure analyses, a close reading of the film was carried out sequence by sequence. The detailed analysis can be found in Appendix no. 4. Since the film is clearly divided into temporal clusters that come about seemingly in a haphazard fashion, there was a need to articulate what thread runs through two consecutive sequences in order to find out if any narrative links existed.

It is important to note here that given the paucity of detailed information on the making of the film, the readings are interpretations of what might have been the motivation of the screenwriter, the director and the editor. These are also informed by what Arriaga, Innáritu and Stephen Mirrone have said in their interviews about the film. Another important exercise was the categorising of the transitions. Conventionally, transitions in films from one scene to next are smooth and as a rule there is an attempt to make them seem invisible, unless there is reason to surprise the audience by an unexpected change (Dancyger 2019). In the case of *21 Grams*, the screenwriter and the director were clear from the final draft of the script that this is a fragmented non-linear narrative.<sup>14</sup> As such, the structure can be corroborated in the screenplay and with minor additions and relocation of some scenes.

The final film reads almost identical to the script which in itself is clear evidence that the makers stuck to the original vision for the final output on screen.<sup>15</sup> In the editor Stephen Mirrone's own words, director Innáritu asked him to forget everything about conventional editing and stop trying to smoothen the edges (2021). The resulting fragments of the narrative with rough edges do present themselves as a difficult watch. But given the performance of the film, something about the non-linear structure still works. Which could mean that within the non-linearity, there are still connections: in Arriaga's own words, he sought 'emotional ellipses' in the structure (2004).

Traditionally, in a linear narrative which inherently follows a plot-driven goal towards the end, the transitions between scenes in linear narratives are considered

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<sup>14</sup> Some film reviewers were convinced after the release of *21 Grams* that the director must have decided at the last moment on the edit table to change the narrative to a non-linear one after seeing how weak the story read in a linear manner.

<sup>15</sup> See comparison between script and film sequences in Appendix 5

necessary in trying to take the story forward. At all stages the screenwriter, the director, the cinematographer and the editor are all engaged in an endeavour to provide links from one scene to another. These links can be thematic, emotional in the writing stage, movement, and visual based in the shooting stage, or connected by sound that flows over the earlier or the next scene. As an oft-held rule, some visual link is sought between the last shot of a scene and the first shot of the next scene to alert the audiences of the change or a similarity in movement of the actors or the camera or props (Dancyger 2019). A visual/aural link allows for a smooth transition and make the narrative flow appear continuous. In the case of *21 Grams*, the transitions seem to serve as a tenuous link to and from the asynchronous sequences. Between 109 sequences, plus the additional scenes that made up these sequences, a close reading provided us with connections between the fragments. A categorization was then considered necessary to understand the types and the decisions behind the non-linear juxtapositions.

Film editors use established conventions while cutting film and as such these methods were looked at to identify and categorise the type of transitions. While largely film editors will declare that their cutting comes from a place of intuition, there are some scholars who have attempted to articulate the methodologies used in editing film for the purpose of teaching future editors (Pearlman 2015, 9). Karen Pearlman's book *Cutting Rhythms* attempts to explain an editor's intuitive thinking which is 'based on movement of story, movement of emotion, movement of image and sound' (2015, 14). In the absence of the editor's notes on the reasons behind the edit decision, this analysis looks at Pearlman's study and some of the conventional editing processes to find the connections between the fragments of the narrative.

## The Screenplay

Generally considered an instruction manual for the whole process of filmmaking, a screenplay can be anything from a brief summary of events without dialogues or a highly detailed document that is the backbone of any film narrative. The conventions followed in writing a film script are for the purpose of studios and crews to be used at every stage of the production pipeline. Most studios will insist on the conventional typeset format, which runs at a minute-a-page and only directors who are allowed a free hand with the material will accept anything other than a formatted script (Field 2005). Guillermo Arriaga wrote the script of *21 Grams* as an original script (not adapted from a literary piece) and a scanned digital copy of the same was accessed from an internet script repository.<sup>16</sup> The document seems like a legitimate script, with numbered watermarks and some discrepancies between the script and the film, which makes this the most likely shooting script document.<sup>17</sup> A further transcript of dialogues was also acquired from a fan site, and manually verified for being a transcription from the film. The next section outlines the findings from this analysis.

### Some observations about the script and transcript:

1. Arriaga famously eschews scriptwriting conventions and structure, but he followed the typesetting format for the screenplay.
2. The script document is 122 pages long and contains 198 scenes. The film has a runtime of 124 mins including the credits, making the format approximately a minute a page. The number of scenes is almost twice that of the sequences (109) because scenes are

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<sup>16</sup><http://www.script-o-rama.com/>

<sup>17</sup>Common practice in film production to number each hardcopy of a script that is given to each person to keep track of copies that might be distributed. This script is numbered 0047.

marked and divided by locations. As discussed earlier, temporal sequences of the kind that I analyze can be comprised of multiple scenes.

3. Arriaga includes descriptions and adjectives for characters, their actions or explanations for their emotions, which is generally not done in a conventional screenplay format.<sup>18</sup>

This served also as a way for the production team to identify the timeframe of the events.

4. Some scenes are improvised by actors on set and not scripted for e.g., Jack intervening in a fight amongst the boys outside the church has no mention in the script.

5. There are minor changes in dialogues, as is the norm for any production; a director and an actor may choose to modify dialogues on set.

6. Some scenes are shuffled forwards or backwards in the final edit. This can be considered an editing decision taken at the time of the edit stage by the director and editor. The possible motivations behind these can be found in the detailed sequence analysis in Appendix 4.

7. Some scenes are omitted, or characters have been either removed or reduced. For e.g., Mary's character track is much truncated in the film. In the script we see her going ahead with the artificial insemination of Paul's child paralleling the revelation of Christina's pregnancy. This can also be considered a decision made during production or at the edit table. While difficult to pinpoint the reason by just analysing the script and the film, it is a common practice in production to remove complete character tracks for pacing or

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<sup>18</sup>Conventionally, one only writes what is to be shown on screen, like a transcription of action. At maximum, the screenwriter can insert instructions for acting in the dialogue sections.

economic reasons. Reducing minor character tracks is one of the ways to reduce diffusion and make the narrative crisper.

### Sequence Analysis with transitions

As discussed earlier, the film was broken down into sequences, i.e. scenes that seem to happen at the same time clubbed together into temporal clusters. It was then re-examined, this time with the notes from the script and with special attention to the transitions between the sequences.

Besides conventional cinematic transitions, there are thematic or dramatic continuities and most of the transitions in *21 Grams* fall in this category.<sup>19</sup> In the absence of a smooth logical flow in the narrative due to the fragmented non-linear structure— first Arriaga as the screenwriter (in what he calls ‘emotional ellipses’) and then editor Stephen Mirrone had to make the connections with unconventional solutions to link the narrative discontinuities. In an interview with the British Film Editor’s virtual interview series, Mirrone, who also went on to work on most of Iñárritu’s later films, briefly mentions his experience. He says Iñárritu asked him to ‘stop editing like a good editor,’ to forget everything he had ever learned about editing and stop trying to make everything smooth and maintain continuity (Mirrone 2021).

Mirrone maintains in his interview that no two films are alike and states that a good editor must learn how to edit differently for each film. In this case he recalls that Iñárritu asked him to set his instincts aside and leave the cuts rough. While this may have been the stylistic brief from the director to the editor, a quick comparison between the edited non-linear structure and the linearised DVR edit is enough to show Mirrone’s skill

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<sup>19</sup> See detailed discussion in Chapter 1

in a smooth cut even in the face of a fragmented narrative. An analysis of the sequences in the film and a comparison of the shooting script made it clear that about 75% of the non-linear structure was finalized at the script level between the director and the screenwriter.

Of course, the script only just gives us the order of the scenes and additionally, notes about the timeframe of the scenes. Where to cut, how to cut and how to create a connection between the fragments is still the decision taken at the editing table or during production in discussion with the cinematographer. Typically, transitions used for shots are similar to the transitions used between scenes. While Mirrone has done a lot of conventional editing between shots, the cuts between scenes are motivated by a completely different rationale than to maintain narrative continuity. A detailed scrutiny of the transitions can be accessed in Appendix 2. A categorization with conventional continuity editing as a base was created for the purpose of the study. Listed below are some examples of the transitions.

### **Modes and Functions of transitions**

For the purpose of the breakdown of NLNs, we proposed 5 different ways of scrutinising sequences. These are adapted from common practices of editing, cinematography, and storytelling. From editing, we borrow types and techniques of the cut. From cinematography we take camera movement, lighting, colour etc. and from storytelling - exposition in *mis-en scène*, dialogue, action or event. A description of the categories and their examples from *21 Grams* are given below:

1. **The type of cut between sequences:** *21 Grams* does not have any instances of other types of cuts than the straight or abrupt cuts, which is the most common type used in editing.
2. **The technique of cut:** There are many instances of different techniques used within the category of the straight cut. For example, in sequence cluster 6, 7, 8, the editor cuts from the overhead light in Paul's hospital room to the bare bulb in Christina's bathroom. Here the Match cut is *light-to-light*. Then from 8 to 9 we cut from Christina's face (Figure 2.19a) to Mary's face in the doctor's room which creates a link showing the contrast between characters<sup>20</sup> (Figure 2.19b) .

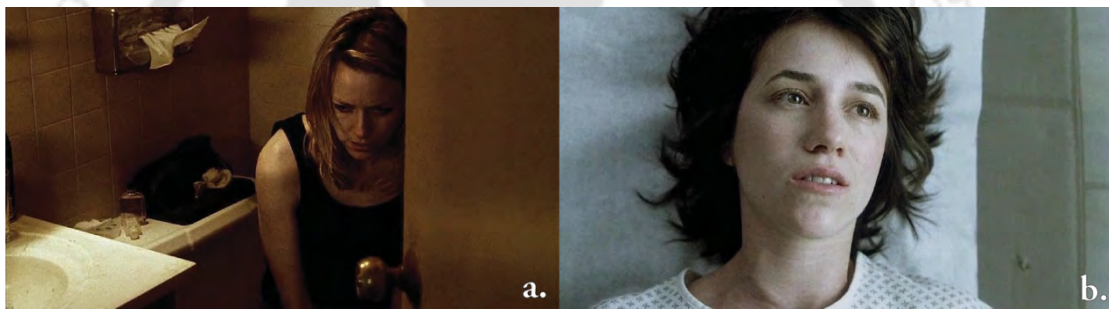


Figure 2.19 Christina in Seq. 8 (00:05:54) & Mary in Seq. 9 (00:05:58)

3. **The mode of manifestation of the link:** In the visual category, different film stock and lighting codify the story arcs or where we are in the narrative in *21 Grams*. In aural, a musical leitmotif, in the form of a melancholy guitar piece plays over multiple sequences, highlighting their emotional content.
4. **The semantic and narrative context** where the information or an exposition is conveyed by the use of a dramatic or thematic transition across two or more sequences. For e.g. a character asks a question in one sequence, and the answer is presented in the next sequence as action, effect or reaction. Between Sequence 21 and 22, Paul comments

<sup>20</sup> For more detail please see Appendix 4

on his heart being the culprit (Figure 2.20a)., while Christina asks him ‘which one is he (culprit)’ referring to Jack in the next (Figure 2.20b).



Figure 2.20 Paul in Seq. 21 (00:17:24) and Christina and Paul in Seq. 22 (00:17:42)

**5. The function of transition:** In sequence 13 and 14, we go from Jack behind bars (Figure 2.21a) to Christina swimming in the blue waters of a public pool from before the accident (Figure 2.21b), which is a contrast/conflict type of transition, and this is more of the thematic montage type of movement from one scene to another. The idea JACK IS TRAPPED WHILE CHRISTINA IS FREE is conveyed here visually as well as contextually.



Figure 2.21 Jack in prison in Seq. 13 (00:09:510) and Christina in the pool in Seq. 14 (00:09:53) in 21 Grams

A similar juxtaposition is between Jack's family at dinner (Figure 2.22a) and Christina with her daughters, highlighting the dysfunction of the former and (Figure 2.22b).

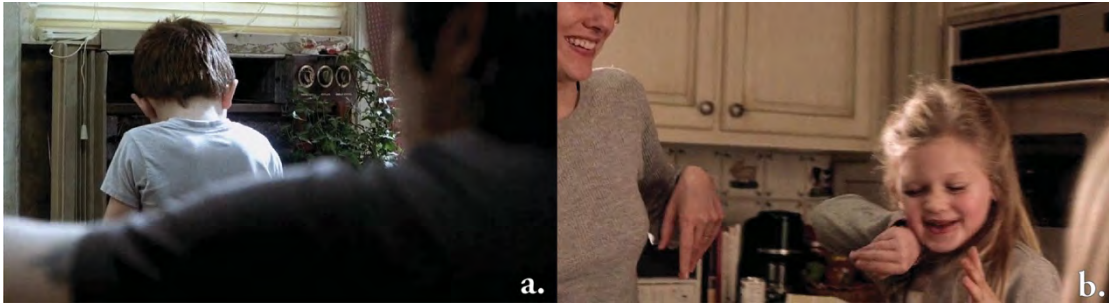


Figure 2.22 Jack punishing son in Seq. 23 (00:20:08) and Christina playing with daughters in Seq. 24 (00:20:38)

A sequence analysis was carried out by viewing the film scene by scene and categorising the transitions in two ways. At first a spreadsheet, which was a continuation of the sequence breakdown sheet, was populated with the observations about the transitions. Then a detailed reading about each sequence and how it connects to the ones before and after was carried out. The complete write-up for this can be found in Appendices 4 and 5 and contains interpretations of all the transitions in the film.

As discussed earlier, in a linear sequencing, a story and its film narrative go in tandem. While there might be gaps due to some events being skipped over, the story still progresses in a forward direction in hand with the film narrative barring any instance of a character experiencing a flashback or the audience offered a flashforward. In a film like *21 Grams*, the surface level structure seems very fragmented. Ideally a non-linear structure of this complexity should also rearrange the conventional narrative structure in a linear presentation. Figures 2.23, 2.24 and 2.25 show a bipartite type diagram to chart the difference in positions of the linear sequences v/s the non-linear sequences. The upper timeline is the non-linear timeline as extracted from DVR, and the lower timeline is the linearised sequence timeline of each character. While this data was available to us in the initial stages of the analysis, the visualization tied in with the transition analysis and then set to the 3-Act structure helped us focus on the sequences of note while also throwing up some interesting insights about the story structure.

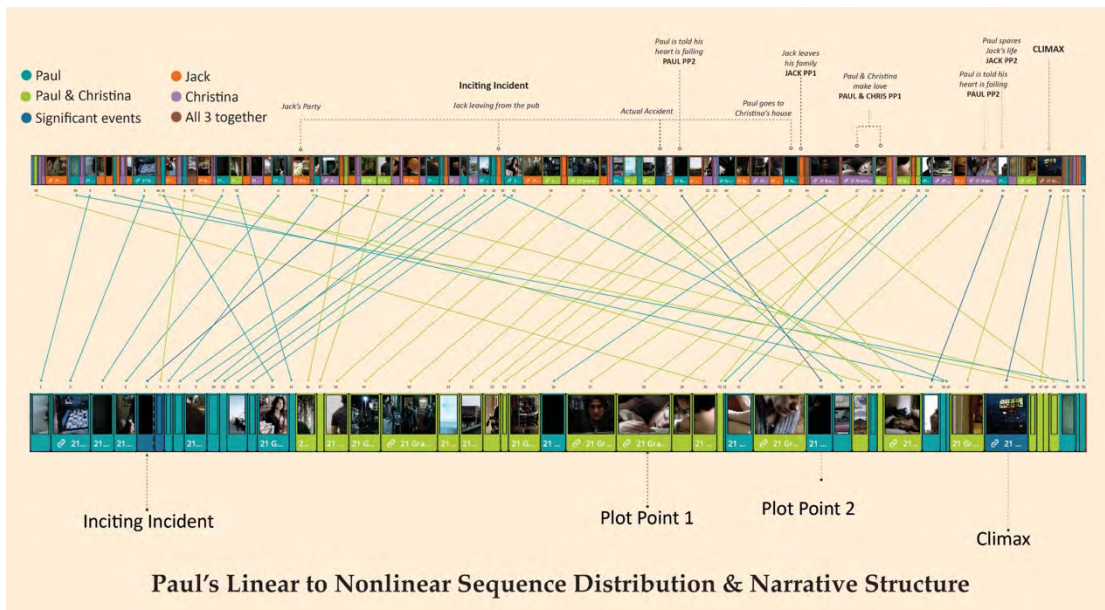


Figure 2.23. Paul's Linear to Non-linear Sequence Distribution with narrative structures in 21 Grams <sup>21</sup>

In the figure 2.23, the NLN clearly begins in the middle of the linear story i.e in medias res. Next, Paul's story setup is evenly distributed across the setup of the non-linear timeline which can be seen in sequence 1 though 13 including the inciting incident, which also falls comfortably between the three instances of the accident sequences that form the inciting incident for the NLN. Paul's PP1, which he shares with Christina, also comes close to Jack's PP1. Paul's linear PP2 which is when he's told his heart is failing, becomes the driver for his decision to end his relationship with his wife by sleeping with Christina and then later giving into her plan to kill Jack in the NLN. It thus becomes a reason for Paul's future actions. While all three characters share the actual climax, the sequences after can be seen scattered at the very beginning of the narrative in the setup. Along with the connections with the sequences before and after their position in the

<sup>21</sup>Since we are charting Paul's 51 sequences against the full 109 sequences, the lower linear timeline is disproportionately bigger than the upper NLN timeline. By making it the same size, the connection lines between the two were even more exaggerated leading to a distortion in reading. Currently, one must disregard the slight slant of the lines and focus on the extreme crisscrossing ones.

NLN we categorise this placement as a type of foreshadowing which lets the viewer get a taste of what is to come.

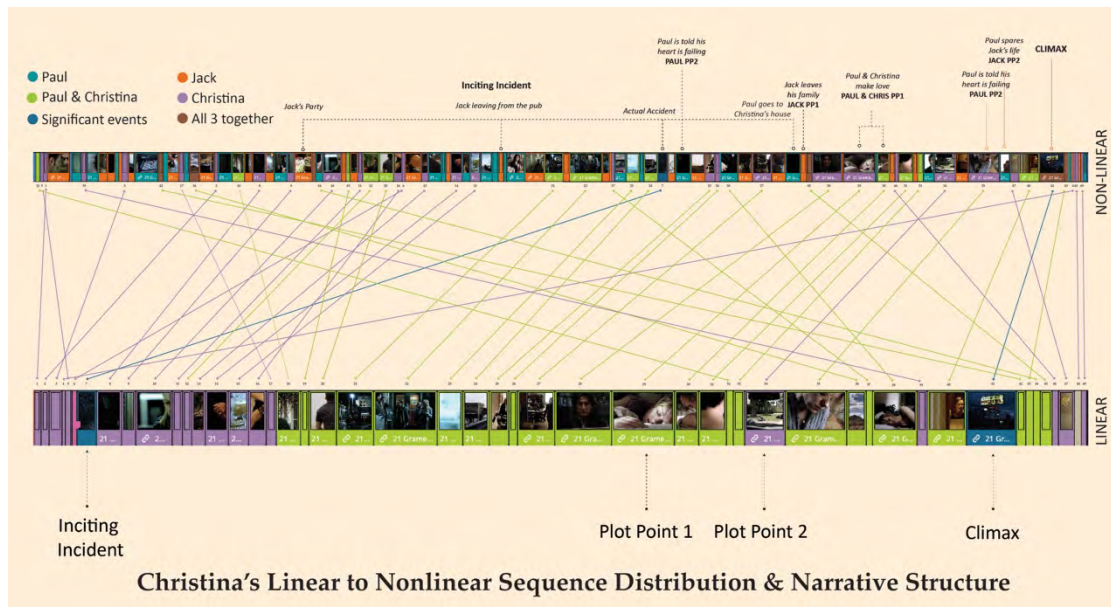


Figure 2.24 Christina's Linear to Non-linear Progression with narrative structures in 21 Grams

Similarly, in Christina's progression (Figure 2.24), her inciting incident falls between the inciting incident sequences for the NLN, and the rest of her narrative progression landmarks are the same as Pauls. The extreme crisscrossing lines, again present the sequences that foreshadow Act 3 in the setup (for e.g., holding a bleeding Paul in her lap), or serve as reminders of the setup in the climax (for e.g., Michael exiting the café with the girls), in what Arriaga calls the emotional ellipses.

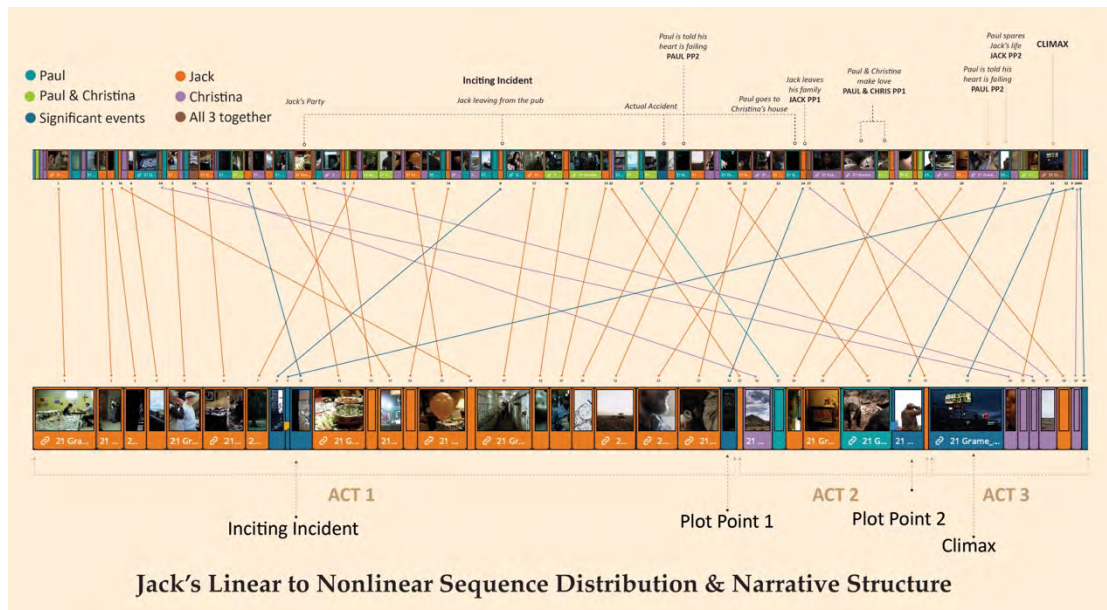


Figure 2.25 Jack's Linear to Non-linear Sequence Distribution with Narrative Structure in 21 Grams

Jack's inciting incident (Figure 23) is split into three with the first in the setup, the second serving as the main inciting incident for the NLN and the third as a reminder just before the end of the film. Like Paul and Christina, the sequences at the extreme ends again serve as foreshadowing or as a prompt.

The bipartite diagrams depicted above simplify the fragmented structure to a high degree and it becomes clear that the narrative works because the writer sticks close to the narrative landmarks of a linear presentation while presenting the NLN.

While the linear sequences are interwoven as a conventional film with parallel editing would be, the outlier sequences make the narrative look more fragmented than it is. A study of the pinpointed outlier sequences of all characters gave us the possible logic behind their non-linear positioning. Of note are the almost parallel lines in each of the character storylines' sequence distribution. This confirms that most of the sequences are actually in a linear progression than what it seems like. Allan Cameron categorises NLNs as modular narratives that 'mimic contingency itself by leaping between narratives

segments in apparently arbitrary and unpredictable ways' (2008, 49). He calls the structure of *21 Grams* 'a radically non-linear, associative structure.'

'[.D]espite the film's chaotic and disjunctive opening, a sense of narrative clarity gradually emerges. And the 'temporal oscillation between the past, present and future stabilizes, so that all the connections are eventually resolved' (50). While Cameron's observations are mirrored by other reviewers and scholars, my study of the structure aims to provide concrete evidence of narrative clarity which scholarly consensus has hitherto been unable to arrive at.

## 2.4 Discussion

Post the narrative breakdown and analysis of the film, some base metaphors and image schemas were identified in the text. The following section builds upon the CMT domain to demonstrate how the metaphors work in the design.<sup>22</sup>

The film *21 Grams* is a story about the lives of three protagonists that are irrevocably changed when an accident occurs, linking them and drawing them inexorably towards the climax. If we take the metaphor LIFE IS A CONTAINER (from statements such as 'he came into my life,' 'my life is empty'), we can find a correlation between FILM and LIFE. As with image schemas, the base spatial schema tends to replicate within abstract concepts and some of the metaphorical entailments of the source domain can be transposed to the target domain. With this in mind, if we consider LIFE IS A BRITTLE OBJECT/CONTAINER, we can transfer the attribute brittle to FILM/NARRATIVE, and therefore see the effect of the accident that shatters the lives of the characters to be reflected in the fragmentation of the narrative itself. Life for the protagonists was an

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<sup>22</sup> For the full discussion on Conceptual Metaphor Theory see Chapter One

object or container that shatters upon impact during the accident that affects all three and the pieces are left strewn about to be examined by observers in the aftermath. To use an analogy here– the narrative lies shattered like a glass object, within the fragments of which we can see what it was, what happened to it and what it became. Therefore, when we see the structure of the narrative (laid out as a visual), we can see the fragments of the accident in the telling itself. From an understanding of the accident as a metaphor, we come to some inferences that can be made from the multiple image schemas at use with examples from the film and the instances of image schemas that can be inferred from the accident metaphor.

### 2.4.1 Evidence of Metaphor

As discussed earlier, the accident is the inciting incident around which the narratives of the three characters revolve. In this section we will first draw a connection from the common language used to describe an accident and its effect on the lives of the characters to the visual and structural manifestation of the theme in the film.

#### **The Setup: The Journey/ Source-Path-Goal (SPG) Schema/ Containment**

Three characters with three different lives are on a trajectory of their own. Their lives are complete with other people, relationships and their own paths and goals. Christina is on the path to recovery from alcoholism, and her family is supportive, with young, loving daughters and an attentive husband. Their life is that of an upwardly mobile modern nuclear family with a bright future ahead of them. Jack, our second protagonist, is an ex-convict who has found a saviour in Jesus and is on a straight path, even though his family is uncomfortable with the change that borders on fanaticism. His volunteering at the church has given him a sense of responsibility and an invitation to a

tight-knit community of like-minded people. He is so adamant about living a clean life that even when he gets fired from his job, he reacts unlike how he would have before and takes it in his stride. His ex-boss has also offered to get him another job, so the future seems full of possibilities. In the case of Paul, his failing heart is a hanging sword on his head, but his wife Mary, is hopeful and wants them to have children. Paul himself is in low spirits, hooked to a breathing apparatus; he feels like an invalid and doesn't have many hopes for the future. Even so, his life trajectory is set. In describing the lives of the characters before they change, two metaphors come to the fore. The first is LIFE IS A JOURNEY in which everything is set to go on a certain path or trajectory. This is an SPG image schema.

The second interpretable conceptual metaphor is that of CONTAINMENT. Each character's life/relationship is a container, separate from the other with no overlaps or shared boundaries; LIFE IS A CONTAINER (from linguistic usage like '*get out of my life*', '*we are a family unit*'). This container is pristine, whole and discrete. The SPG schema and the containment schema extend to the filmic and the narrative modes, as demonstrated earlier. Just as the characters' lives are contained and that they follow a trajectory, so do a story and the course of a linear film.

### **The Accident**

Peter Bradshaw, in writing a review for the film, puts it succinctly:

‘Like a smashed mirror, Alejandro González Iñárritu’s enigmatic new movie shows us broken lives in shards of fear. At its centre is a terrible accident whose impact has shattered

everyone involved, and the movie itself is picking up the pieces and reassembling the truth.’

(2004)

As the characters go about their normal lives, fate brings them together quite dramatically by way of Jack’s accident that kills Michael and his daughters. A chance encounter: two worlds are colliding quite literally, leaving devastation in their paths. Here, the blame is ambiguous; Jack’s truck zips across the frame just after the girls are seen chasing behind pigeons. Neither the film nor the script clarifies what exactly happened at that moment. What is clear is that when Jack realises what has happened, he panics and drives off instead of stopping and taking the victims to the hospital. This incident throws all three characters’ lives off the trajectory they were following earlier.

Christina’s life is shattered as she has lost her entire family in that accident. Jack, while he was on track to stay out of trouble, is now back in prison and has a massive crisis of faith. He cannot fathom why he won the truck in a lottery and killed Michael and the girls with the very same gift, which he believed was from God. Paul, in the meantime, has been given the gift of Michael’s heart. His life has new meaning and a new purpose. Paul’s trajectory is changed, and instead of waiting for death, Paul now wants to repay the donor’s family for the new lease on life that has been given to him.

Here, we see the containers that were the lives of our three characters are changed. In Christina and Jack’s case, they are now shattered, with Jack unable to bear the guilt of the accident and compounded by the fact that he will not get punished for it. Christina falls back into her old way, her life has no aim, no goal, and all she wants to do is numb her pain. For Paul, the change happens after he meets Christina and embarks on

a relationship with her. Paul's wife leaves him, and his new heart starts to fail. In this way, Paul's trajectory is also changed twice in the course of the narrative. The only way forward for Christina is to avenge the deaths of her family members and for Paul to help fulfil the debt he has to Michael. Jack, unable to bear the guilt, leaves his family and tries to disappear in the anonymity of the desert while he waits for punishment or salvation.

Thus, the container schema and the SPG schema are both transformed by accident: the container is shattered, and the lives of the characters are waylaid from their earlier trajectory. The fragments of the container schema and the SPG, which is now off-course, can be said to manifest in the fragmented non-linearity of the narrative structure.

For Arriaga, the accident has already disrupted the equilibrium of the lives/the narrative flow. The structure of the film has been compared to the image of the moment of the accident frozen in time by Holland (Holland, n.d.). He interprets the film to be like a map then needs to be viewed at one go from a bird's eye view perspective as it were, as though the lives of the characters are laid out one next to the other, and the accident affects the past, present and the future, including the order of the telling of the story.<sup>23</sup>

### **The New Equilibrium**

Only through confrontation, resolution and acceptance do the characters move forward. For Christina, increasingly convinced that killing Jack is the only way, resolution comes in the form of her discovering that she is pregnant with Paul's child, just as Paul himself dies following a clumsy altercation with Jack. For Jack, his resolution comes when he

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<sup>23</sup> The accident affects the past in the sense that it colours our interpretation of the scenes set before the accident, shown after we know about it. Thus, the scene of Christina's daughters in the kitchen becomes more poignant for the audience, knowing that they will not survive. This effect can also be seen in an extreme manner in Gaspar Noe's *Irreversible* (2002) in which the brutality of the murder and the rape casts a pall over all the past sequences of the main characters.

transports the dying Paul to the hospital and turns himself in, only to be set free again, this time with Christina's forgiveness. As it is with Arriaga's writing, the exposition doesn't happen on screen, and we only see a stressed Christina look at Jack briefly before Jack himself is shown as having gone back to his family. Paul's heart finally gives in, and he dies, which in some ways was his trajectory in the first place, before the disruption of his life. In this way, all three characters have resolved their conflict, with Jack and Christina on new paths with new goals.

In a sense, the film itself is a manifestation of the container and the SPG schema when seen at a structural level. One-third of the beginning of the film is more fragmented than the other two parts, and this embodies the after-effects of the accident. The three changed trajectories of the completely unrelated characters come together in the second part, while the third is much more linear in form, with the outlier sequences only serving to highlight the emotions or events in the climax of the film.

### 2.4.2 Supporting Cinematography

In a 2003 interview with *American Cinematographer*, the film's principal cinematographer Rodrigo Prieto offered some interesting insights into the production of the film. He was also Iñárritu's cinematographer for the Mexican film *Amores Perros*, for which he won many awards and acclaim. In this interview, he recounts the techniques used to give coherence to the non-linear structure. The points below are drawn from this interview.

1. The camera work was a raw, handheld style. This was done to create the feeling that the 'camera was present with the actors, moving, breathing and reacting with them' (Calhoun 2003). Handheld camerawork is a popular technique to get the

audience to feel intimate with the characters, emphasised by the shaky effect of breathing. This is also the opposite of a smooth, invisible camera work, and in turn, forces the audience to be aware of the camera and themselves, conveying a sense of voyeurism, of someone else being present in the room (Anderson, Gallese, and Guerra 2020, 94). As the narrative progressed and the characters' lives became unstable, so did the framing and the camera work. Prieto states that they deliberately looked for off-balance framing and too little or too much headspace in the sequences depicting instability (Figure 2.26a and b).

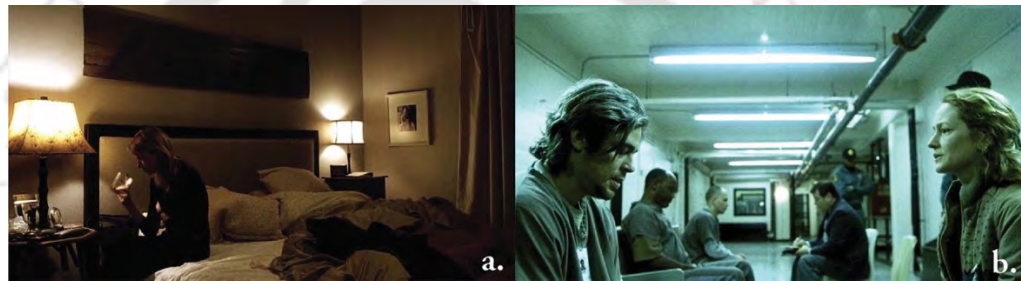


Figure 2.26 Christina after the funeral in Seq. 42 (00:41:05) and Jack incarcerated in Seq. 61 (01:04:16)

2. The camera work was accentuated by a bleach bypass.<sup>24</sup> This technique resulted in a high contrast, grainy effect in the film. This effect plays into the theme of lives being shattered or upended in the aftermath of the accident.
3. It was decided to support the chronological cues in the script, with the use of colour-coding the lights for each character arc. Paul's story is in cool colours with the interior light generally white, Jack's story is a contrast with warmer colours, and Christina's story is presented neutrally. This codification changes when the characters meet each other. Another example is after Paul's heart transplant, Prieto used sunlight sequences to depict that his life was on track now to get

<sup>24</sup> Bleach bypass is a chemical process in which there is a partial or a complete omission of the bleaching step during the processing of a colour film stock. This results in an increased contrast and graininess of the resultant image (Van Hurkman 2014)

better. He did the same with Jack and the church sequence in the beginning, going so far as to light the actor and leave the others with him unlit to show some kind of a religious purpose. Further, he stopped lighting Jack that way after the accident (Figure 2.27).



Figure 2.27 Jack's Lighting (left) before the accident (00:03:42) and (right) after the accident In 21 Grams (00:56:39)

4. Different film stock was used as barometers for characters' emotional health.

When things were looking up for the characters, a finer grain stock was used. As things start to get complex, like after the accident, coarser film grain is used to give it a gritty feeling.<sup>25</sup>

5. Iñárritu preferred to have a shallow depth of field because it is essential for him to create a sense of danger by the visuals coming into and going out of focus.

These insights indicate the following metaphors used by the director in the film.

FINE GRAIN/HIGH RESOLUTION IS EQUILIBRIUM (Normal or Happy)

COARSE GRAIN/LOW RESOLUTION IS DISRUPTION (Abnormal or Sad)

FOCUSED (clear vision) IS HAPPY/ GOOD

OUT OF FOCUS (unclear vision) IS SAD/ BAD

<sup>25</sup> Louis Giannetti describes how Director Ingmar Bergman created a metaphor for psychological disintegration of the protagonist in the *The Passion of Anna* (1969) (Giannetti 1972)

From the metaphor STRONG EMOTION IS BLINDING (Lakoff et al. 1991), '*Her judgement was clouded by grief*' (ibid), and '*Impediments to Awareness are Impediments to Seeing*' from base metaphor UNDERSTANDING IS SEEING (ibid, 86)

#### OFF-BALANCE FRAMING IS BAD

From the metaphor EMOTIONAL STABILITY IS BALANCE (ibid, 150)

SUNLIT/ BRIGHTLY LIT CHARACTERS ARE HAPPY (BALANCED)

POORLY LIT CHARACTERS ARE UNHAPPY (UNBALANCED) (DARK IS BAD)

From Source Metaphor LIGHT IS GOOD (ibid, ), HOPE IS LIGHT (155), GOODNESS IS LIGHT, BADNESS IS DARK (193)

Drawing from the Master Metaphor List, one can clearly see the connections between the metaphoric techniques and the embodied schemas at work.<sup>26</sup> When things are brightly lit, there is clarity and a sense of balance. With darkness comes uncertainty, fear of the unknown, despair and hopelessness. The base metaphor at play here is LIGHT IS GOOD and DARK IS BAD, and it is well established in CMT. Similarly, CLEAR VISION IS BALANCE, and UNCLEAR VISION IS IMBALANCE. This comes from the embodied experience of having clear vision when you are healthy and unclear vision, out of focus or blurred when you have a deficit. This schema explains both the experiments with the grain of the film stock and the shallow depth of field and the lighting conditions. While Prieto does admit that some of these decisions came by accident and not by design, I suggest that the filmmakers are reacting to the medium with their own embodied experiences of the world. I, therefore, submit that the metaphoric entailment

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<sup>26</sup> For more detail see Chapter One

evident in the handling of the cinematographic and editing processes points to embodied image schemas and CMT at work in *21 Grams*.

### 2.4.3 Critique

Having performed an extensive study of the film text, the debate around it and the process of the making of the film, I offer some criticism at this juncture. The film is considered a success in all reports, and an overwhelming majority of the reviews are glowing encomia on the style, direction, acting and treatment of the film. In the face of this, a critique seems necessary to draw attention to the things that do not work as a point of debate for future filmmakers and researchers alike.

As mentioned above, in interviews, Guillermo Arriaga claimed that the title of the film was a metaphoric interpretation of the weight of one's death on the loved ones left behind, which was supported by Alejandro Iñárritu. We find this claim one-dimensional and lacking in awareness of both the theme and the profundity of the medium filmmakers chose to work with. For example, 21 grams, in realistic terms, is 1/4<sup>th</sup> of a cup or five teaspoons approximately of sugar. This seems minuscule when compared with the sum of a person's lifetime spent in the company of their loved ones. When Arriaga says, 'I really don't know if losing 21 grams at the exact moment of death is a scientific fact. I used it as a metaphor of the weight a dead person has over those who remain alive. There are loved ones who, after their death, remain with us all of our lives. We miss them every single day, and, of course, life goes on, but their absence follows us forever' (2004). The metaphor is a strained one. The sheer nominality of the actual weight of 21 grams diminishes and devalues the intensity of the psychic influence of the dead on the living. It is not as if the audience is unaware of the smallness of the quantity

or its real-world implications. Further, the decision to reinforce the century-old failed experiment of a physician who was much criticised in a realistic genre that cannot be considered science fiction or fantasy, does not seem to be creative or poetic enough for striking the mass audiences' imagination.

Literary critic Holland has a different interpretation of this: 'The title sets up a contrast between a physical reality that you can weigh in grams and a spiritual or psychic reality that you can't measure, you can only experience' (Holland, n.d.); but again, we would like to point out that without additional discourse accessible to the audience at the moment of watching the film, any number of complex interpretations can be formulated. Paul, on his deathbed, says that he's heard the body loses 21 grams at the moment of death and wonders if that is the weight of the soul. He then wonders what kind of things weigh 21 grams, thus making it clear in exposition that the weight is of the soul and not of grief. In a way, the ironic juxtaposition of the weight of the soul which is so minuscule, and the massive devastation left behind in the lives of others makes more sense (perhaps we can chalk this up to English not being Arriaga's first language).

Furthermore, the fragmentation of the narrative very clearly could have been linked to the accident at its crux, which we believe was an oversight. When it comes to structure, many film critics and scholars find the style bordering on impractical and believe that the story would have worked better in a linear format (Ebert 2003; Berardinelli n.d.; Denby 2003). An association by design with the accident and the fragmentation would possibly have reinforced the style and raised lesser objections. Nevertheless, it worked on the strength of its stellar cast, all three of whom went on to reach great heights in their craft.

One drawback of the fragmentation, which has also been observed by Roger Tucker and Aronson, is that the film has become entirely exposition heavy. The characters are encumbered by having to deliver verbal exposition after exposition, given the lack of narrative space to develop dramatic situations within which information can be deduced instead of talked about. Aronson suggests that such films use 'non-linearity tricks to fix up its inherent plot problems because told chronologically, it is episodic, unsuspenseful and meandering, with a lengthy, low-jeopardy set-up, tangential stories and big gaps in time' (2010, 370).

The experiments with the film grain, the changing time of day or the character-specific colour temperature did not produce the effect that the makers intended, as the fragmentation of the narrative took away the linearity, which would have otherwise shown the change over time or registered better for the audience. In our research, not a single reviewer or film critic had discerned the techniques till Prieto himself spoke about it in the interview cited above. This is not a case of the technique being so good that it was rendered invisible but rather the overwhelming fragmented style that caused diffusion. Although we will grant that the light and colour did register as an overall tone of the film and its subject, with many glowing reports of the treatment and a rare scathing comment on the visual style 'as dank and ugly as pieces of scrap metal lying in a scummy pond' (Denby 2003).

In conclusion, we submit that only a thorough taking apart of a film text can bring forth such observations and thus, the process then becomes a necessity for the study of the medium.

## 2.5 Conclusion

The exhaustive breakdown of the film narrative and the insights gained from making connections between Embodied Image Schemas and CMT served to answer the four questions that were formulated for this chapter.

In answering the first—‘Is there a design (intended or accidental) to the fragmentation of the narrative in *21 Grams*?’—I find that despite the creators themselves admitting that some of their decisions came from accident rather than design, the underlying metaphoric entailments go towards showing that their decisions were being taken from a universal understanding of embodied conceptual metaphors. While the metaphor of the accident plays perfectly into the fragmented non-linearity of the telling, it seems there is evidence of this being a coincidence than it being entirely by design. We propose that this design by accident is not an arbitrary co-incidence but is informed by the filmmaker’s embodied experiences of the world which manifest as metaphorical substantiations. The evidence for this is clear from the connections we brought forth from metaphors, image schemas and their manifestations in the design decisions. The same conceptual metaphors and image schemas are accessible to the audience and thus, the filmmaker may be able to reach the viewer by the use of these universal concepts in a deeper connection. Arriaga did attempt to do something similar with his next film, *The Burning Plain* (2008), with not as much success as *21 Grams*. Of course, whether a film is successful or not has an infinite number of variables, and it is difficult to predict the outcome as such. We, therefore, conclude that the film is designed (partly by accident) and serves the purpose of foregrounding the content via the form.

In the second query—‘How are the fragments connected to each other in the structure?’—the research found that the fragmented narrative is predominantly linear and the non-linear outlier fragments are connected by transitions which either create a conflict or a linkage, eventually creating a flow all across the non-linear fragments and the NLN is then made easier to follow. As described earlier, the textual cues help form mental models and help the audience follow the narrative even in highly non-linear structures.

Thirdly, the NLN structure is related/ connected to the theme of the film via the metaphors and image schemas identified after the analysis of the data extracted from the breakdown of the narrative. The fourth question is also answered by the description of the production techniques used and the analysis of the narrative structure, which led to the conclusion that only the first third of the film is highly fragmented, like the aftermath of an accident. The rest eventually comes together to be more or less linear in form.

This interpretative analysis of the narrative was able to build the connection between the CONTAINER SCHEMA and the SOURCE-PATH- GOAL SCHEMA and the film narrative to demonstrate that the ACCIDENT metaphor indeed lies at the heart of the film. Along with the transitions, the cinematography, lighting, colours and grain of the film stock were used by the production team to give chronological cues for the different phases of the narrative, which are then jumbled up in the non-linear structure. These were also proven to be derived from embodied metaphorical entailments of the base schemas such as LIGHT IS GOOD, DARK IS BAD etc. In this researcher’s opinion, the highly fragmented nature of the narrative led to the effectiveness of these techniques being much lower than if they had been used for a linear presentation. I assert instead that the flow of the narrative comes from the fact that the landmarks for a 3-Act structure

for any of the three-character arcs did not stray far from the conventional presentation making it easier to understand the story despite the complex arrangement.

In conclusion, I submit that *21 Grams* does have the accident theme present in its narrative design and form, and this comes to the fore with the usage of metaphors and embodied image schemas. Further, I observe that in a seemingly fragmented narrative like *21 Grams*, the production team, led by the director and the writer, designed ways in which to ease the viewing of such a complex presentation. I also surmise that the assumption of a linear narrative in a 3-Act structure, whether intentional or not, is crucial for the non-linearity of the narrative presentation to be comprehensible to an audience.

In the next chapter, I analyse the film *Arrival* in similar depth to demonstrate the metaphor of TIME IS A CIRCLE/CYCLE in its narrative structure.

## Chapter Three

### *Arrival* (2016)

In the previous chapter, I looked at the metaphors of CONTAINMENT and, to some extent, the SPG image schema in relation to the manifestation of the accident theme in *21 Grams* (2001). This chapter deals with the film *Arrival* (2016) and attempts to demonstrate how the conceptual metaphors of time manifest with comparisons between the written script of the aliens, their perception of time and the structure of the film edit or the film narrative. Since the film has been adapted by Eric Heisserer from an original novella by Ted Chiang, it is important to study the source text in order to understand the difference between the literary narrative and the cinematic narrative in terms of narrative structure and the metaphors used. Furthermore, to understand the relationship between the metaphor, the image schema, and the narrative structure, the following research questions are posed in this chapter:

1. Is there an identifiable image schema(s) in the structure of the narrative of the film and the original story?
2. How does the schema manifest in the structure of both the film and the story?
3. How are the metaphor and the image schema linked to the theme of the film narrative?
4. How does the metaphor foreground the theme (time)?

As I did with *21 Grams*, I break the film into sequences that can be analysed for their non-linear presentation. After visualising the edit as a graphic, similarities are drawn between the structure of the film narrative, the resultant visual pattern and the conceptual image schema at work. In this chapter we also elaborate on the metaphors used to flesh out the central theme of time in the film and identify the source-path-goal (SPG), drawing from the works of Lakoff and Johnson as referred to above.

### 3.1 Story v/s Narrative

The film selected for this study was unique among the film texts studied for this project in the sense that it was adapted from an original novella. The novella also has a non-linear structure with a literary style that indicates the difference in temporal sequences. We therefore looked at the story and the film in conjunction with each other to examine and compare the various attributes of both.

#### 3.1.1 The Story (Fabula)

*Arrival* (2016) directed by Denis Villeneuve was adapted by screenwriter Eric Heisserer from a short story called *Story of your Life* (1988) by Ted Chiang. Chiang wrote the novella which was published in a science fiction series called *Starlight 2* and then in his own collection of short stories in 2002. Critically acclaimed, the work of science fiction was nominated for the Hugo Award for Best Novella and awarded the Nebula Award for best novella in 2000. The author counts his interest in variational physics amongst many things as an inspiration for the story (Chiang 2016).

The original story is a first-person narrative written in parts like a letter by Louise Banks, the protagonist, to her daughter Hannah. The author uses a mix of different tenses to weave the idea of non-linearity in the narrative with Louise going back and

forth between past, present and future while addressing Hannah. Within this is the story of how the aliens landed on earth and contact with whom changed Louise's perception of time by giving her the ability to see the future as memories (just the way she can remember the past in terms of seeing memories). There are 18 instances of such future-memories (henceforth FM) that Louise shares, including the first and the last sequence. While the backbone of the story or the main narrative is about Louise's work with the Heptapods, the FMs of her daughter which are written in future tense punctuate the telling regularly.

The literary text is a leisurely exploration of Louise's recruitment by the military and her subsequent interaction with the alien species called the Heptapods who land on earth in 112 locations. She meets physicist Gary Donnelly (Ian Donnelly in the film) who becomes her partner in their interactions with the aliens while they try to communicate and understand the Heptapods' purpose on earth. Of particular note is the absence of a cinematic build-up to a climax where Louise must save the world: the axis around which the film adaptation revolves. Instead, there is a quiet realisation that Louise, through her learning of the written language of the Heptapods, has gained an ability to see her own future and, through philosophical deliberation, concludes that she has no urge to rebel against it or publicise it and instead is filled with an instinctive and enthusiastic drive to fulfil the obligation of the future. The Heptapods seem to not have any demands of the humans in the story, except to observe and teach their language / sciences to them. As Louise becomes fluent in their written communication, she starts to gain knowledge of the future, as if it just existed all along. She realises that for the Heptapods, all communication is performative, in the sense even with the foreknowledge of the outcome they had to act to make that what they know come true.

‘Instead of using language to inform, they used language to actualise. Sure, Heptapods already knew what would be said in any conversation; but in order for their knowledge to be true, the conversation would have to take place.’

(Chiang 2016, 164)

Just as the Heptapods act to create their future, Louise initiates the last exchange with the species before they leave earth, knowing exactly how it will play out. The Heptapods leave earth, just as abruptly as they had come, leaving behind only their language and the information shared with the world’s scientists.

The story has an interesting structure that revolves around the usage of tenses to differentiate between the past, the present and the future. The first and the last sequence are the only story events written in the present tense in which Louise is described as dancing with her husband (who is never explicitly mentioned as Gary) just before he asks her if she wants to have a baby (who will be Hannah when she is born). This is in the form of a beginning and ending of a letter to Hannah from Louise. Ted Chiang uses this framing sequence to locate the rest of the narrative in this time with the recollections of her daughter’s future life using the future tense and the ones with the Heptapods using past tense, thus firmly situating us in the present moment of the evening with her partner:

‘Your father is about to ask me the question. This is the most important moment in our lives, and I want to pay attention, note every detail. Your dad and I have just come back from an evening out, dinner and a show; it’s after midnight.’ (2016, 111)

‘To be fair, the Heptapods were completely cooperative. In the days that followed, they readily taught us their language without requiring us to teach them any more English.’ (2016, 128)

‘I remember a conversation we'll have when you're in your junior year of high school. It'll be Sunday morning, and I'll be scrambling some eggs while you set the table for brunch.’ (2016, 129)

The story's structure is like Louise's newfound ability to access her past and future memories as needed. The novella has a more philosophical approach towards the concept of non-linear time. The Heptapods already know the past, the present and the future. For them, there is no free will or choice, but it doesn't seem like an imposition because they feel compelled to follow the path they see. After learning the Heptapod language, Louise experiences time in a similar manner. This is explained in the story when Louise is out buying groceries and sees a salad bowl, which in the future will fall on her daughter's head and leave a scar. While she knows the mishap will happen, she feels no compulsion to act against what will come; the action of buying the bowl is natural in her mind. The story ends with Louise accepting her husband's idea of having a baby despite knowing Hannah will die in a rock-climbing accident, thus ending the framing sequence.

What is of note here, is that there is no mention of the Sapir-Whorf Theory from linguistics that is invoked and expanded upon in the film. Further, the world outside of the story doesn't exist, there is little other than the three central characters and the aliens that feature in the sequences. Within the structure, the FMs do not appear in a motivated

manner, but randomly and have little or nothing to do with the sequence before or after.<sup>1</sup> There is no deceit on the part of the author, the changing tenses indicate that this isn't a linear story, unlike in the film, in which the audience is deliberately misled about the future memories. The first time Louise acknowledges that she knows the future is in the last ten pages, after the salad bowl incident. The story-Louise uses the analogy of a column of ash to describe how she experiences her memories of the future after she learns the language. This is discussed further below. For the moment, it would be appropriate to turn to the narrative.

### 3.1.2 The Narrative (Syuzhet)

Like the novella, *Arrival* the film begins with a short montage which reads like a prologue, in which linguist Dr Louise Banks and her life with her daughter Hannah—from the child's birth, early youth and eventual death in her teens due to an incurable disease is depicted. The narration in Louise's voiceover addressing her daughter is superimposed upon the montage. After the contextual montage, the narrative proper begins, following a conventional structure.

The central narrative revolves around the arrival of alien ships on Earth and Dr. Banks' recruitment by the military to help communicate with the aliens. Here she meets Ian Donnelly (Gary in the story), a physicist with whose help she quickly establishes a rapport with the Heptapods. Louise teaches the Heptapods English, and they, in turn teach her their written language. As she communicates with the aliens, she begins to have

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<sup>1</sup> The first exception is on page 133 when she asks Gary to have patience before they can ask the Heptapods about mathematics, and immediately the following sequence is about Hannah not having any patience when she was a child. The second is when Louise uses a term, she hears from Gary in the past to help Hannah in the future. The non-zero-sum game term has also been used in the film to show Louise's growing realization that she can affect both their past and her future (149–153).

visions /memories (henceforth V/M) of her life with her daughter. Unlike the story, there are no tense markers here to indicate as such and the viewer doesn't know these are visions of the future, like the FMs from the story. In fact, they echo the prologue when we are shown the same girl in different situations with Louise. This causes the viewer to assume that Louise has a tragic past that might motivate her actions. The viewer understands only later that an immersion in the Heptapod's language affects her ability to view time as linear, resulting in her gaining the ability to see the future as memories. When the pressure of communicating with the aliens coupled with the V/Ms starts physically affecting her, Ian asks her if learning the alien language is the cause. He refers to the Sapir-Whorf Theory, which posits that total immersion in a foreign language can rewire the speaker's brain, to which Louise protests that even if that did happen, it would not affect her ability to do her job.<sup>2</sup> Besides the physical exhaustion and emotional effects of the V/Ms, Louise's character in the story timeline gives no indication of the memories being unusual until just before the climax when she articulates her confusion to the Heptapod about not knowing who the little girl from her V/Ms is. Soon after this, the present timeline and the V/Ms of the future start to intersect in the form of knowledge that Louise can pass either to her future self or from the future to her past self.

Subsequently, the connection between the Heptapods and Louise is broken when some zealot soldiers decide to blow up the ship. Now cut off from the aliens, Louise is able to reach into her future self to access for herself the knowledge of the entirety of the Heptapod language. A little while later, she seeks help from her future self to get in touch

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<sup>2</sup> In reality, the hypothesis of linguistic relativity also somewhat misleadingly known as the Sapir-Whorf Hypothesis (since Edward Sapir and Benjamin Lee Whorf never published this view as a hypothesis) suggests that the language one speaks determines (what is called linguistic determinism) or influences one's thoughts and is a mild version of the one posited in the film.

with the Chinese military head, General Shang, who is about to declare nuclear war with the alien ships and thus help herself in the present, avoiding a possible nuclear confrontation with the aliens and the governments of the world's nations.

The film ends with Louise armed with the knowledge of the future and how compelled she feels to stay on the path prescribed by the memories of it. In the last sequence, Louise is asked by Ian, now her husband, in the very same sequence we see at the beginning of the film, if she wants to have a baby together. She accepts despite knowing that they will divorce, and that the daughter born to them will eventually die of a rare disease (changed from an accident in the story). Thus, the narrative comes to a full circle in the context of the film structure.

The central storyline is imbued with the idea that learning the alien's language changes Louise's perception of time. The aesthetic choice of translating a linear textual narrative into a non-linear filmic representation which deceives the audience is unique to the film and the screenplay writer, Eric Heisserer. Nevertheless, the non-linear film narrative cannot escape the fact that the audience and form are still bound by time, and this experience dictates how the story is understood. As will be shown below, the filmmakers use interesting *mis-en-scène* techniques and editing to quietly hand us all the information at once, repeatedly, just like the alien language that is at the core of the story. While Louise learns the alien language, she also learns how to perceive time in a new way, only connecting the dots till exposition towards the end of the film. In hindsight, the signs are all there in the form of visual and aural cues.

### 3.1.3 Adapting to Script

Screenwriter Eric Heisserer first wrote the script in 2015. Finding a producer was a task since he was known for horror film scripts and felt that producers hesitated while trusting him with a genre that was so different. He describes sci-fi author Ted Chiang as a rare find, in that he sees Chiang is writing compelling fiction that can ‘educate the reader about theoretical physics and leave them sobbing at the same time’ (Heisserer 2016b). Heisserer’s first draft itself was mapped out as a non-linear narrative. Director Denis Villeneuve got on board the project and shared the author and the screenplay writer’s vision. The film was released in 2016 and went on to make a worldwide total of 203.4 million dollars against the budget of 47 million dollars (*Arrival*, n.d.). Both the audience and critics rated it highly and it went on to win several nominations and awards for best sound editing, adapted screenplay, cinematography, editing, production design, sound mixing, best original score and best actress. *Arrival* was seen as surprisingly intellectual and philosophical for a science fiction film; the experiment with the structure appealed to the viewers who reportedly relished the twist in the end (Turan 2016).

While writing the script, Eric Heisserer faced a unique challenge. Filmmakers are taught to avoid overtly verbal expositions of information, but Heisserer discovered the opposite while interacting for research with linguists and physicists: ‘Smart people are constant teachers, and I had to unlearn my own rule about avoiding moments where a character stopped to explain or define something’ (Heisserer 2016b). In the film, Louise and Ian both present their theories as expositions. Generally, films avoid verbal expositions of information. One aspect of *21 Grams*’ critique as we show above was its over dependence on verbal expositions. While expositions in other films sometimes seem

to be too on the nose, in *Arrival*, these suit the characters who are teachers and scientists and it felt natural to Heisserer that the characters do so.

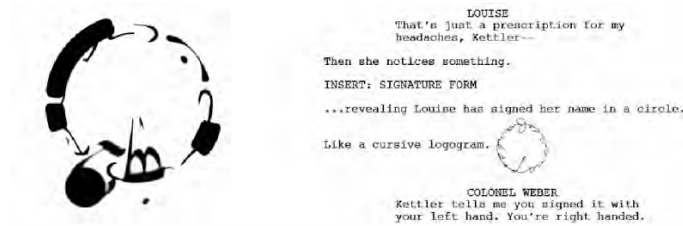


Figure 3.1 Detail from Heisserer's early drafts of the film *Arrival* (Heisserer 2016b)

Heisserer also used graphics of the alien logograms in the bound script to illustrate certain points about the language used in film (Figure 3.1). He found that words alone were not enough to convince producers or studio executives about the usability of a certain scene or dialogue in the film (ibid). This makes sense since the script is only the first document that starts the process of the film and eventually the story is told using images and sound.

The draft of the script available online is one of the final drafts (Heisserer 2015) and the same copy has been uploaded to several websites. The title page is labelled 'Final Shooting Script' dated August 20<sup>th</sup>, 2015, which is approximately one month from the end of the shooting schedule, which started June 7<sup>th</sup>, 2015. A comparison of the script and the film makes it clear that this is possibly the last draft that was used since all the scenes from the film are in the script, plus some that were omitted either during production or at the editing table. The script mentions many omitted scenes, blank except for the scene numbers. The pages of the script have several 'colour' label watermarks of the earlier drafts (Blue, Yellow, Pink, Goldenrod, Buff); a common

practice in screenplay writing is to label drafts with colours.<sup>3</sup> In this case, we can infer that the original script underwent at least six revisions, and the final manuscript contains pages from all the versions.

### 3.2. Analysis of Film

The methodology for the analysis of a film narrative for the purpose of metaphor identification has been formalised in two ways by now in the previous chapter. The first method was for an image-based narrative for the film *Disco Pigs* (2001), and the second was for the fractured narrative structure of *21 Grams*. What is clear by now is that the process needs to be tailored for each film according to the nature of the non-linearity. With *21 Grams*, the main crux of the process was making sense of the completely non-linear arrangement of the sequences and to identify the attributes that create the flow of narrative from one sequence to the next. For *Arrival*, this process was modified, and the goals were reformulated.

The first step in the process is a rigorous viewing of the film under scrutiny. Along with the viewing, the researcher needs to engage in notetaking/diagrams which help record first impressions as a member of the audience (Figure 3.2). Post the viewing, a reading through of the secondary material, including but not restricted to, information on the director, the screenwriter and other crew's viewpoints, critics reviews and general observations about the film from reputed critics, online magazines or databases like IMDb or Rotten Tomatoes etc. helps with the validation of the initial observations.

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<sup>3</sup> The Writers Guild of America suggests a colouring standard which starts with White for Original, Blue for the First Draft Pink for second and so on till Cherry which is the eighth draft and then on the order repeats with the added word 'second' to keep track of the many versions of the screenplay that are written before production. (Simpson 2019)

Finally, an articulation of a rough hypothesis before getting into the actual exhaustive analysis is done.

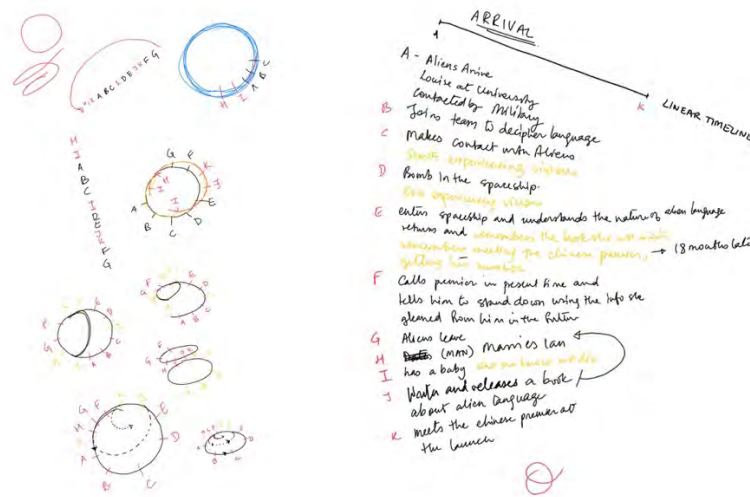


Figure 3.1 First Sequencing and sketches for Arrival

In *Arrival*, the very first viewing led to some interesting reflections about the structure of the film, along with a lot of visual cues that lead the viewer to make certain assumptions.<sup>4</sup> A quick sequencing helped draw the very first visualisations of the narrative structure (Figure 3.3).

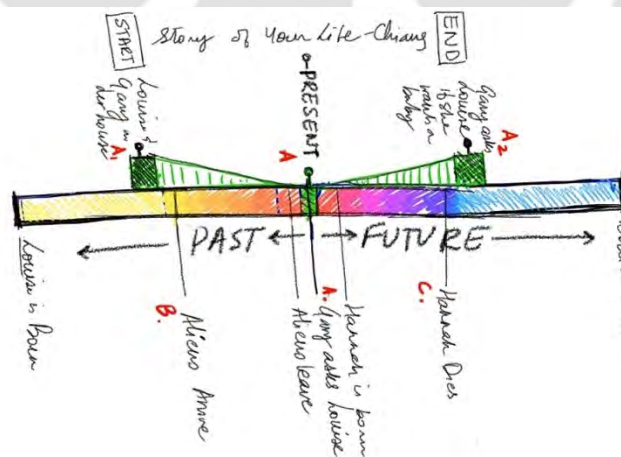


Figure 3.2 Freeband Structure from Arrival

<sup>4</sup> I had watched the film during its theatrical release and the circularity of the narrative was already evident then.

Added to this, the reviews of the film and interviews with Heisserer or other crew often spoke about the circularity of the story or the loop in the narrative (2016a). The hypothesis thus constructed was ‘The looping/circular structure of the narrative is similar to the written language of the Heptapods and their understanding of time’. This structure is quite obvious in the watching of the film as the first sequence is also repeated at the end like a framing sequence. The initial identification of the image schema at play is the key to the formal process of analysis that is done further ahead.

### 3.2.1 The Process

The film is a typically mainstream manifestation and is therefore much simpler in structure than *21 Grams*, with much of the narrative presented in a linear progression. The non-linear sequences are motivated by the story and are hence clustered around certain segments. Therefore, similar to the earlier breakdowns, a copy of the film was accessed on an editing platform (Adobe Premier Pro).<sup>5</sup> It was then annotated for where non-linear sequences were and then each shot in these sequences was cut and labelled. After this, the shot cut list was exported to a spreadsheet format and each sequence was annotated with the following details: Scene Number, Duration, Video Description, Audio Note, BG Music Note, Sequence Label, Type of Shot, Camera Movement and Type, etc. Following this exercise, it was easy to see the data visualised in different ways for the purpose of comparison (Figure 3.4).

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<sup>5</sup> For this film, we used Adobe Premier Pro®, a paid subscription, instead of Da Vinci Resolve which was opensource. This was due to DVR’s heavy dependence on memory in the operating system. Any editing software can be used for the film breakdown if it has an automated shot detection plugin. Post *Arrival*, I have cut some films manually, as there was no need to go granular on the breakdown due to the simpler nature of the films.

| A               | C             | E   | F                      | G                      | H                  | I         | J            | K                      | L                | M                   | N                      | O                  | P                    |
|-----------------|---------------|---|------------------------|------------------------|--------------------|-----------|--------------|------------------------|------------------|---------------------|------------------------|--------------------|----------------------|
| Sequence Number | Start TC      | Description   | Dialogue               | Type: Linear/NonLinear | Linear Progression | Audio Cue | Visual Cue   | BBM                    | Linear Sequences | Camera Movement     |                        |                    |                      |
| 1               | 1:00:01:17:22 | Title sequence  |                        |                        |                    | D         |              |                        |                  |                     |                        |                    |                      |
| 2               | 2:00:01:55:19 | The view of the lake, two wine glasses, bottle. Same as shot in the last sequence.                                  | VO: Story begins       | NL                     | 104                |           |              | Instrumental           | I                | Tilt Down, Track in | Top to Bottom, Zoom in | Smooth, Mechanical | Framing, Window      |
| 3               | 3:00:02:30:21 | Louise holding baby's hand in hers, the nurse comes to take the baby, baby starts crying and Louise takes her back. |                        | NL                     | 113                |           | Wedding ring | Instrumental Continues | J                | Handheld            | NA                     | Handheld, jerky    | Fuzzy, Low DoF, Blue |
| 4               | 4:00:03:03:10 | Hannah Age 6 Playing with Louise  |                        | NL                     | 126                |           | Wedding ring | Instrumental Continues | M                | Handheld            |                        | Handheld, jerky    | Fuzzy, Low DoF, Blue |
| 5               | 5:00:03:13:09 | Daughter Age 8 Louise putting her to sleep, Wedding ring visible  | H Says I love you      | NL                     | 130                |           |              | Instrumental Continues | N                |                     |                        | Handheld, jerky    | Warm Yellow          |
| 6               | 6:00:03:14:19 | Hannah Age 12 saying I hate you to L  | Hannah says I hate you | NL                     | 161                |           |              | Instrumental Continues | P                |                     |                        | Handheld, jerky    | Fuzzy, Low DoF, Blue |
| 7               | 7:00:03:18:09 | Hannah Age 12 Reading with Louise   |                        | NL                     | 162                |           |              | Instrumental Continues | P                |                     |                        | Handheld, jerky    | Fuzzy, Low DoF, Blue |
| 8               | 8:00:03:22:20 | Hannah Age 12 with doctor   |                        | NL                     | 163                |           |              | Instrumental Continues | P                |                     |                        | Handheld, jerky    | Fuzzy, Low DoF, Blue |
| 9               | 9:00:03:28:20 | Louise getting Hannah Diagnosis from doc  |                        | NL                     | 164                |           |              | Instrumental Continues | P                |                     |                        | Handheld, jerky    | Fuzzy, Low DoF, Blue |

Figure 3.4 Detail from film breakdown spreadsheet, Appendix 6

### 3.2.2 Sequence Breakdown

In *21 Grams*, the sequence breakdown was done based on temporal and narrative units which contained mostly scenes. For *Arrival* the same categorisation of division cannot be used as the style of non-linearity is different from that of *21 Grams*, in that there seems to be a motivated design in the order of the sequences which are composed of both shots and/or scenes. The non-linear sequences come at unequal intervals and when they are sometimes chunked into scenes or appear as single shots. For example, the starting montage is annotated as separate sequences which contain both scenes and shots, whereas the interspersed shots of Louise's V/Ms in the rest of the film which she experiences while communicating with the aliens are labelled as shots from a particular sequence in the linear telling (Figure 3.5 and 3.6).

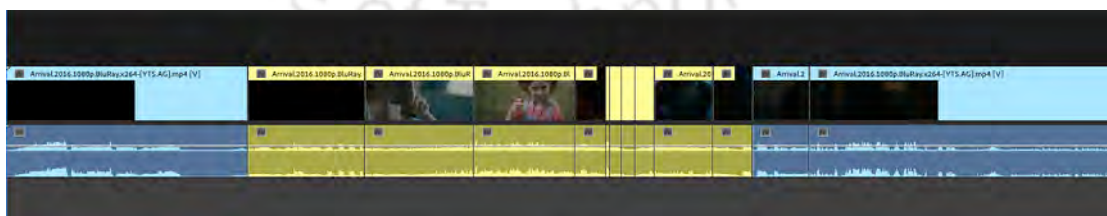


Figure 3.5 First sequence in the film, the ones marked blue are linear and yellow are non-linear.

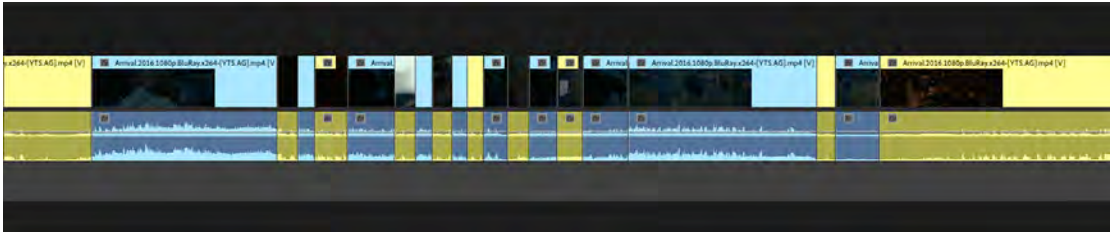


Figure 3.6 Sequences towards the climax

In the breakdown, the film runs to 01:56:15:23 (1 hour, 56 mins, 15 seconds and 23 frames). This exact value may differ as the digital format of the acquired film format is not standard and neither is the processing on the edit platform, but this is adequate for the purpose of analysis. The film was broken down into shots first using Auto Scene Detection. This gave us 968 shots including the title and the end credits. The shots were categorised first as linear and non-linear. Of 968 shots, 863 come in a linear progression. Therefore about 89.3% of the film is linear in presentation with the rest coming in as flashforwards in the form of single shots or small scenes. The style of non-linearity in *Arrival*, as mentioned above, is not as complex or fragmented as the one in *21 Grams*. The non-linear sequences/shots appear as clusters in only over 10% of the film. We therefore don't see the need to look as closely at each shot or scene in the rest of the linear part of the film as was done with *21 Grams*. Instead, we looked at story events and only non-linear shots or scenes as they appear in the narrative progression.

Further, for *21 Grams*, the start frame of the first shot of a sequence and the end frame of the last shot of the same sequence was looked at for sequence transitions to find connections and the flow of the narrative between non-linear sequences. In *Arrival*, since the film is largely linear and easy to comprehend, we look for the visual or aural cues that the filmmakers have designed to either lead or mislead the audience. Also, as discussed earlier, while Eric Heisserer added transitional elements before the initial non-linear sequence in the script, all the transitions themselves did not make it to the final cut. We

believe the motivations for non-linear sequences are largely justified and more detail about each can be found in the sequence analysis Appendix 7 (Figure 3.7).

| Sequence Number | End TC      | Description  | Type Linear/NonLinear | Linear Progression | Audio Cue                                       | Visual Cue                       | Linear Sequences |
|-----------------|-------------|--|-----------------------|--------------------|---|----------------------------------|------------------|
| 36              | 00:50:20:05 | Louise outside the CC tent, no indication that shes seen anything. Next shot, soldiers watching louise suspiciously and then exchanging a look |                       | 24                 |   |                                  | C                |
| 37              | 00:50:51:18 | Base doctors performing checkup on Louise. Doctor goes and briefs colonel. Colonel agrees to let Louise continue.                              |                       | 25                 |   |                                  | C                |
| 38              | 00:51:20:11 | Soldier trying to calm down his hysterical wife on the phone   |                       | 26                 |   |                                  | C                |
| 39              | 00:51:46:04 | Louise analysing the logogram. As she draws a line across the page, she sees another V/M   |                       | 27                 | Pencil on Paper sound signals the start of a VM |                                  | C                |
| 40              | 00:51:50:23 | Hannah Age 8, in the reeds   | NL                    | 140                | NS  |                                  | N                |
| 41              | 00:51:54:23 | Louise pauses while drawing.   |                       | 28                 |   |                                  | C                |
| 42              | 00:51:57:14 | Hannah Age 8 looking at a caterpillar in the reeds   | NL                    | 141                | NS  |                                  | N                |
| 43              | 00:52:00:21 | Louise at the desk, shot from back   |                       | 29                 |   | Camera track in like realisation | C                |
| 44              | 00:52:03:18 | Hannah Age 8, dipping a stick in the water   | NL                    | 142                | NS  |                                  | N                |
| 45              | 00:52:07:23 | Louise at the desk, shot from back   |                       | 30                 |   | Camera track in like realisation | C                |
| 46              | 00:52:08:15 | Hannah Age 8, dipping a stick in the water, flipping a rock over   | NL                    | 143                | Rock in water overlap signals the end           |                                  | N                |
| 47              | 00:52:22:23 | Louise looks up as if she notices a sound  |                       | 31                 |   |                                  | C                |
| 48              | 00:55:47:09 | Montage with Ian V.O and interactions with Heptapods, explanations about the nature of their language  |                       | 32                 |   |                                  | C                |

Figure 3.7 Scene Details in Arrival; Appendix 7

For the sequencing, we divided the film first into linear story events that were labelled alphabetically.<sup>6</sup> The reason behind this decision was that each sequence comprises a minimum of one and a maximum of two shots or scenes. Therefore, numerical labelling was used in the sub-labelling of scenes within each sequence. This helped with the further visualisation of the image schemata of the film structure. Further, the rest of the

<sup>6</sup> Gerard Genette in *Narrative Discourse* (1980) uses a similar alpha numerical labelling of narrative events in the *Iliad*, in which the letters indicate the story order, and the numbers indicate the narrative order.

shots were grouped into scenes broken by the V/Ms, and the numbering continues past these, giving us 169 scenes, which were annotated with story descriptions in detail.<sup>7</sup>

Unlike the earlier film, *Arrival* is a story-world non-linear presentation, and on the surface of it, there is no true linear presentation of the narrative. This is because one cannot linearise the film and make sense of it as Louise gets essential clues to solving the central conflict at the climax by reaching out to her future self. Therefore, the narrative will not work on a linear timeline. However, disregarding the need for coherence, one can theoretically linearise the sequences as they happen in Louise's life. This was done with the narrative 'beats' identification process. For the purpose of the study a rough linear listing of sequences was done, enabling us to label the sequences as they happen in Louise's life. The table (3.1) below details the sequencing based on story beats.

| SEQ. | DESCRIPTION   | DURATION    |
|------|---|-------------|
| A    | Louise goes to university, aliens arrive on Earth, Louise goes home, contacted by military  | 00:12:29:14 |
| B    | Louise is taken to Montana to join the team, meets Ian, interacts with aliens   | 00:33:51:20 |
| C    | Louise has first contact without suit, starts seeing V/M  | 00:11:50:00 |
| D    | China gives an ultimatum, Louise and Ian find out that the aliens want to give weapons to humanity, soldiers place bomb in the spaceship, Louise and Ian are given the alien language, bomb explodes, and Louise and Ian are pushed out of ship   | 00:13:12:22 |
| E    | Louise and Ian try to decipher the language, find out that it is 1/12th of the whole, they fail at convincing the others, Louise enters spaceship alone to understand the nature of the gift. Heptapod shows her more V/Ms and explains their purpose, Louise realises that she can see the future. | 00:14:46:00 |
| F    | Louise comes back to the base and can now read the language fluently. While everyone else is evacuating, she steals a sat phone and calls General Shang in China and tells him his wife's dying words (which he tells her in a V/M, see 00:02:22:10 below) while the soldiers try to stop her.      | 00:05:59:01 |

<sup>7</sup> 'scenes' here is not used in the conventional understanding of a scene, since one scene in the film is often interrupted with a V/M and the next shot returns to the same scene. Thus, in our practice, the next shot is labelled with the next number. This facilitates quantifying the data for visualizations.

|   |   |             |
|---|---|-------------|
| G | China stands down with other nations when they realise that they must work together. Aliens leave, Ian shows interest in Louise                     | 00:03:52:13 |
| H | Meets General Shang at a party to celebrate the coming together of nations and He gives her his private number and tells her his wife's dying words | 00:02:22:10 |
| I | Now married, Louise and Ian decide to have a baby   | 00:02:16:09 |
| J | Baby Hannah is born. Louise in the hospital with the nurse and baby Hannah. We can see the wedding ring in this sequence.                           | 00:00:42:14 |
| K | One year old baby Hannah and Ian and Louise happy together  | 00:00:32:22 |
| L | Louise writes a book on the language and teaches Heptapod to a full classroom. Dedicated to Hannah and wearing a ring                               | 00:00:49:08 |
| M | Hannah age four Playing with Louise near the lake in a horse outfit   | 00:00:44:04 |
| N | Hannah at age six, Louise and Ian put Hannah to bed. Hannah tells Louise she loves her. Louise explains to Hannah her name                          | 00:01:48:06 |
| O | Hannah at age six, Ian has found out about Louise knowing how Hannah will die and has left them, Louise plays with Hannah alone.                    | 00:03:16:10 |
| P | Louise with Hannah at age 12, asking about zero-sum game, saying 'I hate you,' falling ill, dying.  | 00:01:55:03 |

Table 3.1 Linearised Sequences in Louise's life with sequence labels in Arrival

Louise does not physically travel through time. She is instead, able to access her consciousness in the past and the future. Therefore, the listing can be considered as a simple linearisation of the narrative beats. The first 3 mins 43 seconds of the film (after the title) seems to be a prologue but is the epilogue of Louise's story in the linear version. It contains sequences I, J, M, N, and P before starting with Seq. A which is the starting point of the story too. This reads like a prologue in the film and is a very common device used in mainstream cinema to introduce an important aspect of the backstory of the protagonist. A prologue generally explains the current situation in the story-world or the backstory, which explains the protagonists' motivations for their actions or reactions in the story about to unfold. In the absence of the linguistic tense markers that the sequences in the novella bear, it is impossible to know at first viewing that this is the future. Nothing about Louise's appearance changes in the prologue, not even when she ages several decades by the end of their daughter's life (refer to point 2 in the table

below). Heisserer and Villeneuve use this common device deliberately to mislead the audience and endow the protagonist Louise with a melancholy air that comes as an effect of the primacy of the montage in a linear viewing mode. The audience is primed by the sequence showing the birth and death of Louise's child, to view her as someone who is grieving and surrounded by memories of the past. We also see Heisserer do this in the script in scene 009, 017 and 018 (2015). In the linear storyline, the prologue is the epilogue of the film, i.e., Louise has baby Hannah with Ian after the aliens leave Earth. Heisserer reportedly wrote the reveal which constitutes the first five pages and the last five pages of the film first before writing the whole script (2017). Below are some of the other observations about the script in comparison to the story and the film:

| NO. | NOVELLA  | SCRIPT  | FILM   |
|-----|--|---|--|
| 1   | Starts with Louise and Gary in her house; Louise's V. O. talking to her daughter | Starts with a man with Louise (who is wearing a wedding band) and on the glass pane of her house the words 'Do you want to make a baby?' with V. O.   | Starts with an empty picture window, with two wine glasses on the table. Louise's V. O. talking to her daughter  |
| 2   | Author Ted Chiang makes no mention about her appearance.                         | Heisserer indicates the length of Louise's hair in the different sequences to distinguish the different time periods,   | No change in Louise's appearance in the film   |
| 3   | Number of alien vessels landing on earth is 112                                  | Number of alien vessels landing on earth is 12  | Number of alien vessels landing on earth is 12   |
| 4   | No such scene  | In scene 18 of the script, after she comes back from the university (when everyone has just found out that the aliens have landed), Louise looks into an empty spare room with 'sadness' as Heisserer puts it. In the script Heisserer wants the audience to make assumptions about Louise's past, her melancholic demeanour and her large empty-looking house. | This scene is truncated but we get some subtle red herrings in the form of an empty room she passes that lead us to making the same conclusion anyway.             |
| 5   | No such scene  | In scene 21, Heisserer writes 'she is spooning extra pillows as if they were a bed fellow'.   | In the film, Louise is holding a full-sized body pillow, which is something more commonly used by pregnant women. It seems like Heisserer, and director Villeneuve |

|    |   |   |  |
|----|---|---|--|
|    |   | A similar comparison is made in scene 25.   | build into the visual narrative, the idea that Louise has lost someone, and in her unconscious moments shows her need for dependency.  |
| 6  | In the story, the memories are peppered throughout. There is no deceit, and the first time Louise acknowledges that she knows the future is in the last ten pages, after the salad bowl incident.       | In the script, Louise starts to see her V/Ms just after the first time the Heptapods show her the logograms.  | In the film, Louise starts to see her V/Ms after she takes off her suit in the chamber, or rather when she sees the logogram for the first time  |
| 7  | Equivalent to a film transition, there are no overt connections in the order or the kind of memory of the future that Louise narrates between telling of the story of her encounters with the Heptapods | Heisserer writes in distinct transitions from the present into one of the (V/M), like Louise looking down at her muddied boots and then seeing Hannah's boots in the V/M. Or looking at the word planet on her papers to Hannah asking her how to pronounce the word planet. He also adds sound transitions | These transitions are not used in the film, and therefore the V/Ms become even more ambiguous when they come to Louise. Audio overlap is used instead to bridge the gap between the present and future memories.           |
| 8  | The world view is largely absent in the story. There isn't much happening beyond Louise, Gary, Hannah and the aliens  | Similar to film   | The film has several montages of news, or the central montage of Louise teaching the aliens English and learning Heptapod B. We assume they come as a stylistic decision on the edit table by the editor and the director. |
| 9  | Louise having a relationship with Gary is not overtly conveyed, only hinted at.   | Script comes across as staccato and the characters don't seem fleshed out, especially Louise and Ian's interactions.  | There is more chemistry between the characters of Ian and Louise in the film than in the script. This is expected as it is a shooting script and needs to be a blueprint for the production on the floor.                  |
| 10 | Louise uses the analogy of a column of ash for describing how she experiences time before and after her learning Heptapod B   | While trying to explain to Colonel Weber how the aliens perceive time, she compares it with their non-linear language. Time is not linear for the Heptapods   | Same as Script   |
| 11 | Hannah dies of a rock-climbing accident after reaching adulthood  | Hannah dies of an incurable disease in her early teens shown at the end.  | Same as script but as a prologue in the beginning  |

Table 3.2 Comparison of novella, script and film in Arrival

### 3.2.3 The Heptapods and their Language

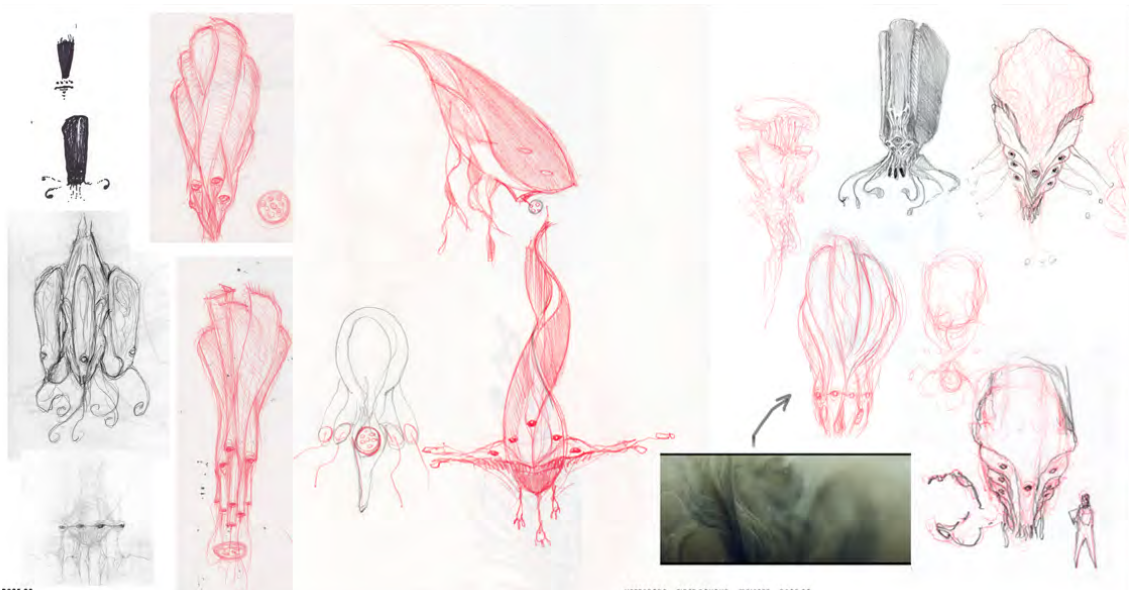


Figure 3.8 Initial Concept art for Arrival Meinhart Hansen; reproduced from [meinbarthansen.com](http://meinbarthansen.com) (Hansen 2016)

The description of the Heptapod (seven-limbed) in the novella is more like a cephalopod with no front or back to the creature (Figure 3.8).<sup>8</sup> Their torso looks like a barrel suspended atop seven limbs with four terminal digits each. A puckered opening at the top serves as an orifice for respiration as well as speech, with seven lidless eyes arranged in a ring around the torso. Another opening on the bottom served for eating and excretion. The structure of their bodies leads Louise and Gary to deduce that any direction may be forward for them. In the film the Heptapods designs are different from the ones in the story with no eyes and a humanoid torso, but they retain the seven-limbed lower half (Figure 3.9).

<sup>8</sup> Hansen Meinhart was asked to design the creatures for Arrival and his first sketches were close to the description in the story.

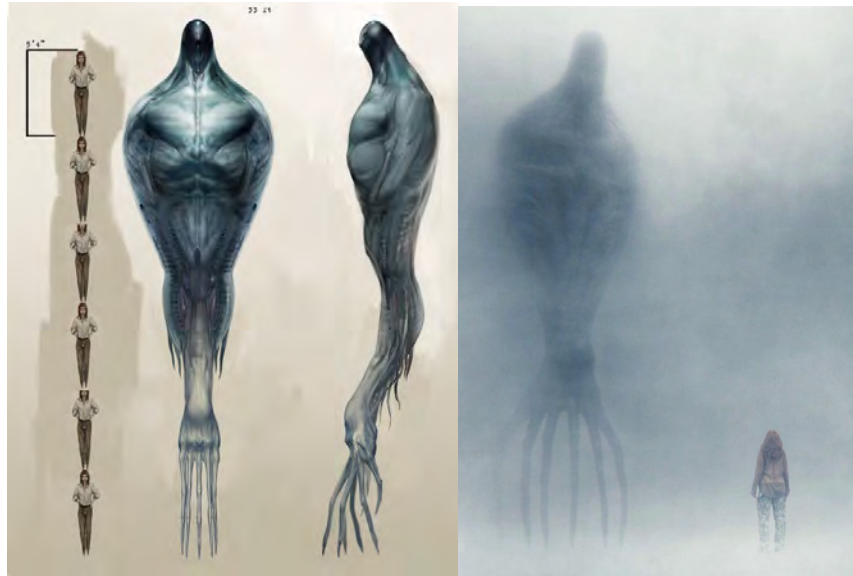


Figure 3.9 Concept art by Carlos Huante; reproduced from [carlos-huante-monstruo.com](http://carlos-huante-monstruo.com) and still from the film *Arrival*

As Louise discovers, the aliens, called Heptapods, have two modes of communication. The first is a spoken language that is nearly impossible for humans to translate or recreate because they have no knowledge of the Heptapods' sound-producing organs. This verbal language Louise terms as Heptapod A.<sup>9</sup> The second is their written language, which Louise discovers does not correlate with the verbal one. The sounds do not correspond with what they write. Thus, Heptapod B, as the written language, is classified as a semasiographic language, i.e., a system based on graphemes to make meaning.<sup>10</sup> The component parts do not correspond to sounds and are therefore a completely different system than Heptapod A.

In the story, when Louise starts communicating with them using written language, she notices similarities in the writing style and the physiology of the Heptapods. Heptapod B as she dubs it, appears logographic at first glance and 'like a doodle of script, vaguely cursive' (Chiang 2016, 124). A sentence, for e.g., was made up with logograms for individual words that 'melted' into each other while being rotated or

<sup>9</sup> This distinction is made clearer in the story by the author than in the film.

<sup>10</sup> A grapheme is a single functional unit of a writing system ('Grapheme', n.d.)

modified. This, Louise deduces is so that the Heptapods can read in whatever direction and there is no right side up or down. Gary, in the same instance notes that it could be a ‘consequence of their radial symmetry’ (2016, 128). Louise describes the writing as a ‘bunch of graphic designs’, with no rule dictating their arrangement, putting together as many logograms as needed to end up into a ‘giant conglomeration’ whose ‘visual impact was remarkable’ and ‘looked like fanciful praying mantids drawn in a cursive style, all clinging to each other to form an Escheresque lattice’ (2016, 135). Further she finds out that as the Heptapods write, they lay down the strokes that participate in many different logograms, as if knowing exactly what will come where when writing the whole sentence. Louise compares this to master calligraphers who plan out calligraphic designs that require immense preparation, leading her to theorise that for Heptapods, time is not linear.

This picture that Louise paints in the novella, is quite different from the film version of both the Heptapod (their physiology) and the logographic language.



Figure 3.10 Written language of the Heptapods; still from Arrival (00:38:12)

In the film, the way the Heptapods write is with an ink-like misty substance which emanates from the ends of their limbs (Figure 3.10). These logograms are circular

patterns which come into being all at once, unlike the linear writing style that humans use. The reason the language came into the forefront of the narrative was that earlier, the ending of the film was going to be the Heptapods offering the humans the blueprints of an ark. Then Christopher Nolan's film *Interstellar* (2015) released and since it also dealt with the idea of an ark being built to save humanity, the *Arrival* team realised that the ending needed to be changed. They, therefore, concentrated on the power of the language (Heisserer 2017).

According to production designer Patrice Vermette, they wanted to create a language that was aesthetically pleasing and yet complex and alien enough to leave Louise and by extension, the audience wondering what it could mean (Rhodes 2016). The circular manifestation was something Heisserer had specified in the script, and the production team followed. This was also a visual manifestation of how the Heptapods viewed time and would be used as a narrative device in the film. To distinguish it from recognisable alphabets or hieroglyphs, Vermette asked his artist spouse Martin Bertrand, who then presented the first prototypes of the inky logograms. The production team used the paintings and compiled a dictionary of 100 symbols. While these details are not visible or explained in the film, it is interesting to see the richness of the language being created during the production stage. The logograms ranged from simple greetings to complex sentences, the thickness or thinness of the ink strokes had meaning, and they also had rudimentary grammatical symbols. The methodology of analysis that Louise uses on screen was developed by noted mathematicians Stephen Wolfram and his son Christopher. They surmise that the developed system could be built into a larger vocabulary and that all it needs is patience and will (ibid).

Having laid out the background of the film, we now turn towards one of the central metaphors that suggests itself from the theme of the film.

### 3.3 Metaphors of Time

Time is an immaterial, intangible, and non-spatial continuum. One of the basic physical quantities that describe the material world, time, is measured by incremental units or the motion of hands on the face of a clock (Dowden n.d.). These increments are also a way to observe how the material world changes, for example, movement along a path, birth of life or decay of matter. But at the crux of the argument, time has no form and is unperceivable by human vision.

‘For if there are times past and future, I wish to know where they are [...] Wherever they are and whatever they are they exist only as present. Although we tell of past things as true, they are drawn out of the memory, not the things themselves, which have already passed.’

Book 11 Section 18.23 St. Augustine (Augustine and Ryan 2014)

In his inquiry into the nature of time and memory, St. Augustine in the 4<sup>th</sup> century CE observed that time only existed in the present, the past was a memory, and the future was an anticipation of things to come. According to him, each of these three experiences is firmly anchored to the present, rendering the perception of time an internal one. He was one of the first to suggest that this abstract dimension was only perceivable in our consciousness, that it is only in our minds that we know what has passed, what is happening in the current moment and what might come. Further, he states if time never passed, there would be no past; if nothing ever changed, there would be no future and if there was perpetually only the present moment, then maybe that is what eternity would

be like (Hausheer 1937). What is ironical, is that Augustine also observes that there is no present moment and in observing the present, it has instantly turned into the past and there is yet again, no way of saying 'this is now'. Augustine famously called the present 'a dull edged knife' that only served as a connection between the past and the future. Henri Bergson also echoes this idea when he says his present 'has one foot in the past and another in my future'(Bergson 1988, 177).

Lakoff and Johnson observe that 'we use canonical events as temporal yardsticks'(Lakoff and Johnson 1999, 139). In observing the changes in the material world, time can measure time, i.e., passing of time decays the façade of a building, ages the skin and hair or corrodes the paint on an automobile. Another way to measure time is by motion, e.g., the planets' movement around the sun or the journey undertaken from point A to point B. Even so, in such instances, we invariably measure time by other quantities like motion, changes in the material nature, events or the simplest: rising and setting of the sun. There is no tangible quality of this dimension that may be held, observed, dissected, and examined for inner workings. 'Time is nothing but an impression, a mode of thought, a reflex of things passed and passing, and in particular a function of memory' (Hausheer 1937). Given this condition, Hausheer concludes that only metaphors can be tools of interpretation for the abstract experience of the passing of time.

Humans have quantified time with abstract divisions like seconds, minutes, hours, days, and years to measure and observe its passing. The other method of tracking this illusive dimension is to describe time or its effects on people, objects, and our environment. For this we use different metaphors which embody the experience of time as a phenomenon. In the English language for example, time can be compared to money, to space, to a

movement, as an adversary, as a container, as a commodity, as a pursuer, as an object, as a landscape, as a resource and as an agent of change (Lakoff et al. 1991). TIME IS A VALUABLE RESOURCE is a commonly-used metaphor that can be found in most western cultures where time is valued and can be traded (Lakoff and Johnson 2011). Given that our lifespans are finite and there is a certain period of our lives that we can be considered productive, time in most Western cultures is considered a valuable commodity that can be saved, wasted, or traded for money. Some examples of the usage are as follows: *You are wasting my time; She has invested a lot of hours in that deal; He doesn't have much time left; Is that how you spend your time?*

Work, wages, rentals of property and other assets, interest on investments, loans frequently stem from the metaphor TIME IS MONEY. According to Lakoff and Johnson, 'Corresponding to the fact that we act as if time is a valuable commodity—a limited resource, even money—we conceive of time that way. We understand and experience time as the kind of thing that can be spent, wasted, budgeted, invested wisely or poorly, saved, or squandered.' (Lakoff and Johnson 2011, 16). Thus, the TIME IS MONEY metaphor is a systemic metaphor, with which it is possible to characterise an entire gamut of entailments, which in turn can become metaphorical expressions for the concept. TIME IS A MOVING OBJECT is another common metaphor that can be seen in constructions like *'my time will come; the deadline is fast approaching us.'*

Culturally, time is seen as linear and as a space, with the past behind us and the future in front of us (in other non-western cultures, sometimes the future is behind us and the past in front).<sup>11</sup> The face of a clock also divides time into a spatial unit, leading

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<sup>11</sup> Lakoff and Johnson discuss the Hopi tribe which conceptualize time as something that moves and can arrive. (Lakoff and Johnson 1999, 150)

to the illusion that it is measurable, predictable and can be calculated and controlled (Mroz 2012, 35). As human beings, our perception of time is that of a beginning, a middle and an end. We structure units of time this way too, where for e.g., a project begins and ends, our schooling also has a distinctive beginning and an end, including short spans of time like a bus ride or a party. In this sense time is also a linear progression from when we are born, we live and then we die.

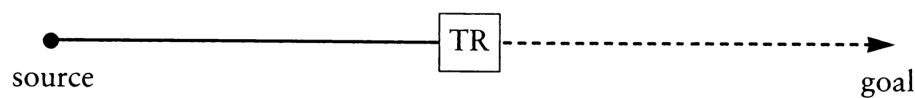


FIGURE 3.2 (Source-Path-Goal Schema)

*Figure 3.11 SPG Schema reproduced from Philosophy in the flesh (33)*

As discussed more fully in the introduction, the SPG schema is an example of the image schema that is often used to denote the passage of time (Figure 3.11). For e.g., a trajectory (TR) traversing along a path from point A to point B necessarily depicts a movement towards an end goal and therefore a passage of time. Most commonly, timelines used to depict historical changes follow the SPG schema. For example, the evolution of man on a timeline, or the history of World War I and similar visualisations.

In films, digital editing platforms will display film timelines as horizontal lines of edited footage (alternate camera angles are stacked when required) that can be manipulated by digitally emulating the action of the cutting and shifting of analogue film.

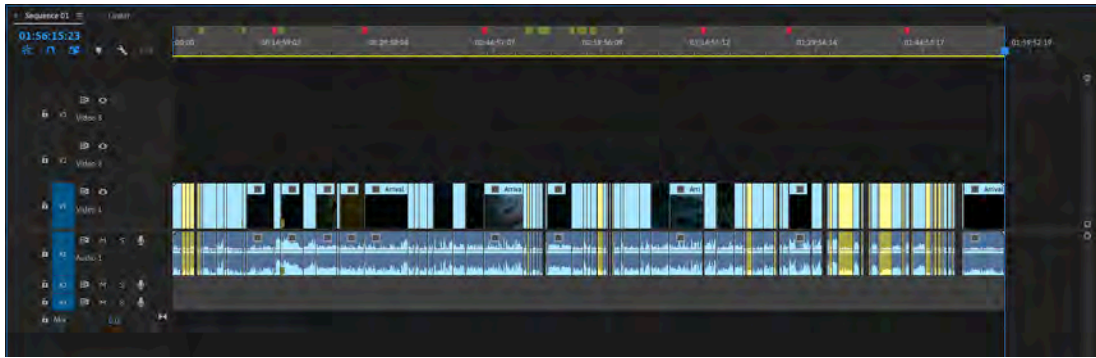


Figure 3.12 Editing Interface with annotated timeline from Arrival

A throwback from the flatbed editing tables used in the days of analogue filmmaking, both platforms viewed the beginning at the left hand of the timeline as the start and the end on the right hand (Figure 3.12).<sup>12</sup>

### 3.3.1 Louise's Perception of Time in the Novella and Film

Story-Louise compares the rendering of Heptapod B to intricate Arabic calligraphic designs, which needed meticulous planning by professional calligraphers. As she becomes proficient in writing and reading Heptapod B, she finds her thoughts becoming 'graphically coded' and the designs appearing to her fully formed. Louise compares it to being in a trance-like meditative state, where the logograms are mandalas. Further, when Gary (Ian) has a breakthrough with a physics principle with the Heptapods, Louise has her first incident in which she experiences a crossover between a present event and a future event involving her daughter, who is yet to be born. From this, she concludes that unlike humans whose linear perception of time and physics '(is) conducive to a chronological, causal interpretation of events: one moment growing out of another, causes and effects creating a chain reaction that grew from past to future' (Chiang 2016, 154), the Heptapods viewed events over all of time and interpreted them as a necessity to

<sup>12</sup> The Moviola editing machine ran the analogue film in a vertical fashion as opposed to the flatbed (Landy 2018)

be fulfilled. They already knew what was to happen and were aware of the effects of the actions they would have to initiate.

As she gains the ability to see her own future with ‘absolute certainty and in specific detail’, Louise feels charged with a sense of urgent responsibility to act exactly as she knows she will. Louise’s perception of time, while changed, is still a blend of her human perception and the Heptapod one. As before, when she describes her memories falling into place like slivers upon a column of ash, after learning Heptapod B; they fall into place in ‘gigantic blocks, each measuring years in duration’ and composed of the span of Louise’s life (approximately 80 yrs.). She observes that it only affected her memory while her consciousness moved along as before ‘a growing sliver crawling forward in time, the difference being that the ash of memory lies ahead as well as behind: there is no real combustion.’ And occasionally she experiences the past and the future all at once ‘my consciousness becomes a half century long ember burning outside time. I perceive- during those glimpses that entire epoch as a simultaneity’. In Figure 3.13, the first column shows Louise’s awareness of time as it passes from her birth to her present moment. The second vertical column is when she starts experiencing the FMs, this column starts with her birth and ends with her death. And the third is how she feels sometimes, a heightened awareness of a huge period of her life all at once. The last column depicts only the story space that the narrative of the film traverses i.e., the multicoloured gradation in the last column that we use to depict the film narrative structure ahead.

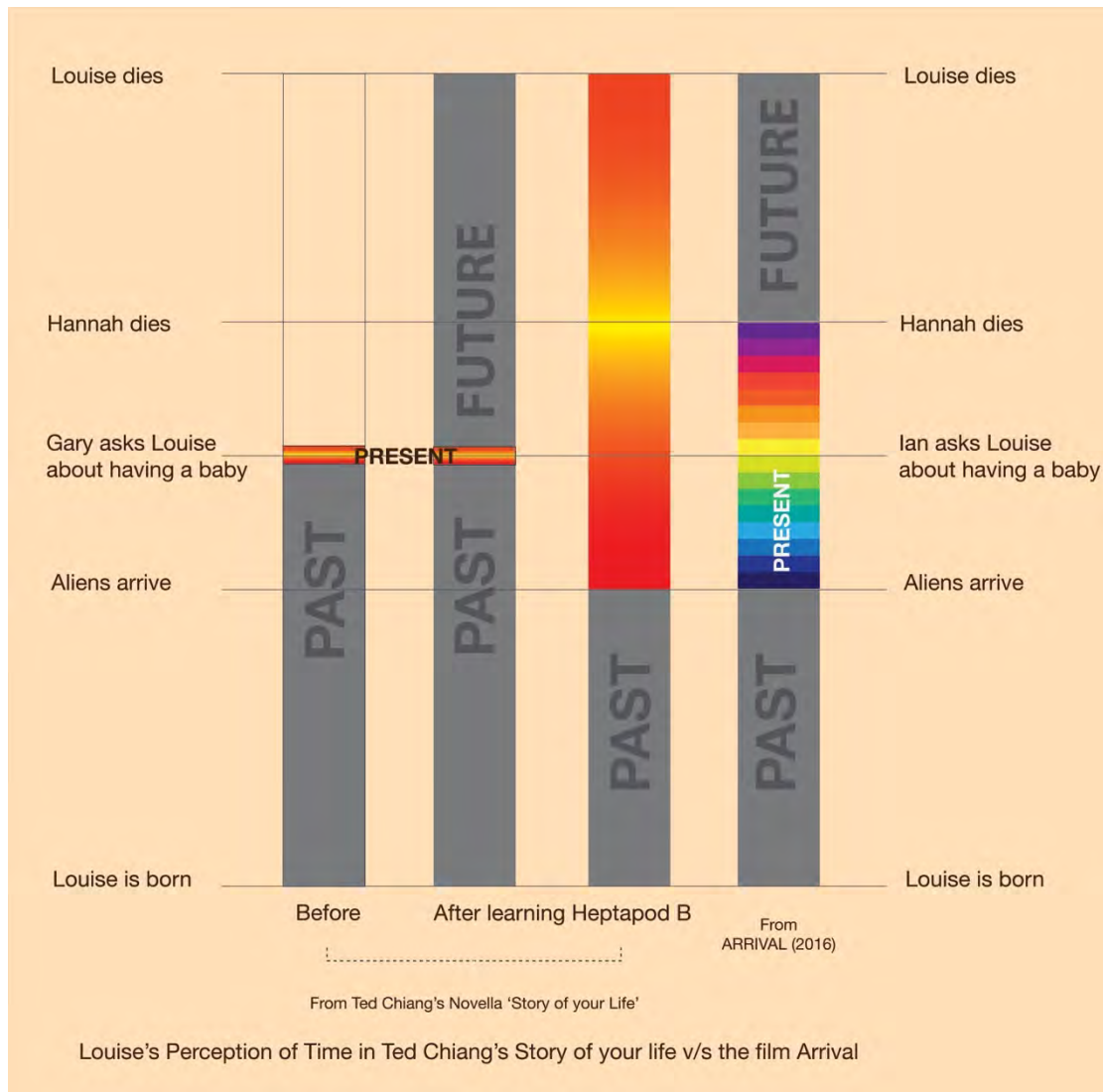


Figure 3.13 Column of Ash Analogy from Ted Chiang's story visualised with the span of story time from Arrival

The Louise of the novella uses the column of ash metaphor for expressing her new awareness of time. The film does not use this, instead choosing to show the cyclical graphical coding of Heptapod B without Louise overtly expressing this idea. This is visible when the Heptapod releases the black ink and forms the first character, all at once, without a start and an end. For the story-Louise, before her interaction with the Heptapods, time for her either passed by or she moved through time. After learning Heptapod, Louise is both moving through time, and time is laid out before her in its entirety, albeit only her own lifespan beyond which she cannot access anything. More often than not writers will use metaphors or analogies to explain difficult concepts in

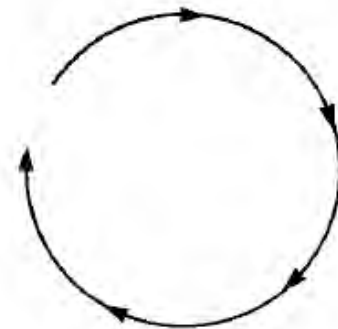
stories such as these. The novella begins in the present tense for Louise (and this aspect of the novella's structure inspired the screenplay), as she speaks to her yet to be born daughter about how life was and is about to happen. Chiang's Louise compares life to a tall rising column of ash of a cigarette upon which each sliver falls as her life passes in a linear fashion. After her experience with the Heptapods, she can now 'see' the future as clearly as the past or the present. The story begins with the same scene as does the film with Louise and Gary Donnelly together, at the end of which Gary asks her if she wants to have a baby. This sequence is split into two, the first part written/shown as the first sequence and the second as the last. In screenwriting parlance, this device is a framing narrative, a looping narrative, bookend narrative, also called circular storytelling and the device does not necessarily appear at the beginning and the end and may also conclude halfway through the story.

One important difference between the story and the film is that the diegetic present for story-Louise is the moment in which she is poised to answer the question Gary will ask about having a baby. For film-Louise and the viewer, the diegetic present is her story of the encountering of the aliens, and this is bolstered by the misleading narrative structure that makes the audience more invested in the alien story than the dinner at her home. The linguistic tense markers in the story work a similar way in keeping the viewer shuffling back and forth between the past, the present and the future.

### 3.3.3 Evidence for the Circle/Cycle metaphor in Arrival: A Structural/Visual Metaphor

The cycle schema, like the other embodied schemas, has a strong bodily basis. We experience physiological regulation as cycles; the beating of a heart, respiration, digestion, the reproductive cycle, even waking and sleeping can be understood as this repetitive pattern. Outside of our bodies, the physical world around us with its growth, development, decay, the movement of planetary bodies, of whole universes can be described with this schema. According to Johnson, the simplest cycle schema is represented as a circular motion, which is temporal in nature and can also describe a rise and fall, or a climactic pattern (Figure 3.14).

‘Most fundamentally, a cycle is a temporal circle. The cycle begins with some initial state, proceeds through a sequence of connected events, and ends where it began, to start anew the recurring cyclic pattern.’ (Johnson 1990, 119)



**FIGURE 22. CYCLE**

*Figure 3.14 Cycle Schema, reproduced from Mark Johnson's The Body in the Mind (1990)*

In short these are time-bounded patterns for activities, which have a defined recurring structure. When it comes to the experience of time itself, man-made divisions, while making it easy to keep count, constantly describe the passing of this intangible quantity in a cyclic repetitive manner. We experience day, night, weeks, months and years as cyclic phenomenon that repeat in a recurrent manner. This extends to other artificial units like academic sessions, sports seasons, fashion seasons and the like. But of course, the implication is that while the quantifying of the phenomenon of time might be cyclic, the experience of it is that of change and of movement from the beginning to

the end and can be considered circular i.e circular movement that becomes cyclical. We live for an average of 80 years and within those, while the divisions are cyclically quantified, we get older, and events or periods of our lives begin and end.

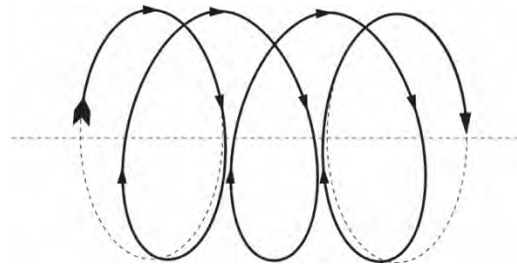


Figure 3.15 Cyclic Movement

Movement along this circular-cyclic path is unidirectional, in the sense that one is not allowed to move backwards. While it looks like a return to the original position, it is in fact a restarting of the cyclic pattern in a new way (Figure 3.15). According to Johnson, the circle image schema falls short of depicting climactic variations of the cyclic phenomenon. ‘life patterns do not simply repeat; they exhibit a character of build-up and release’ (Johnson 1990). He uses the examples of build-up and release of sexual or emotional tension, of illnesses where one falls sick, gets drained of vitality and then recovers; described best by ‘the sine wave with its periodic “rise” and “fall”’ (1990, 120).<sup>13</sup> (Figure 3.16)

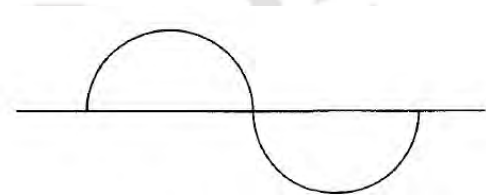


FIGURE 23. CYCLIC CLIMAX

Figure 3.16 Cyclic Climax reproduced from Mark Johnson's *The Body in the Mind* (1990)

According to Johnson, the structure of the cycle schema is one of the most basic ways that we understand time and demonstrates a ‘definite recurring internal structure’ (Johnson 1990, 121).

<sup>13</sup> In scriptwriting, one way to describe narrative movement is ‘rising /falling action’ (Freytag 1894). It is a device used in the popular formulaic structures that are used in mainstream films

## The Circle in the Story

The narrative structure of *Arrival* was first observed to be looping in the initial viewings of the film and validated by data available in the film's reviews and interviews. With further visual and design analysis and breakdowns of the sequences, it was found to be broadly circular or spiral in nature. In Figure 3.17, the sequences are arranged in their order of appearance in a circular format. This was one of the first visualisations of the circular structure. The assumption was that the circular structure, could also spiral as the narrative went from the diegetic present to the future. Rough placements helped identify the direction and placement of non-linear sequences.

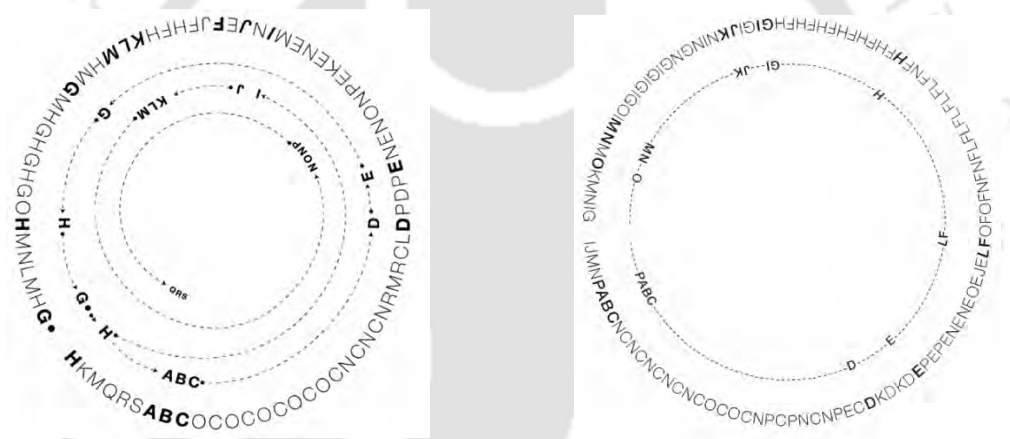


Figure 3.17 First visualisations for the looping narrative design of *Arrival*

The spiral was found to be an overly complex structure for the visualisation. In the next figure, the sequence labelling was corrected, and non-linear sequences were highlighted. Unlike *21 Grams*, non-linear sequences of *Arrival* are few and far between. They also necessarily need not make a parallel story on their own. Therefore, it was not important that the order of the sequences be exact in only non-linear sequences by themselves.

The next step was to perform a granular visualisation of the circular pattern.

Shot/scene durations from the EDL helped transfer the lengths from the spreadsheet to a

vector drawing software. A vector facsimile of the edit timeline was created on Adobe Illustrator. Figure 3.18 is the first visualisation of the sequences in their non-linear structure. As stated earlier, after identifying 16 story beats, each beat was labelled with a letter from A to P and each beat was given a corresponding colour swatch from the colour wheel.<sup>14</sup> Further, taking from the sequence durations from the edit data, a vector representation of the timeline was created. Each story beat was coloured according to the consecutive colours in the colour key.

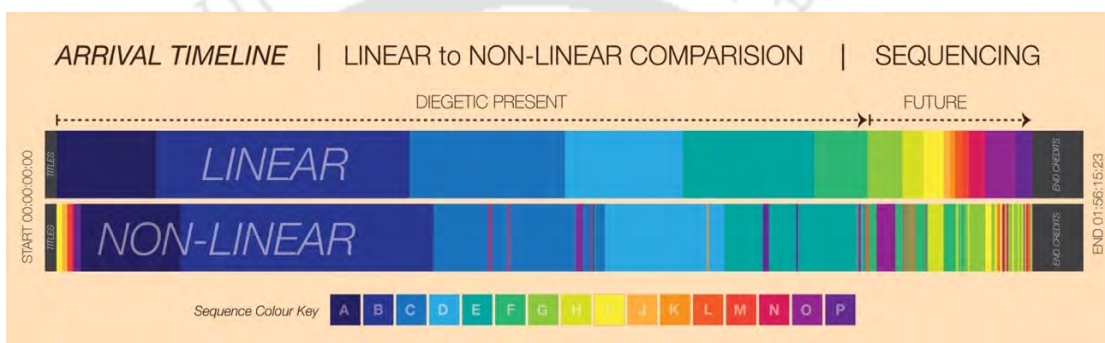


Figure 3.18 Linear/Non-linear Comparison of Timelines in Arrival



Figure 3.19 Detail of the Prologue; Arrival

This was then converted to a circular form, keeping the durations of the sequences intact. This led to interesting visual insights. The colour wheel gradation makes it easy to see the progression of the story from the present to the future. The inner circle is the timeline in a linear format used only for comparison with non-linear. In the nonlinear circular

<sup>14</sup> The colour wheel is a standard representation of the organization of colours around a circle in which primary hues and secondary colours follow each other perfectly in a looping structure. Since we are hypothesizing a circle schema in the metaphor, the usage of consecutive colours from the colour wheel was the most apt and each colour connects to the next one on the wheel offering us a continuous gradation in a circular layout. Thus, 16 colours were chosen to represent each beat in the sequence colour key.

structure, the epilogue fits approximately with the prologue, leading to the circle illusion (Figure 3.20).

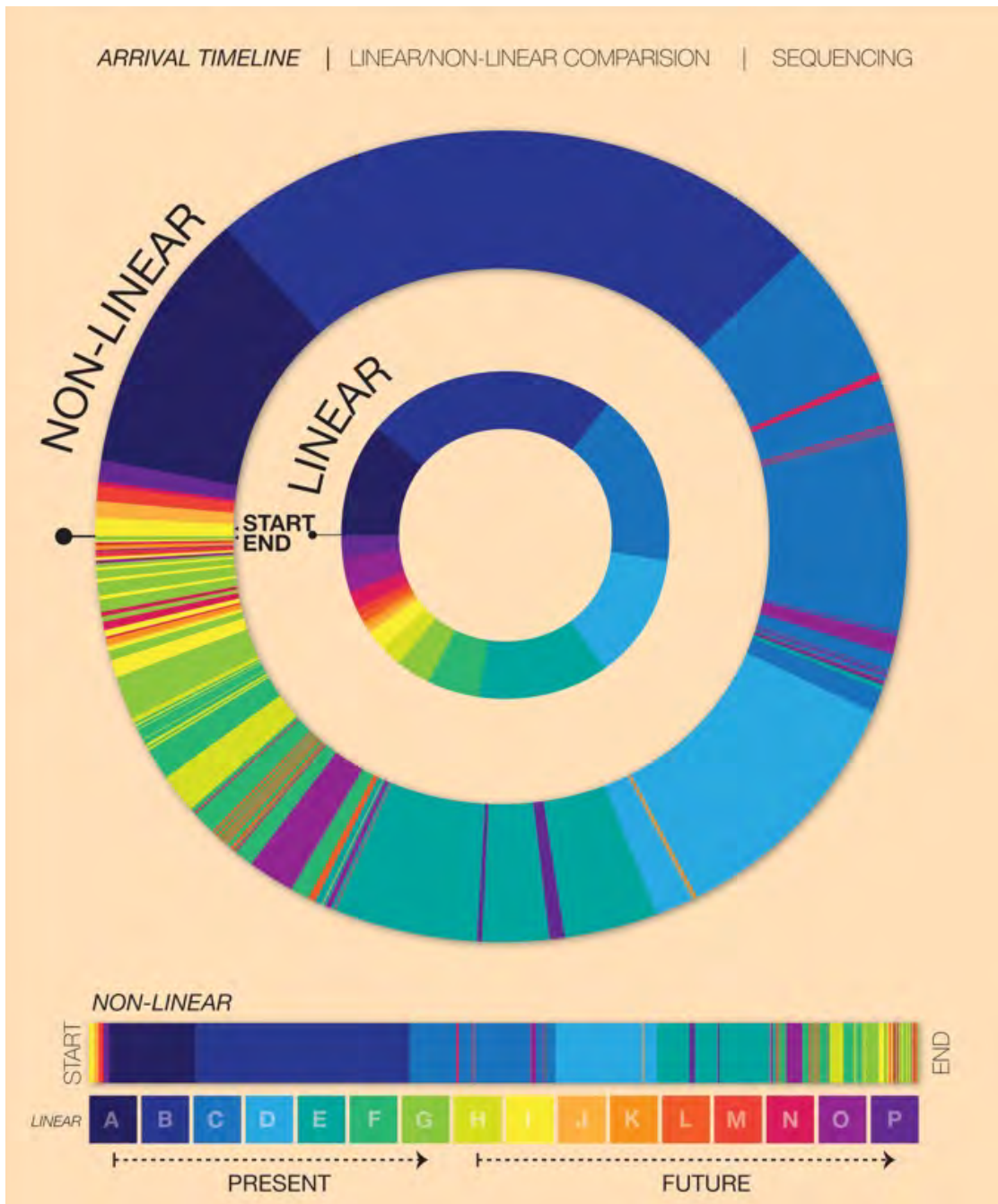


Figure 3.20 *Arrival*, the narrative as a circle

### 3.4 Flow of Narrative: Mnemonic Cues, Transitions and Recurring Motifs

Bordwell and Thompson define a cinematic narrative as a series of cause-and-effect events unfolding in space and time, driven by the protagonist's reactions. Viewers link cause-and-effect and comprehend time and space to understand the narrative (2020).

The process involves constructing a situation model based on the narrative's propositions.<sup>15</sup> The order of events affects comprehension, and viewers actively participate in making inferences and assumptions. This is not a new concept, as Eisenstein and Kuleshov's experiments with the montage effect demonstrated the importance of the order of events and the subjectivity of comprehension. In *Arrival*, the last scene in the prologue of Louise walking down the hospital corridor to the next scene where she is walking to her class on campus can be said to be related by motivation, in a sense, by the act of walking away, Louise leaves behind the death of her daughter and moves on to live her life and reintegrate herself in her routine after the tragedy.

With *21 Grams*, the flow of the narrative was constructed by a series of propositions which took the form of either conflicts or connections between the disparate sequences leading to an understanding of the fabula despite the fragmentation. With *Arrival* we identify the primacy effect, the priming method, the use of schemas, mnemonic aids in the form of visual compositions, analogies that come about with the juxtaposition of the memories and events and recurring visual motifs in the film which perform a similar function.

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<sup>15</sup> Rolf Zwaan's event-indexing model identifies five dimensions of events: time, space, entity, causation, and motivation. An event happening in any of the five dimensions will trigger an overlap of the incoming clauses integrating into an event representation. (Zwaan 2016)

### 3.4.1 Primacy and Schema

In chapter one, we explained briefly the concept of developmental schemas. The agent schema specifically compels the viewers to make certain assumptions about characters at the outset of cinematic narratives. In the case of *Arrival*, Louise is foremost proposed as a (possibly) single mother who has lost her child. This powerful schema, along with the heart-breaking addition of the tragedy, drives the viewer to go beyond the presented information and supply the missing details.

The primacy effect states that the 'ordering of information has important consequences' (Barratt et al. 2009, 67) in the perception of the narrative. The viewer makes assumptions based upon what they are presented with first, and using schemas, they are set up for what is to come. A filmmaker can therefore manipulate the viewer by designing the order of events and using schemas. In a linear presentation, this is done in a straightforward way using devices such a prologue, flashback/flashforwards, and epilogues. A prologue of a narrative is a device that introduces something that happened to a character outside of the main story event, which will be used to justify the character's actions or explain the circumstances of the story-world. An epilogue is the opposite of a prologue in that it offers the viewer a glimpse of the world beyond the film's resolution. The prologue can also be considered under the general convention of a set-up or an opening of a narrative. Thus, by setting up the epilogue as the prologue in *Arrival*, the director and screenwriter deceive the audience and lead them to make assumptions about Louise's past life and state of mind. Another terminology in popular use is the backstory or the exposition. This device sets up the expectations that a viewer formulates over the course of the first quarter of the film. Expositions are plot explanations that can be withheld at times to create suspense. These narrative devices have evolved over the

century of filmmaking and are in use in conventional mainstream filmmaking to aid ease of comprehension and therefore cater to a wider audience.

### 3.4.2 Mnemonic Cues and Transitions

Hannah C. Wojciechowski describes *Arrival* as a puzzle film because there is a calculated attempt at shuffling the ‘the temporal and spatial contexts that viewers rely on in order to create mental narratives and episodic memories’ (Wojciechowski 2018). The complex structure of the narrative is a challenge for the viewer, who mistakes the flashforward scenes for flashbacks and is surprised at the conclusion. She posits that the puzzle of the film is constructed for its audience around mnemonic aids that ‘help viewers retain relevant puzzle pieces in their memories for the duration of the film until they have enough information to solve the puzzle’ (2018, 56). Wojciechowski concludes that these mnemonic aids go towards creating a ‘simulated sensation of “remembering” the future’ (ibid.) along with the protagonist Louise. I suggest that along with these aids she describes in her study, there are several transitions that create the connectivity for the viewer in the film.

Following are some of the visual/aural cues and transitions observed. These are also informed by Wojciechowski’s study, and our sequence analyses.



Figure 3.21 Louise leaving hospital after Hannah’s death (00:03:48) and Louise climbing stairs to her class (00:04:01)

1. The film begins with a montage of Louise and her daughter from infancy to death.

This 3-minute sequence which seems to be a prologue is the film’s greatest twist. At the

end of this montage, Louise walks down the hospital corridor alone (Figure 3.21a), and the camera tracks her movement which is slightly left to right and continues this tracking into the next scene where Louise is walking up the stairs to her classroom from left to right of frame (Figure 3.21b) which is a movement match type of transition. Here the story seems to jump forward, and whether it is the future, or the past is ambiguous. We propose that the match-cut transition creates a continuity that reinforces the sequential narrative flow and makes the audience assume that this happened to Louise before the 'present' in which she is asked to communicate with the aliens. Many viewers also report endowing Louise's character with a melancholy 'projecting on Louise a mood she hasn't adopted yet' (Rakus 2016). This is a designed misdirection on the part of the film's makers. This gives Louise's actions and words a weight that she hasn't earned for herself yet.

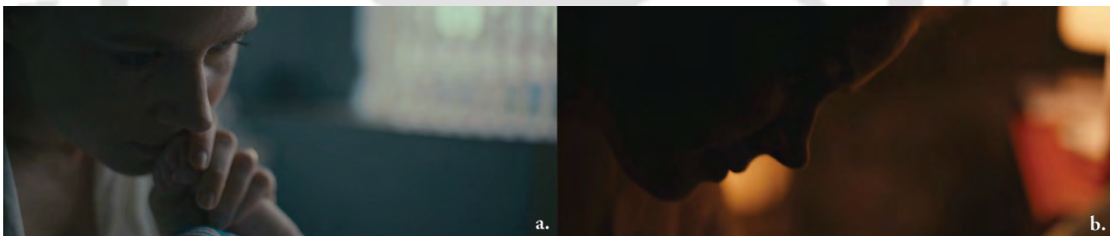


Figure 3.22 Seq. 3 (00:03:10) and Seq. 10 (00:03:14) ; Louise with Hannah

2. Several compositions of Louise and Hannah are repeated at various stages of their lives together, which serve as compositions that reinforce their relationship throughout the sequences, for e.g., Seq. 3 (Figure 3.22a) and Seq. 10 (Figure 3.22b). These act as visual reinforcements of the mother-daughter bond and make the final decision that Louise takes to have the baby despite knowing she will die, that much more poignant.



Figure 3.23 Seq. 5 Hannah says 'I Love you' (00:03:10) and Seq. 6 Hannah says 'I Hate You' (00:03:14)

3. The montage spans a decade of the mother-daughter duo's life and to achieve this in the span of 3 mins., scenes like Seq. 5, we see 6-year-old Hannah says 'I love you' to Louise (Figure 3.23a) and Seq. 6, at 14 she says 'I hate you' (Figure 3.23b) which indicate a jump in time and a changing relationship.



Figure 3.24 Seq. 33 Louise removes suit as soldiers look on (00:43:04); (00:43:25)

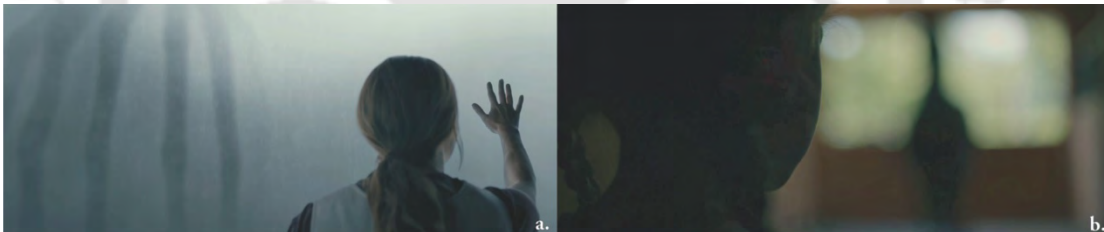


Figure 3.25 Seq. 33 Louise reaches out to the barrier (00:44:04); Seq. 35 Hannah looks at horse (00:47:22)

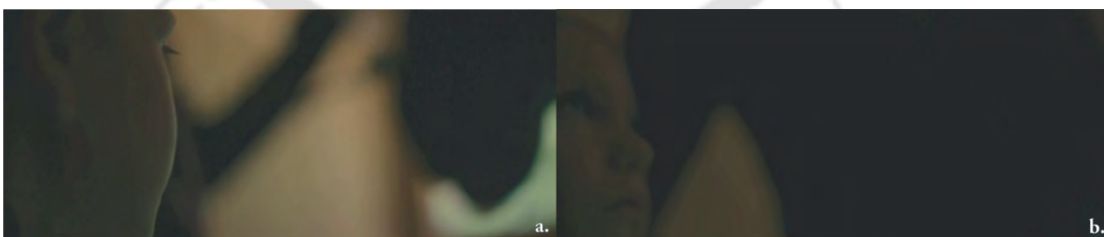


Figure 3.26 Seq. 35 Louise touches horse as Hannah looks on (00:47:36; 00:47:38)

4. In Seq. 33 and Seq. 35, we see the compositions and staging of the scenes being repeated to reinforce the reading of Louise's role in the narrative. In Seq. 33 Louise initiates contact with the Heptapods without her protective suit for the first time (Figure 3.24a). The Heptapod responds with a splayed limb on the barrier to Louise's own raised

hand gesture (Figure 3.25a). The soldiers and the rest of the team at the command centre look on in consternation (Figure 3.24b). Louise also encourages Ian to do the same. Immediately after, as they return to the base, Louise experiences her first V/M, in which she is introducing a 6-year-old Hannah to a horse (Figures 3.25b, 3.26a and b). The staging and framing of both scenes are analogous and evoke the following metaphoric propositions:

The framing of both shots i.e., Heptapods in the spaceship and the imposing figure of the horse which is out of focus create a connection which can be interpreted as STRANGE ALIEN SPECIES IS IMPOSING HORSE, with SOLDIERS/IAN/AUDIENCE IS HANNAH and LOUISE IS MOTHER (Confident explorer/protector)

In the staging we see the vague shape of the horse as it steps closer to Hannah, and she backs away in fear while Louise pulls her closer and soothes the horse with a raised hand (on its nose) as she did with the Heptapods. We also interpret this as a misleading connection. Humans often rely on past experiences and memories to help make sense of new life events. Functioning as a flashback that explains Louise's action (doffing the suit without permission and approaching the barrier confidently, encouraging Ian to do the same), the V/M fits perfectly in a standard reaction to an unusual circumstance. In this instance, the V/M serves more as an analogy than a metaphor, but it creates a strong correlation between the two. In the same scenes we also see the repeated rectangle motif in the form of the window behind the horse and the transparent barrier in the spaceship.

5. In Sc. 39 to 47, Louise has another V/M of 6-year-old Hannah playing in the weeds. Wojciehowski observes that Hannah's stirring the water with a stick, and the black caterpillar she prods reminds one of the exact same logogram Louise is working on. These mnemonic aids, in her words, are what the director seeds throughout the film to create a sense of clairvoyance in the viewer along with Louise and to help arrive at the same experience she feels at the end. Similarly, she compares Hannah's clay figurine of the Heptapods to the position of her hand on a rock in a subsequent shot as a visual analogue that help embed the appropriate information for later access (2018, 62).

6. In Sc. 49, Ian jokes to Louise that he's probably single because he is bad at communication. Louise responds by saying that one could be good at it and still end up single. Building on what we know about Louise so far, one can assume that Louise has had a failed relationship and is jaded from the experience. This misleads us into thinking Hannah was born and died before this present moment that we see. This is contradictory with what Ian assumes, as we hear him express confusion when in Sc. 111 Louise says she now knows why her husband left her and Ian asks her 'you were married?' This is one instance where the audience has assumed something based on the information they were given, which Ian did not have. It is an interesting gambit by the director, and as Wojciehowski puts it, it causes 'disorientation and confusion that resolve as understanding and delight, but also the entirely fictional sensation of "seeing the future" that has been engineered by a carefully crafted narrative that flips past into future' (2018, 64).

7. Extra-diegetic sounds like the turning of pages, the flipping of a stone in the water, Hannah's voice asking a question, etc., come before the V/Ms start, signalling their onset

or culmination and reinforcing the assumptions that they are memories.<sup>16</sup> This is a split edit type of a transition which manifests here as a J-Cut/pre-lap audio or an L-Cut overlap audio which is generally used in dialogue scenes to indicate a narrative movement, or narration over a montage, or to signal a flashback. Other audio markers include a bass tone from the alien's vocalisation and the BG music. A more comprehensive reading of the transitions and cues can be found in Appendix 6.

### 3.4.3 Recurring Motifs

While studying the structure of the film narrative, we also came across a visual metaphor embedded in the compositions of shots across the film narrative. In the film, a visual leitmotif that is repeated often is that of 'a rectangular frame on the far wall which serves as a natural source of illumination'. This can be seen in the following locations: Louise's home, which opens up at the back to a lake and the far wall of the living room which is entirely made of glass windows; in her classroom as a TV screen where she first learns of the aliens; her office, which has a whole wall of windows behind her; the wall of monitors at the command centre which are a link to the teams on the rest of the landing sites; the glass wall in the chamber where Louise and her team interact with the aliens and the monitors or screens which display all of the information from around the world that the team at the site consumes. Production designer Patrice Vermette attributes this to artist James Turrell's show that he and Villeneuve (separately) had seen before beginning work on the film (Grierson 2017). This visual form firstly ties the film together in terms of a recurring motif that echoes the frame of the medium itself.<sup>17</sup> It is interesting to note that the film frame itself is a VISUAL FIELD WITHIN A BOUNDED REGION. With the

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<sup>16</sup> Since there seem to be two strands of the story running in tandem, the extra diegetic sound is either from the story of Louise and the aliens or from the story of Louise and Hannah.

<sup>17</sup> See chapter one for discussion on metaphors of film.

addition of the frame, we have a container within a container. At each stage, Louise, and through her, the audience, get information from this rectangle or it serves to illuminate the event taking place within the space. We propose that the following base conceptual metaphors can be interpreted in visual examples from the film.

1. VISUAL FIELD IS A CONTAINER/ BOUNDED REGION

For e.g., *The target is in the centre of my vision; She has the man in her sight; The coast is out of sight now; The sea extends beyond our field of vision*

2. UNDERSTANDING IS SEEING; IDEAS ARE LIGHT-SOURCES;

DISCOURSE IS A LIGHT-MEDIUM; PERCEPTION IS RECEPTION

For e.g., *I see your point now; I had a brilliant idea; It was a murky discussion*

(Lakoff and Johnson 2011)

3. AIDS TO GAINING AWARENESS ARE AIDS TO VISION

For e.g., *Please shed some light on this problem; I finally opened my eyes to the problems around me.*

4. IMPEDIMENTS TO AWARENESS ARE IMPEDIMENTS TO SEEING.

For e.g., *I don't see the solution to this; She was in the dark for a long time; I have a foggy memory of the night.*

These are commonly-used metaphors in the English language from Lakoff's *Master Metaphor List* (Lakoff et al. 1991) and Lakoff and Johnson's *Metaphors we Live by* (1980).

We have categorised the visual examples from the film in two types: a passive frame and an active frame.

A passive frame is when rectangular motif serves more as an illumination for the staging than a container for information. The sequences under this category are as follows:

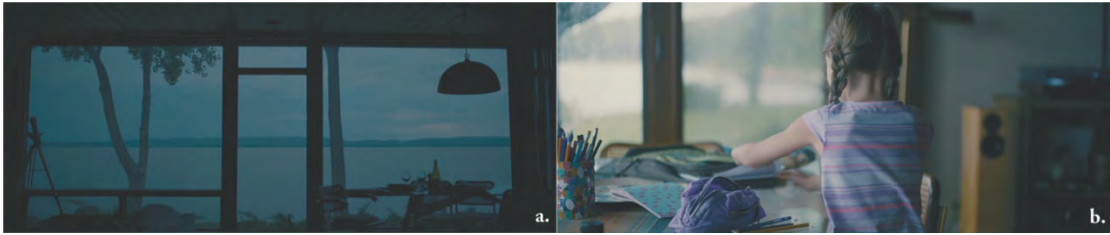


Figure 3.27 Starting shot of *Arrival*, (00:01:52) and Hannah showing her homework to Louise (00:55:51)

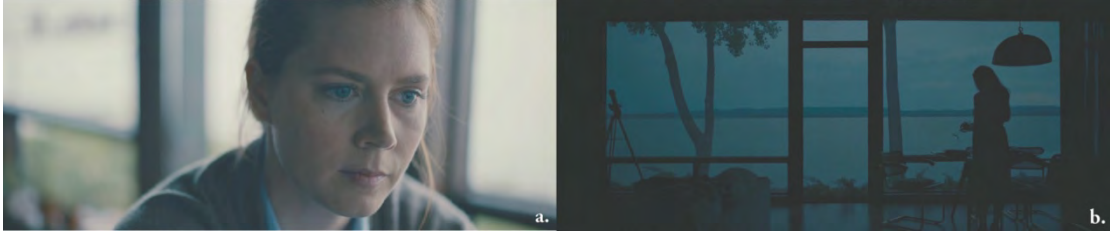


Figure 3.28 Louise looking at Hannah 00:57:01 and Louise pouring wine (00:41:21)

1. In Louise's home, a glass pane at the far wall overlooks the lake. In this location we have the first shot of the film: the window back lights the empty room and two wine glasses (Figure 3.27a), then it goes on to form a backdrop and a source of natural lighting for Louise's interactions with her daughter (Figure 3.27b and 3.28a); finally, it frames the couple when Ian asks her if they should make a baby thus acting like a natural illumination for the characters and props (Fig 3.28b).



Figure 3.29: Louise in her office from *Arrival*

2. Louise's office windows illuminate the scene for the interaction between her and Colonel Weber (Figure 3.29). In the presence of this rectangular source of natural light, we are also offered clues to what is happening in the story. We interpret both the described examples with the AIDS TO GAINING AWARENESS ARE

AIDS TO VISION metaphor which in turn stems from the base UNDERSTANDING IS SEEING. Light falls on the event unfolding in front of us and we see, therefore perceive, new knowledge.



Figure 3.30 Louise approaches the barrier (00:44:07) and Louise inside the Heptapod's enclosure (00:23:22)

3. This passive frame is also a barrier at times that stops (or allows) the character (and the audience) from gaining certain information in two instances. One is when Louise enters the ship on the other side of the glass barrier when she goes to ask the Heptapod for help (Figure 3.30b). The dark rectangular frame is visible behind her, and this is the sequence in which the Heptapods finally explain their purpose on earth and her visions about her future. Louise has certainly been walking towards this barrier with the intention of crossing it since the beginning of the film: first when she insists that she go on-site to talk to the aliens herself, then when she removes her protective clothing in the chamber (Figure 3.30a), and finally when she physically surpasses the barrier.

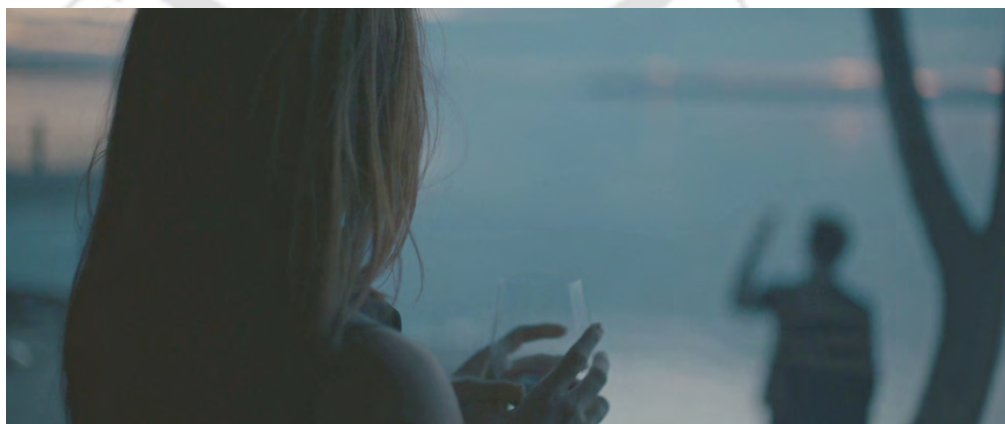


Figure 3.31 Louise calls out to someone (Ian) (00:42:27)

The second example of this is the barrier of the glass wall of Louise's home between her and Ian when she calls him inside (Figure 3.31). This we interpret as the metaphor IMPEDIMENTS TO AWARENESS ARE IMPEDIMENTS TO SEEING. We are teased by this view in the beginning when we are only able to make out the two wine glasses. Then after the climax, we see the same shot again; this time we see Louise looking outside and beckoning to a man. Before and after this shot are the several shots of Hannah's father being shown to be Ian. This montage of sequences is a major reveal, and this point is where we truly understand that the visions she's been seeing are from the future. Ian is the man she marries, has a daughter with and divorces when he cannot accept the choice, she made to have Hannah despite knowing that she will die. Therefore, we conclude that crossing the barrier is akin to gaining knowledge.

The second category i.e., active frames are the depictions of the rectangular motifs that literally hold the information or the agent of information like the Heptapods. The examples are:

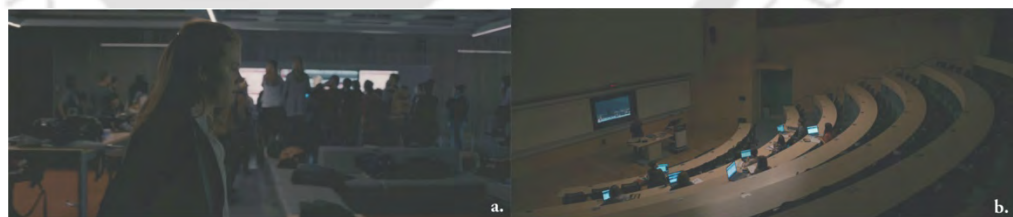


Figure 3.32 Louise walking towards her classroom (00:03:46) and Louise in class (00:05:31)

1. The frame of the TV in the college and Louise's classroom tells the protagonist and the audience that the aliens have arrived (Figure 3.32a and b). Similarly, many such digital screens are pictured in the film, where all the information about other countries' actions, the state of the people in the world, or the turning

of the tide when China retreats are conveyed through similar rectangular frames (Figures 3.33a and b, and 3.34a and b).



Figure 3.33 Louise and soldiers in the command centre (00:20:32); (00:33:09)



Figure 3.34 News broadcasts in the command centre (01:06:30); (01:15:41)

2. The glass-like barrier in the ‘interview room’ of the Heptapods’ ship is the most striking of frames in the film (Figure 3.35a and b). The barrier itself is used by the Heptapods to write and convey information. This frame is Louise’s and our window to an alien world and a key to understanding them via interaction and observation. We, therefore, conclude that the metaphor VISUAL FIELD IS A CONTAINER/ BOUNDED REGION and UNDERSTANDING IS SEEING can be interpreted from these instances of usage.

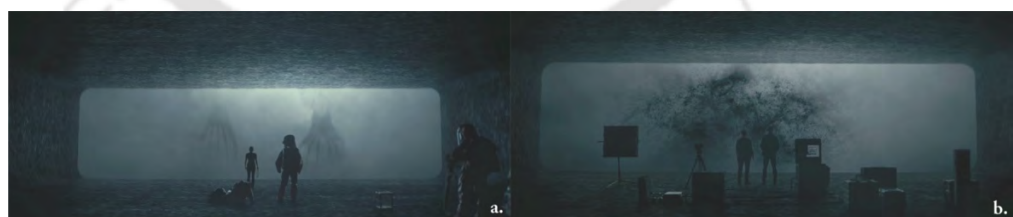


Figure 3.35 Barrier in the alien ship, (00:43:24); (01:12:01)

3. A single instance where we see the light of the transport helicopter from the glass pane of Louise’s home window while she’s sleeping, makes the window, which has been used passively so far, be considered as an active frame.

Brad Young, the cinematographer for this film thought ‘that journey from darkness to light is her journey’ (Laurent 2017). The film went on to win Best Cinematography in the 89<sup>th</sup> Academy Awards. In the same article, Villeneuve stated he was looking for a cinematographer who could work with natural light, as he wanted the film to be very realistic. Along with Vermette, the antechamber of the Heptapods was designed like a dark temple, made to feel cavernous. Young adds that ‘[t]his movie is about Louise’s personal enlightenment. So, you just submit to what the light offers and let that tell the story. It gave us the opportunity to let the lighting of the film mirror the journey of the character’ (ibid.). They used light as a metaphor for enlightenment and darkness for ignorance. Other locations besides the spaceship also reflect this idea, such as Louise’s home, the university, and her classroom. Of the light, Villeneuve remarks ‘A light that brings a lot of intimacy, sensuality, fragility and humanity to the project,’ (ibid.). As with other cinematographers, Young also coded the colour temperature of sequences with meaning: ‘I went for cooler colours when I wanted Amy [Adams] to feel worn down. We tried to pull back on that a little bit, but then Denis stopped me in the [colour timing] and told me not to be so concerned about skin tone and let her be pasty, let her exist in that melancholy space, let us feel that visually’ (Desowitz 2016). We have also seen a similar coding with the cinematography of *21 Grams*, and it is a common decision to take by the production team before the actual shoot. Young also attributes his documentary filmmaking days to how he constructs the camera movements in the film. In sequences like Louise trying to decode the language, her interactions with the aliens, her memories with her daughter, he uses a smooth handheld to not impose but at the same time achieve an effect of intimacy. For most of the film, the camera is at the backs of the characters, with the large rectangular sources of light turning the characters almost

into silhouettes. What this framing also does is put the rectangular forms in the background of the characters, lighting or backlighting them.

These rectangular frames are all over the film and there are very few compositions where the form doesn't exist. Thus, we conclude that the visual motif of a rectangle plays a very important role in reinforcing the narrative flow while also providing information to the viewer.

### 3.5 Conclusion

#### TIME and LANGUAGE and NARRATIVE IS A CIRCLE/CYCLE

With the circle as a recurring motif in the Heptapods' written language, the structure of the film and the alien's perception of time as all at once, a parallel can be drawn. The aliens and, by extension Louise, can access all of time at once, while still living through a present. The film narrative begins with the arrival of the aliens and ends with their departure. Everything else that is not a part of the diegetic present is the future that is yet to come. The filmmakers used the looping structure to bring this sense of 'knowing the future before it happens' that Louise's character experiences, to the audience by looping the narrative and using mnemonic devices to blend the V/Ms smoothly into the narrative. The viewer doesn't question Louise's experiences until she herself questions them. Louise's experience of time after immersion into the Heptapod language comes in the form of her V/Ms which she fails to recognise as memories of the future. In this manner, the viewer is deceived into thinking the episodes are flashbacks before she voices her confusion. Thus, time manifests as a circle in the structure, linking the character's experience with the narrative structure.

Further, the circular logograms in the film have neither an end nor a beginning, unlike sentences in the English language. Parts of the Heptapod B sentence are made up of ink strokes with words rotated around the circumference, and the sentence can be read in any direction. In this sense, the visualisation of the logograms corresponds to how the aliens experience time, and the act of writing reveals that they know exactly what they are about to write and how much space it will occupy before they have written it. We thus conclude that while the visualisation of the narrative structure in the film corresponds to the circular structure of the logograms, the root is clearly from the Heptapod experience of time as non-linear. All three attributes clearly demonstrate the TIME IS A CIRCLE/CYCLE metaphor at work. This analysis also revealed that mnemonic aids, transitions and recurrent visual motifs fortify the circular structure of the narrative, bringing about cohesiveness between concrete (language) and abstract (time) domains and highlighting the experience for the protagonist that otherwise would have been lost in a linear telling of the story.

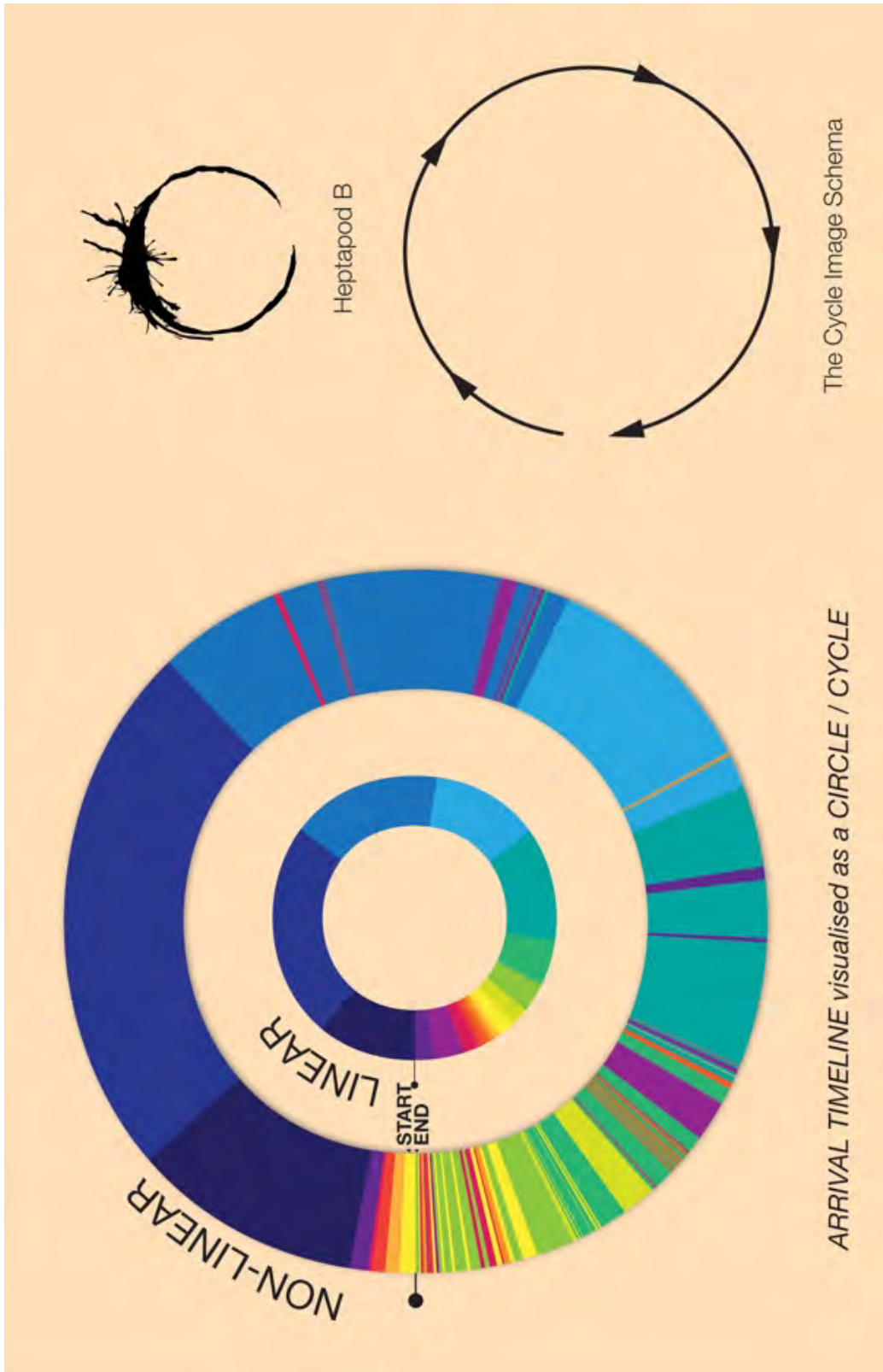
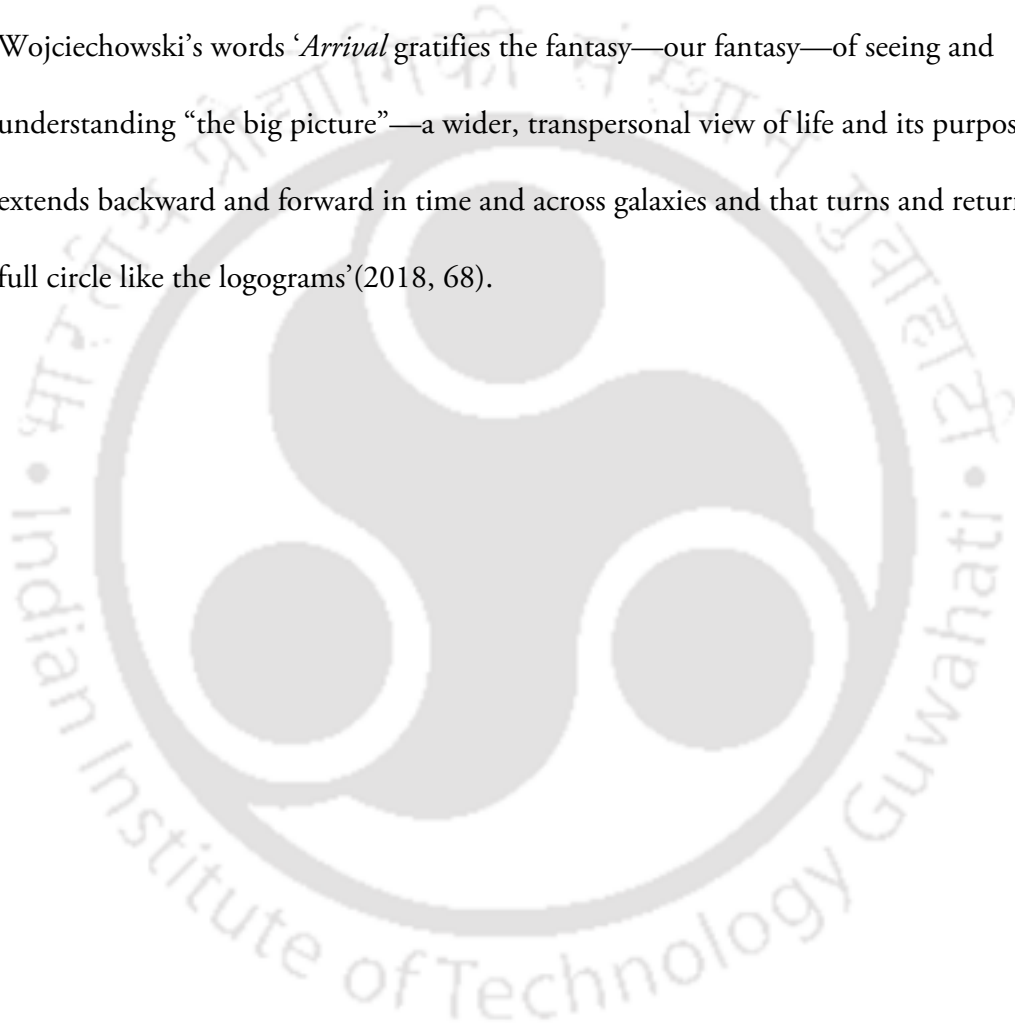


Figure 3.36 Narrative Structure, Heptapod B and The Circle/Cycle Metaphor

Thus, the three kinds of visualisations (Figure 3.36) put together shows how Heptapod B, the image schema and the actual visual analysis of the film seem to be iterations of the cycle/circle metaphor, and when placed side by side reveal the cycle/circle elements at various design and conceptual levels, tying the theme and the structure of the film together through the embodied signal of Heptapod B. In Wojciechowski's words '*Arrival* gratifies the fantasy—our fantasy—of seeing and understanding “the big picture”—a wider, transpersonal view of life and its purposes that extends backward and forward in time and across galaxies and that turns and returns in full circle like the logograms' (2018, 68).



## Chapter Four

### *Three Other Films*

At the fundamental level, metaphors map concrete source domains onto abstract target domains. According to Maarten Coëgnarts (2017), in the medium of film these are driven by inferential logic. There is enough evidence to show how metaphors are elicited by the use of various cinematic devices. If the spatial attributes of these schemas are used in the structure of the narrative, 'the filmed event obtains a formal unity and generality that provides coherence: it acquires characteristics that, like language, can be analysed' (Coëgnarts 2017). This research has posited that spatial attributes in films can also refer to and elicit image schematic experiences. Having demonstrated the use of schema and metaphor in the cases of the two films in the previous two chapters, we explored three other film texts in a similar manner to strengthen this claim. As hypothesised earlier, each film needed a slightly different approach, but at the core, the methodology remained the same. At the centre of this study are the application of base image schemata and an analysis of the basic conceptual metaphors at work.

This chapter studies three more mainstream and successful non-linear films: *Sliding Doors* (Peter Howitt, 1998), *Memento* (Christopher Nolan, 2000), and *Dunkirk* (Christopher Nolan, 2017). This is a less granular study since it seeks to provide a wider

validation of the thesis to accompany the in-depth demonstration offered in the previous chapters.

The films selected for analysis in this chapter are also from the mainstream genres and have a strong connection between the form and the content. They are similarly well-received by both critical and mainstream audiences and have been the subject of much discussion and study. Any treatise on non-linearity in the film medium is incomplete without *Memento* and *Sliding Doors*. Their popularity in CMT and film studies circles also helped us limit the focus to only the metaphoric implications of the design of their narratives. *Dunkirk* was chosen because of its director's proclivity towards experimenting with structure on a mainstream platform in his entire oeuvre. Christopher Nolan plays safe and yet toes the line over and over again. While fascinating, it is the work of another, preferably auteur-based study, so we too have played safe and study only two of his films for the moment.

#### 4.1. *Sliding Doors* (Peter Howitt, 1998)



Figure 4.1 Helen A (00:06:23) and Helen B (00:06:17) in *Sliding Doors* (1998)

*Sliding Doors* is a romantic comedy-drama that follows the parallel lives of a woman named Helen (Figure 4.1). Played by Gwyneth Paltrow, whose storyline splits into two after a pivotal moment in her life which is whether she catches a train or not. The film

explores the different paths Helen's life could take depending on this event and examines themes of fate, choice, and consequences. *Sliding Doors* received mixed reviews upon its release, with some praising its concept and Paltrow's performance, while others finding it contrived or overly sentimental (Leong 1998; Berardinelli 1998; Barclay 2001; Ebert 1998). The edit of the two narratives criss-crosses from one to the other using interesting transitional elements, that are part of the *mise-en-scène* itself. This, in turn, ties into the idea of sliding doors, which metaphorically allows the audience passage from one reality to another. We posit that the SPG schema is activated in not one but two parallel narratives, and the switch from one to the other creates a zigzag narrative pattern designed to embody this parallel movement for the viewer.

#### 4.1.1 About the Film

*Sliding Doors* was the actor Peter Howitt's directorial debut. As with Guillermo Arriaga in *21 Grams*, Peter Howitt got the idea of this film through a chance encounter himself: when he stopped to make a phone call to a friend instead of catching a train, he was hit by a car, and that incident turned out to be profoundly thought-provoking for him. He realised how quickly things could change as a result of choices made and figured that this was a good concept for a film to explore. The characters in the story were also loosely based on himself, his friends and the events in his life, as most new screenwriters are wont to do. For four years after writing the script, Howitt was unable to raise funds for producing the movie. For him, producer Sydney Pollack taking an interest in the film due to John Hannah's desire to act in it was also a 'sliding doors' kind of a moment. John Hannah happened to have a copy of Howitt's script with him the day he met Pollack. Once Sydney Pollack got on board as producer, everything fell into place serendipitously, allowing Howitt to make the film (Stein 1998).

The film did well at the box office, surpassing its \$6 Million budget to earn almost twice that amount ('Sliding Doors', n.d.). The film depicts the life of Helen, a PR executive, who loses her job, and, while trying to get back home to her boyfriend, misses her train. The storyline split is demonstrated in Figure 4.2. For clarity in the discussion below I label the first story (in which Helen misses the train) Storyline A (henceforth SA) and the character, Helen A. The Helen who catches her train is labelled Helen B and her story, Storyline B (henceforth SB). Helen A gets mugged while trying to hail a taxi and does not catch her boyfriend Jerry cheating on her with his ex-girlfriend Lydia. Helen B meets James on the train and reaches home just in time to catch Jerry in the act of cheating on her.

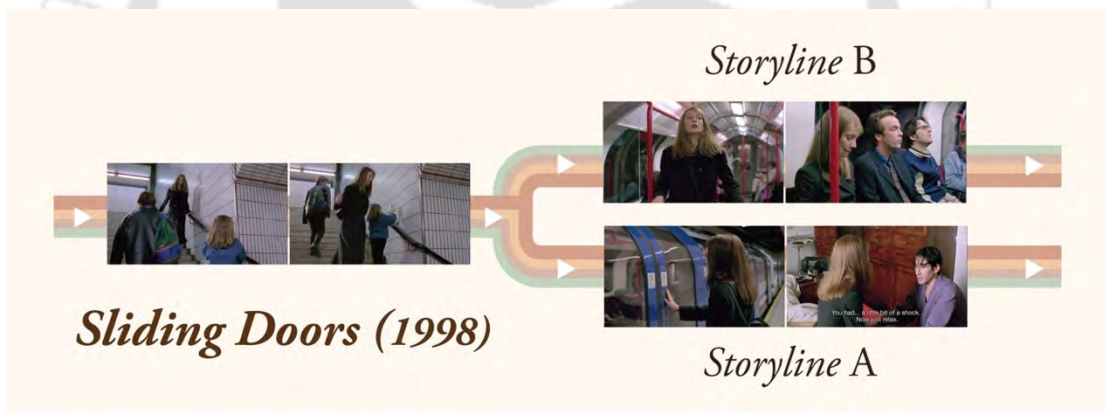


Figure 4.2 Split in the story, *Sliding Doors* 1998

Helen A is unaware of her boyfriend's betrayal and subsequently struggles to find another job. She must resort to part-time work in a hotel and a sandwich shop to support Jerry as he writes his novel. In the meantime, Lydia, Jerry's mistress, gets frustrated that Jerry won't break up with Helen and devises elaborate schemes to make Helen find out about their affair. Eventually, Helen and Lydia both get pregnant with Jerry's child, and in the final confrontation, Helen, upon discovering Jerry at Lydia's apartment, falls down a flight of stairs and loses her baby. When she regains consciousness, she finds the

strength to break up with Jerry and meets James in the elevator of the hospital, much like they had done at the beginning of the film.

Helen B catches the train and meets James during her journey home. She gets home in time to find Jerry in bed with Lydia, and after breaking up with him, Helen B moves in with her best friend, Anna. She eventually begins a relationship with James and starts her own PR firm. Jerry comes to see her and asks her to take him back, but Helen discovers that Lydia is pregnant and leaves him for the final time. While trying to reconcile with James, Helen discovers that she's pregnant with James's child while also realising to her despair that he is still married to Claudia. Eventually, James is able to clear up the misunderstanding, and they get back together, only for Helen to get into a road accident which she is unable to survive. Helen B dies at the end of SB.<sup>1</sup>

These two stories are intercut with each other, and many key moments which happen at the same time overlap.

### 4.1.2 Forking Path Narratives

*Sliding Doors* is considered a forking path narrative. These are stories that split from one point in the course of the film and offer alternative fates involving the same characters and locations. David Bordwell uses this terminology, deriving it from Jorge Luis Borges's story 'The Garden of Forking Paths,' in his analysis of four films which show this characteristic, and *Sliding Doors* is one of them (Bordwell 2002).<sup>2</sup> In contrast to the other three films that Bordwell discusses, which depict each different version of the story in

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<sup>1</sup> James and his wife have been separated for 6 months and are only keeping up appearances for the sake of his sick mother.

<sup>2</sup> 'The Garden of Forking Paths' revolves around a novel written by a sage in which the central character, upon arriving at a choice in his life, chooses all of them simultaneously, thus creating several futures, several times over which also fork. This short story by Borges is a cornerstone work of fiction which became the inspiration for hypertext fiction and also foreshadowed the idea of parallel-worlds in quantum physics.

seriatim, *Sliding Doors* presents its two futures in tandem, like parallel stories intercut with each other.<sup>3</sup> Bordwell itemises some common conventions of such narrative structures in his essay (2002, 92–100). Below is a digested reproduction of some of the characteristics identified by Bordwell that are relevant to the film under scrutiny augmented with my own observations and examples from the text:

1. Forking path narratives tend to have simple premises, almost stereotypical recurring characters and locations which form the basis of the story world. In *Sliding Doors*, the characters in both forks are the same people who perform similar functions in both versions. What is different is the character growth and change, plus the situations they find themselves in. Bordwell suggests that this simplicity and recurrence makes divergent futures easier to comprehend for the audiences.
2. The Borgeian forking paths, which manifest as infinite in the story, are pared down to a simpler and 'more cognitively manageable conception of what forking paths would be like in our own lives' (2002, 90). Bordwell posits that most filmmakers do this not due to a lack of courage to make a complex narrative but for the ease of the audience who fall back on common perceptual skills and narrative conventions to make sense of stories. In *Sliding Doors*, we only see two parallel worlds which depict the consequences of a single action. The other films Bordwell analyses, *Run Lola Run* (Tom Tykwer, 1998) and *Blind Chance* (Krystof Kieslowski, 1987), both show three alternative timelines but, as noted above, in serial order.

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<sup>3</sup> For example, *Run Lola Run* (Tom Tykwer, 1998) has three different versions of the same chain of events which are shown one after the other and the protagonist seems to learn from each run of the obstacle course. This results in an effect almost like being given three chances to play the same level in a video game.

3. The forking paths are linear in the sense they follow the conventional structures of a mainstream film while being crosscut with the other paths (Figure 4.3). Both the storylines (SA and SB) in *Sliding Doors* continue in a linear fashion while being intercut.

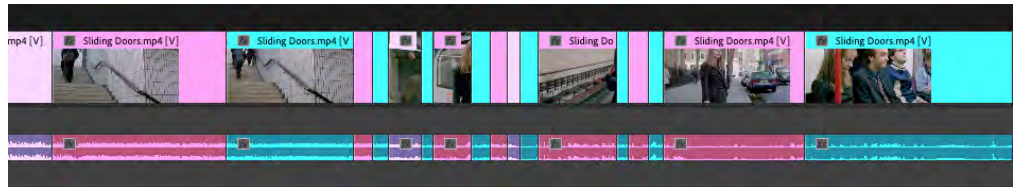


Figure 4.3 Alternating Storylines *Sliding Doors* 1998

4. Forks are signposted: a single moment gains importance against others in the base narrative, which behaves like a switch which splits the story into two futures. As Figure 4.4 shows, Helen's story splits at the train station, where Helen A misses the train, and Helen B catches it. In SA, where she is unaware of the affair, she even wonders what would have happened if she had caught the train and been early coming home. In SB, Helen B gets acquainted with James as a result of catching the train and embarks on a relationship with him after her break-up with Jerry. The split in the fork is highlighted by a musical leitmotif, signalling that something extraordinary is about to happen. Immediately after Helen A misses the train, the tape, so to speak, rewinds back to the point where she bumps into a child, causing her delay, and this time the mother pulls the child away, clearing the path for Helen B to enter the train in the nick of time. There is no logical explanation provided for the split or any significance to the characters who caused the forking path, which foregrounds the primary theme of the film: the significance of blind fate in the unfolding of human lives.

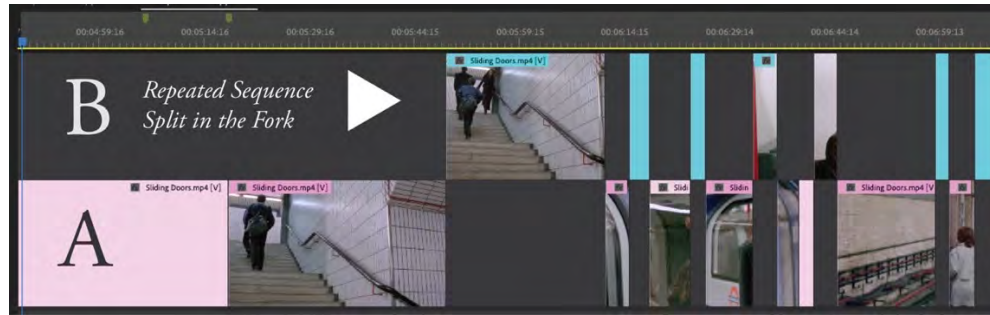


Figure 4.4 Signposted split in the fork Sliding Doors 1998

5. Forking paths run parallel. According to Bordwell, events in both Helens' lives mirror each other in certain ways, and the intercutting brings this out more sharply. For example, Helen A drinks with Jerry at Bertolli's, while Helen B drowns her sorrows at the break-up with Anna (Figure 4.5). Both Helens are helped into bed by Anna and Jerry respectively. Both Helens and both Lydias get pregnant, both Helens at a party and hotel respectively experience dizziness at the same time and both Helens are involved in a car accident.



Figure 4.5 Both Helens at Bertorelli's; Sliding Doors 1998; (00:23:43) and (00:22:58)

6. Bordwell observes that the two forking paths are not sealed off from each other and that the protagonist seems to learn from either and apply that knowledge in their own story. Helen A is in the same place as Helen B when James participates in a rowing competition. Helen A remarks to Anna that she somehow knew that there would be a race with purple-shirted rowers that day. This is also a scene which smoothly transitions between SA and SB in a trick shot; we begin with Helen B on a companion boat egging James on with their friends and pan to

Helen A walking alongside the same river with Anna. In *Run Lola Run*, the protagonist learns from each failed attempt at acquiring money for her boyfriend so that in the final try (the third one), she succeeds in avoiding the earlier obstacles.<sup>4</sup> For Helen A, who has managed to survive the accident in the end, the learning comes in the form of what she remembers (quick flashes of the places she visited in SB) of Helen B's conversations with James, although in this timeline Helen A makes the acquaintance of James for the first time in the hospital elevator.

7. Forking path narratives favour the last storyline. In the case of *Run Lola Run*, the three stories are iterations of the same premise, and in the last one the protagonist reaches their goal. In *Sliding Doors*, SA is also the one in which she survives, and we end the story with her meeting James again. SB is the timeline in which Helen B falls in love with James but dies in the accident, and we come back to SA or the primary plotline and end with Helen and James getting another chance at starting a relationship.
8. The two plotlines belong to different genres; according to Bordwell, SA is a melodramatic plot, while SB is more of a 'typical romantic comedy' (2002, 102). Since Helen B dies in the romantic comedy timeline, and melodramatic Helen A survives, Bordwell remarks that the director satisfies audience expectations. He allows Helen A, now wiser from Jerry's adultery, to meet James again, this time in a mirror scene of the way they met at the beginning of the film (Figure 4.6).

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<sup>4</sup> According to Bordwell, it is as if Lola figures out what she's learned over the last two attempts and manages to reach her goal out of desperation. (Bordwell 2002, 100)

She is also able to answer James' question asked in jest, the answer to which Helen learned as Helen B in SB.<sup>5</sup>



Figure 4.6 James hands Helen the earring in the beginning (00:04:33) and in the end (01:35:32) in Sliding Doors 1998

9. In SA, Helen, Jerry and Lydia form a triad with James, an incidental character in the periphery, whose presence would not even make sense if all of SA were taken for the only story we know. In SB, however, Helen, James and Jerry form the triad while Lydia becomes a supporting character as Figure 4.7 shows.

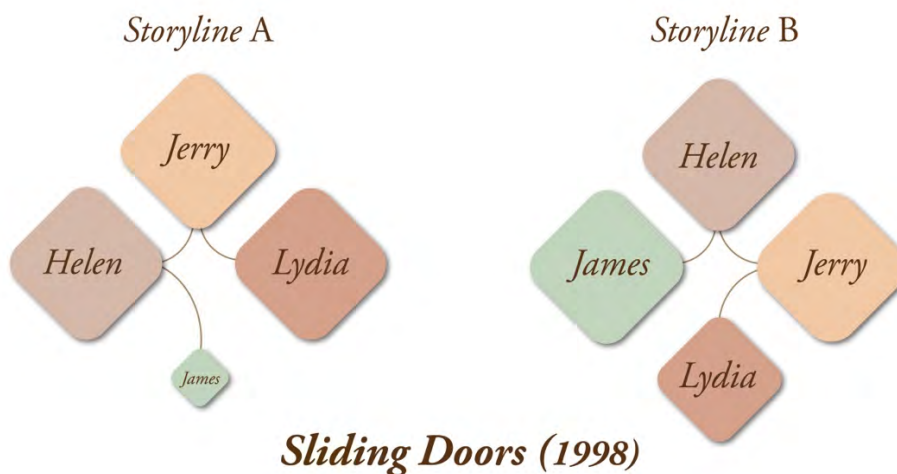


Figure 4.7 Character maps for both storylines, Sliding Doors 1998

Bordwell concludes that 'the more radically the film evokes multiple times, the more constrained it must be on other fronts' (2002, 104).

<sup>5</sup> In Arrival, the protagonist's actions are influenced by her access to the future (Chapter 3). We find both this and Helen's ability to answer the question similar in nature.

### 4.1.3 Narrative Movement and Metaphor

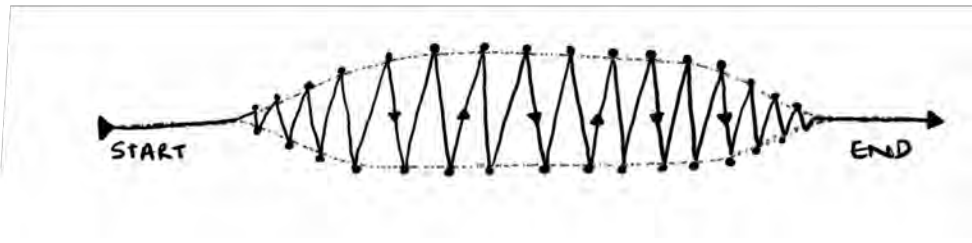


Figure 4.8 Visualization of Narrative Movement in *Sliding Doors* (1998)

The split in the storylines and the consequent crosscutting makes both narratives appear alternatively on screen. The narrative design that Figure 4.8 visualises reveals that after the initial setup, the narrative creates a zigzag movement with sequences following each other and terminating in a single storyline again.

The inside of the train compartment and the platform represent two different futures for Helen. In missing the train, Helen A is denied entry and thus left behind on the platform in SA, while Helen B is granted access to it in SB. This happens via a pair of sliding doors, which Helen A fails to cross, and Helen B succeeds in crossing in the nick of time. The motif of doors repeats often throughout the film and is used as a transitional element from one storyline to the other. The director himself remarks that the doors or rather the action of slipping through physical sliding doors is used in the film to embody the metaphoric transition to and from two distinct timelines (Howitt 1998).

The first metaphor that may be identified here is OPPORTUNITIES ARE OPEN PATHS. The sliding doors opens a path for Helen B and sets her on a journey of self-discovery while denying the same to Helen A, leaving her struggling to make ends meet while still supporting her cheating boyfriend.

Engaging in a long-term action involves change of state, a purpose, and external events affecting you. The changing that one undergoes as one

engages in the activity is understood as motion from one location to another. The changing that one undergoes as external events affect one, is understood as control over one's location exercised by an outside force. Thus, external events are seen as things (or a fluid) in motion, with direction and speed and with a force that can affect one's journey. (Lakoff et al. 1991)

The sliding door also presents an impediment for Helen A. By shutting her out of the other possible future; the door has become an impediment to her movement towards a better future. She is stuck in a difficult relationship with an unfaithful partner in the same flat. Helen A is also unable to find a new job in PR, instead taking part-time jobs in the same two locations we have seen her earlier in. So, there is no forward movement for her. The metaphor identified here is DIFFICULTIES ARE IMPEDIMENTS TO MOVEMENT.

PROGRESS IS FORWARD MOTION: While Helen A misses her chance to catch her boyfriend with his lover, Helen B catches them in the act and proceeds to end the relationship and literally moves out and on.

STATES ARE LOCATIONS: For Helen A, she is left behind in a terrible situation and bad relationship without knowledge. Helen B, on the other hand, moves out of this bad situation and turns her life around, starting up her own firm, getting a makeover and a new boyfriend. Helen B is in a better place than Helen A. The identified metaphors reinforce the primary metaphor, i.e., LIFE IS A JOURNEY and are entailments of the same.

The narrative movement from one to another creates an actual experience of movement between the two timelines for the viewer. In Figure 8, we see the progression of the narrative timeline vs. the story timeline. The vertical depiction of the timeline is due to the following reasons: Top to Bottom and Left to Right are considered to create the least amount of cognitive load due to reading direction (in most Western cultures) and gravity. This principle is oft used in design and filmmaking to convey hierarchy or meaning.<sup>6</sup> A horizontal timeline, the kind we have used in the earlier chapters, would not have served the purpose here to depict the sliding movement of the narrative, which then becomes up/down (Figure 4.9) instead of left/right which would

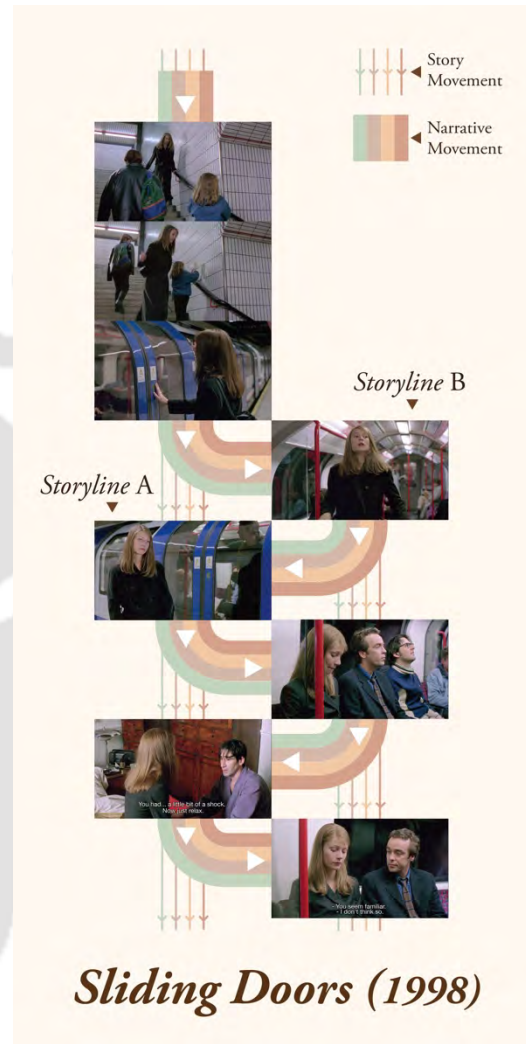


Figure 4.9 Narrative Movement v/s Story Movement, Sliding Doors 1998

<sup>6</sup> Jennifer Van Sijll writes an excellent textbook on cinematic conventions with examples from popular films which cover all the conventional techniques used to code the frame with meaning (2005).

favour one storyline over the other.<sup>7</sup> Neither storyline can be considered to be better than the other, and thus, such connotations are best avoided.

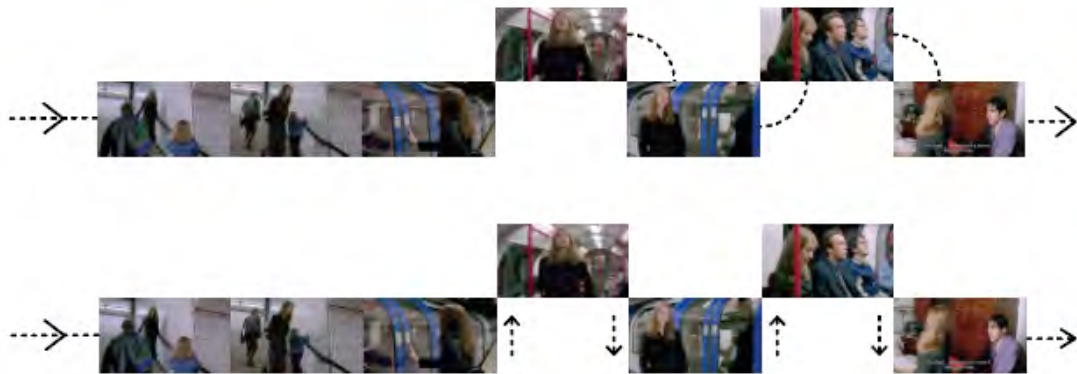


Figure 4.10 Other Options for Narrative Movement Visualisations

<sup>7</sup> GOOD IS UP, BAD IS DOWN are the metaphors which come into use when talking about verticality (Lakoff and Johnson 2011).

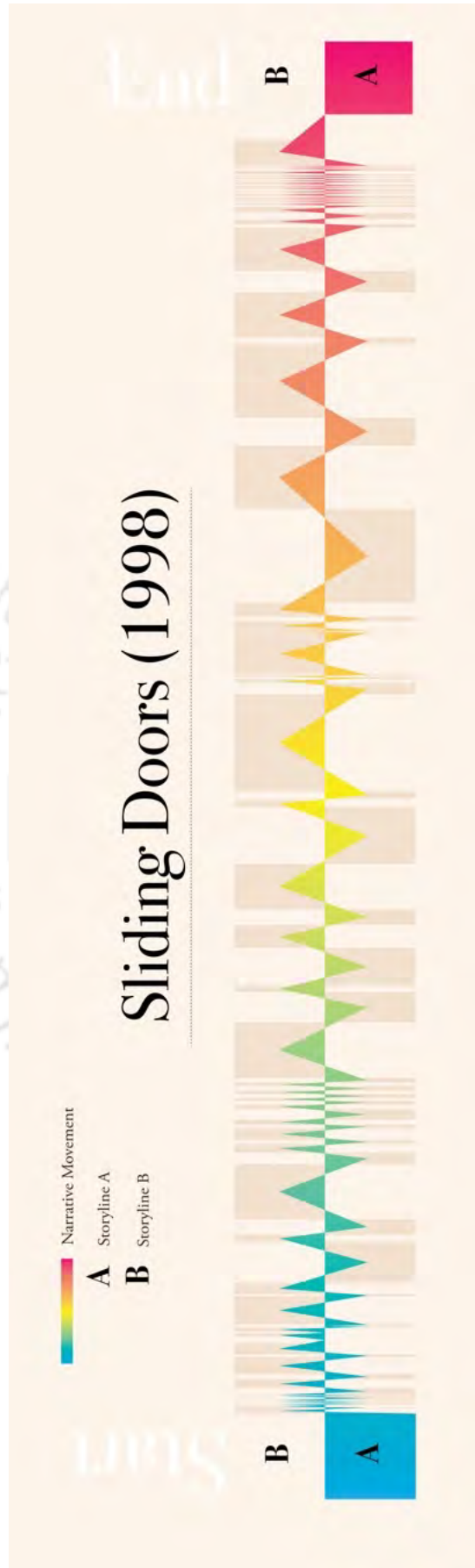


Figure 4.11 Narrative Movement between two storylines in Sliding Doors 1998

#### 4.1.4 Sliding Doors Moments

Ashley Fetters, in her 2018 article, describes the film *Sliding Doors* as an ‘examination of how tiny, seemingly inconsequential moments can alter the trajectories of our lives.’ (2018). The film has been said to famously introduce into popular usage the phrase ‘sliding door moment.’ Commonly used in news articles, the term has been used to describe Princess Diana’s last-minute decision to go to Paris, which led to her death; the rise and fall of sports teams and banks; describe how to get love to last in pop psychology (Wikipedia Contributors n.d.), even in academia to talk about women reflecting on race and friendship (Dalpes and Eanes 2018). As a result of watching the film at an impressionable age, Fetters felt overwhelmed by the idea that at any given point of her life, she could be unknowingly choosing between a great life or a mundane one. Every time she would catch or miss a subway train, she would be compelled to dwell on the magnitude of this seemingly small event in her life, and this filled her with anxiety. Eventually, as Fetters grew older, she came to terms with the idea that there was more than one way of looking at the film’s message: ‘even when our lives take fluky, chaotic detours, ultimately good-hearted people find each other, and the bad boyfriends and homewreckers of the world get their comeuppance.’ While Helen B dies and Helen A lives and, in a way, restarts the good part of her life with James.

#### 4.1.5 Cinema of Choice

Nitzan Ben Shaul was another of the many affected by the depiction of forking paths in *Sliding Doors*. In his book *Cinema of Choice* (2012), Shaul expounds the idea of optional thinking and close-mindedness. In general, narratives in films present a causal chain of

events that leads to a single conclusion. They don't offer a choice in the way the story ends. This single consummation is heavily entrenched in the genre of the film, the characterisation of the protagonist and the make-up of the story world. Since the viewer is completely immersed in this experience, there is no opportunity to think about an alternative action that the characters could have taken.<sup>8</sup> Upon observation of his own reactions after a viewing of *Sliding Doors*, Ben Shaul realised that 'optional thinking,' as he labelled it, hardly ever occurs with other films. This 'pleasurable cognitive and creative process,' which compels viewers to imagine possible, viable futures for the characters of the film, is seldom explored in linear goal-oriented narratives.<sup>9</sup> Instead, 'most films encourage a closed state of mind, biasing our cognitive processes toward a reductive and selective attention to incoming data.' This leads to a cognitive bias, which is dictated by a film's subject matter, steering the audience towards a 'closed state of mind' (2012, 1). As Shaul reminds us, there is evidence in cognitive psychology to suggest that the ability to generate alternative hypotheses is favourable for decision-making, problem-solving and critical thinking. In his book, he charts the field in an excellent review in favour of this claim. *Sliding Doors* encourages optional thinking in a way that is reminiscent of wishful thinking on the part of the protagonist and the audience on behalf of the protagonist.

Since we are offered no explanations as to why the tape rewinds and Helen gets another chance to change the trajectory of her fate, the overwhelming interpretation is

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<sup>8</sup> Interactive narratives like *Bandersnatch* (David Slade, 2018) have a set number of pathways that a viewer can choose from and with every choice or every different instance of viewing, be presented with a different narrative. Currently these narratives which form a category popularly called 'choose your own adventure' fall outside the purview of this discussion as they elicit a different type of engagement from the viewers.

<sup>9</sup> This process is also the most natural one through which we make day to day decisions about our own lives, by mapping out alternatives which would unfold as a consequence of our decisions, and then choosing the most appropriate one. Since this is an inherent attribute to humans, it seems plausible to argue that a depiction of the same in a film narrative would bring to fore similar cognitive effects.

that this is wishful thinking on her part. The evidence for this lies in the following observations:

1. SA is the one in which Helen is stuck in a situation in which she is unhappy. So, SB can be interpreted as a daydream on Helen A's part, in which she wishes things were different and creates an alternative future for herself.
2. Since Helen A is still stuck in the primary timeline, she is also unable to get closure as Helen B in SB does despite having apparently moved on. This is evident in her waiting for Jerry to call/apologise, her inability to entirely commit to James in the initial days, her letting Jerry kiss her in front of James and after going back to the apartment to talk to Jerry, where she is disabused once again of the notion that anything can be salvageable in that relationship and also when she suspects James of cheating on her. All these instances link straight back to her insecurities as Helen A.
3. Helen A remains suspicious of Jerry throughout SB, leading her to check up on his movements or asking him outright if he's cheating. She is miserable in the primary timeline and stays that way till the end. On the other hand, we see Helen B happy, enjoying her life with James, revelling in a new look, a new job and so on. Helen A becomes a victim in SA, but we see other facets of Helen's personality in SB that we would not be able to access with only the primary timeline. Individually, neither story would have filled out this character on its own for the viewer. The structure instead builds depth and vividness to her character allowing the audience to imagine her in another life.

While there have been many later films with forking path narratives, *Sliding Doors* remains the prototype for a mainstream manifestation of this particular design.<sup>10</sup>

In this film, then, the narrative design displays a movement back and forth between its two storylines and embodies at a structural level the overarching theme of the film. This dovetailing of narrative theme and overall cinematic design serves not only to enhance the viewing experience but also reinforce the claims that this research makes.

## 4.2 *Memento* (Christopher Nolan, 2000)

*Memento* is another example which I test to find out whether the edit design of non-linear cinema may be shown to embody cognitive metaphors derivable from its story content. Much has been written about Nolan's celebrated neo-noir psychological thriller, which, given its humble inception, is a feat in itself. This was Nolan's first feature-length film produced by Newmarket Films LLC, who eventually had to distribute the film themselves when other major American distributors turned it down. Before *Memento*, Nolan had made *Following* (1998) on a bootstrap budget and cast, shooting only on weekends and with one film roll at a time (Shone 2020). With *Memento*, Nolan was given a budget of \$9 million by Newmarket and ended up earning \$40 million, to the industry's surprise. It was a box office success largely through word-of-mouth publicity and talk around the film festival circuits. Reportedly, the audience kept going back to solve the puzzle of the film, which was only allegedly possible upon a second viewing (Barratt et al. 2009).

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<sup>10</sup> The recent Netflix film *Look Both Ways* (2022) by Wanuri Kahiu follows the same pattern but engages with more contemporary themes.

### 4.2.1 About the Film

The film presents part of the story in reverse chronological order the design of which are visualised in Figures 4.12 and 4.13. It follows the protagonist Leonard, who is searching for the person (John G) who murdered his wife. The film explores themes of identity, memory, and revenge and received widespread critical acclaim for its direction, acting, and innovative narrative structure. Time is represented forwards and backwards at the same time. Ghislotti calls it bidirectional, forcing the audience to experience time and memory as the protagonist does (2009). The ending of the narrative (which is the middle of the story) has been visualised as a hairpin bend, often described as such by Nolan himself (2001). This is a turning point that skews everything we have seen so far, making us doubt our own understanding of the events that we have witnessed.

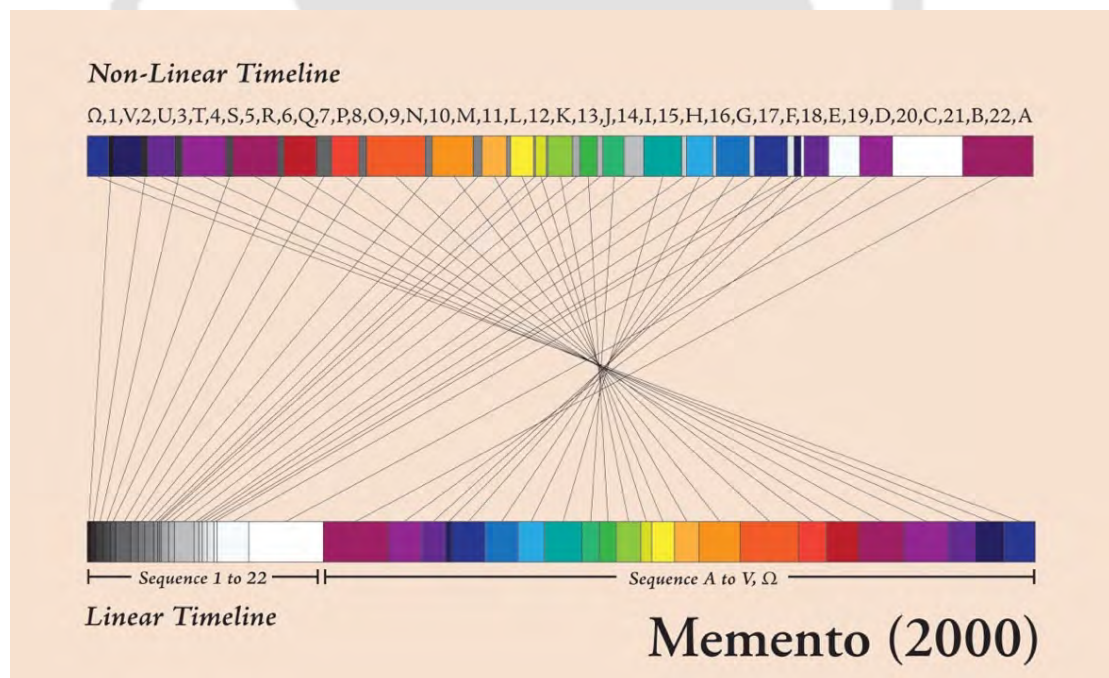


Figure 4.12 Bipartite diagram for Memento

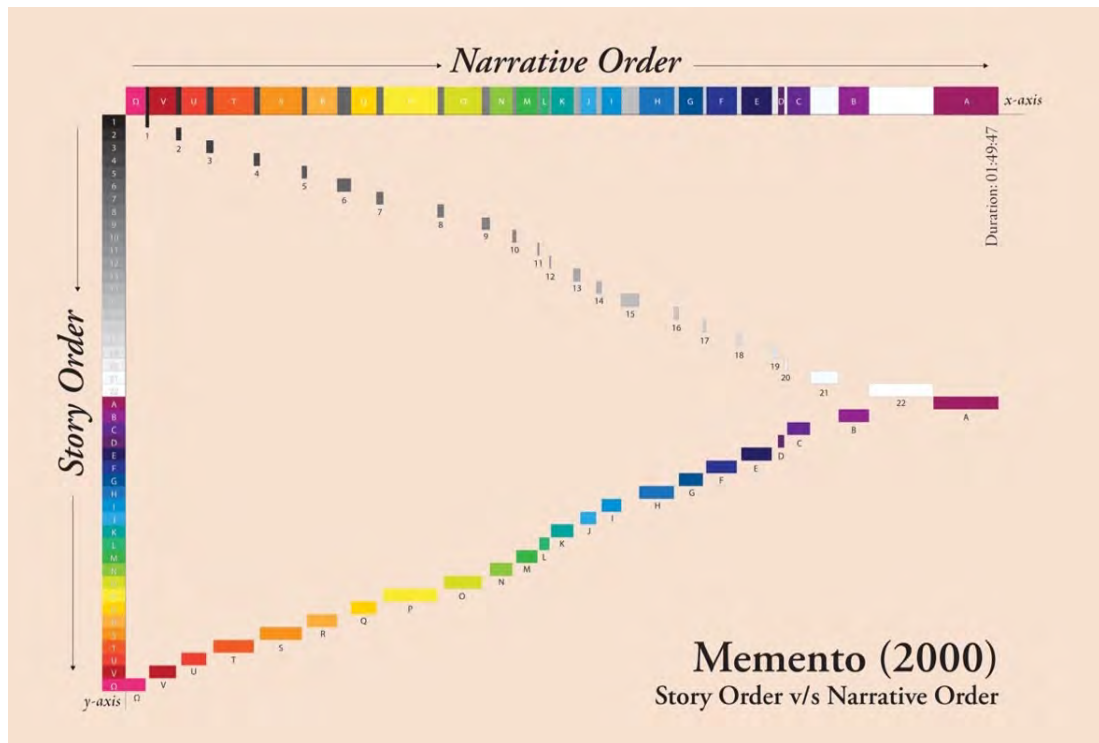


Figure 4.13 Narrative order vs. Story Order based on Story Curves, Kim et al.

#### 4.2.2 Structure of *Memento*

In the twenty-two years since the film's release, scores of critics, reviewers, philosophers, filmmakers, students and even interested audience members have dissected and analysed the film to its very grain. While it would be impossible to recapitulate all the work done on *Memento*, my analysis is informed by the in-depth scrutiny by scholars such as Stefano Ghislotti (2009), Noël Carroll and Andrew Kania (2009), Kim et al. (2018), Allan Cameron (2008) and finally, Tom Shone's book *The Nolan Variations* (2020) on his in-depth interviews with the director. Along with review articles published in the past two decades, especially the original analysis of the film by Andy Klien as early as 2001, I also briefly look at the observations of critics and audiences who have much to say about the film. We mention these because the groundwork has already been laid by many scholars on this film. The book *Memento* (2009), edited by Andrew Kania, contains an exhaustive breakdown of the film scenes and sequences as well as philosophical interpretations of the

same.<sup>11</sup> Stefano Ghislotti, in his article in *Puzzle Films*, also summarises the most common concerns of every researcher while explaining in detail how the structure of the film works. Before I get into the metaphor at work, I quickly summarise the innovative structure of the film below.

1. The film comprises 22 B&W scenes (labelled 1 to 22) and 22 colour scenes (labelled A through V plus  $\Omega$  which is the last scene in the linear version overlapped with the starting credits).<sup>12</sup> They are interspersed: the black and white scenes are shown in a linear, forward manner, while the colourised scenes are shown in a retrograde fashion. The linear version of the film reads as  
1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22/A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V,  $\Omega$  (Figure 4.14)



Figure 4.14 *Linearised Timeline Memento (2000)*

While the non-linear reads as

$\Omega$ , 1, V, 2, U, 3, T, 4, S, 5, R, 6, Q, 7, P, 8, O, 9, N, 10, M, 11, L, 12, K, 13, J, 14, I, 15, H, 16, G, 17, F, 18, E, 19, D, 20, C, 21, B, 22, A (Figure 4.14)



Figure 4.15 *Non-Linear Timeline Colourised, Memento (2000)*

<sup>11</sup> Kania's breakdown (Kania et al. 2009) is similar to the ones I have done for the rest of the films in this research, so it ties in very well with the methodology of this project.

<sup>12</sup> Andrew Kania labels the last scene chronologically as  $\Omega$  (Kania et al. 2009, 4) which Stefano Ghislotti labels as W (Barratt et al. 2009, 99). We refer to Kania's convention as it is a part of a more detailed analysis.

2. Story: Through Sequence 1 to 22, the protagonist Leonard speaks to someone on a motel phone while tattooing his thigh with a clue to the rapist/murderer of his wife, whom he knows as John G. We also realise that his condition, caused by the same attacker, has left him unable to form new memories or retain them for more than a span of 6 to 10 minutes. This is also the duration in which all the sequences play out in the film.<sup>13</sup> Sequence A to V and  $\Omega$  show us the action of about 2–3 days, during which first Leonard tracks down John G (Jimmy Gratz) with the help of a dirty cop named Teddy and kills him thinking that Jimmy is his wife's attacker and that he's finally getting revenge. Immediately Teddy disabuses him of the notion and tells Leonard that he has already killed the original John G, but since he cannot remember this Teddy manipulates him into killing other 'bad' people under the guise of revenge to suit Teddy's own dirty dealings. When Leonard discovers this, he sets up Teddy as the next John G (Teddy's full name is John Edward Gamell). Before he can forget what happened, Leonard writes himself a note to tattoo Teddy's car numberplate as the next clue to find John G and leaves wearing Jimmy's clothes and driving his Jaguar. Thus, Leonard sets into motion yet another revenge plan, this time with the help of Jimmy's bartender girlfriend Natalie. The story ends with Leonard, yet again, tracking down John G and killing him, this time Teddy, who has been taking advantage of Leonard for an unspecified amount of time.

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<sup>13</sup> Noel Carroll suggests that the duration of the sequences being the same as approximately the time for which Leonard can hold memories plunges the audience 'into a present time slice of a certain unnaturally delimited duration with no memory of what preceded it' (Kania et al. 2009, 144)

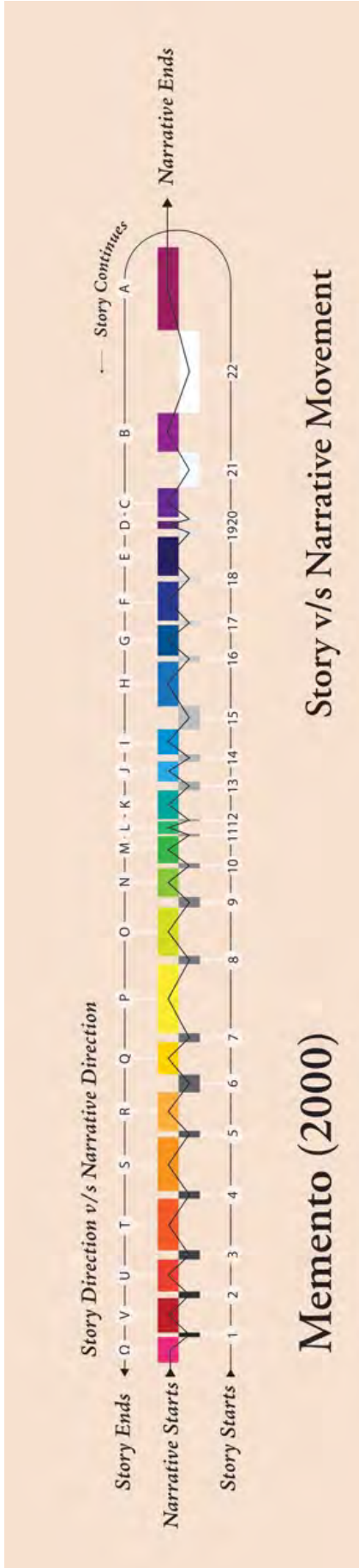


Figure 4.17 (Top) Story vs Narrative Movement, Memento (2000)

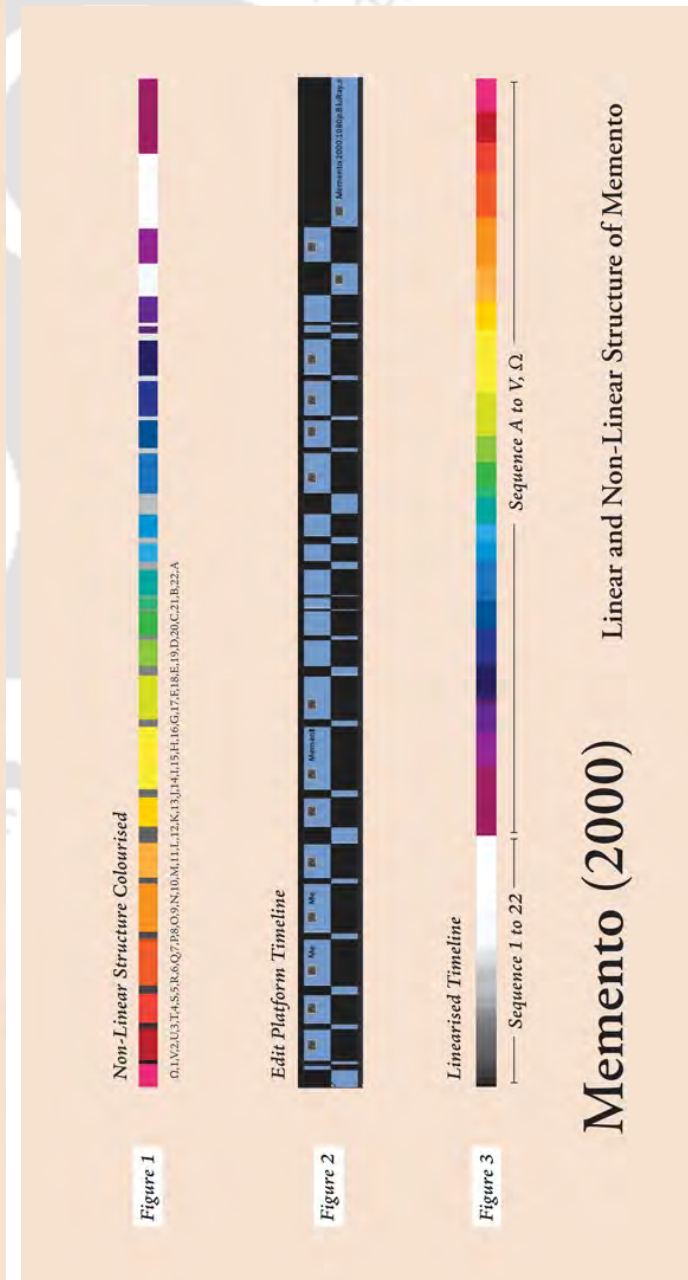


Figure 4.16 (Left) Structure of Memento

3. Narrative: What we see during the course of the film, i.e., the narrative structure, is the story bent into half and folded over with a hairpin turn at the end (Figure 4.16). The story movement is this folded-over hair comb structure, while the narrative movement is a zigzag between the extreme points in the story-time.

We see the 22 B&W sequences of Leonard talking to someone, recounting the story of Sammy Jenkins as a way of explaining his own condition and the memories of his wife, interspersed with the backwards-placed coloured sequences of him killing the two supposed John Gs. The positioning of the sequences is not random, and we see both timelines in an alternating manner which the visualization in Figure 4.17 makes apparent.

### 4.2.3 Linear vs Non-linear

In order to understand the design of the film for the purposes of this study, the sequences were visualised in both linear and non-linear timelines. While videos of such a comparison exist in the film's fandom, the visualisation performed in this study is more comprehensive and detailed. The result of this comparison is illuminating and justifies *Memento* yet again as a masterwork of cinematic design.

Stefano Ghislotti suggests other processes that augment the phenomenon of *Memento*, namely schema formation and primacy effect (2019). As viewers watch a film, they use the incoming cues to construct the schemas of the characters or situations. In the case of *Memento*, due to the primacy effect the non-linear structure builds sympathy for Leonard, adds a sense of annoyance at the character of Teddy who keeps popping up at

regular intervals, and crafts a building distrust of the character of Natalie.<sup>14</sup> The structure is a compellingly integral part of the schema-building for *Memento*'s characters.

Strikingly, in the linear viewing, the film fails to create sympathy for Leonard's condition, and Teddy's annoying presence is yet to be built. In the original version, Teddy pops up in the coloured sequences, and we have already seen Leonard kill Teddy in the very first scene. Going by the primacy effect and schema building, we surmise that the Teddy character is not a good person. This is also reinforced by Leonard writing 'don't trust his lies' on the back of Teddy's Polaroid. Accordingly, we have already painted Teddy as a bad guy and have no sympathy for his character. At the end of the film (middle of the story) Teddy tells Leonard how he has helped find his wife's killer, but Leonard cannot remember taking revenge. Here, for the first time, we see a slight indication of Teddy possibly caring about Leonard in his own limited way. This climactic sequence of the non-linear edit is presented as an unremarkable scene in the linear version in which Leonard learns about Teddy's nature and his actions so far and decides to take revenge on Teddy by starting a new search for another John G. Consequently, we end up seeing Teddy as slightly more victim-like. The B&W sequences, which contain all of Leonard's voice over narration and his story about Sammy Jenkins, are used as expositions in the non-linear structure. In the linear, all the exposition takes place within the first 20 minutes of viewing, performing a kind of

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<sup>14</sup> The character of Teddy is played by Joe Pantoliano who also played a negative role in *The Matrix* (Wachowski and Wachowski, 1999), which released shortly before *Memento* and was a worldwide phenomenon. Nolan says that he was unsure of casting someone who was already known to play a villainous character in a famous film but eventually went with Joe for Teddys character (Shone 2020). This might also have some bearing on how people who had already watched *The Matrix* viewed Teddy's character.

information dump on the audience. In the non-linear, the parcelling out of the exposition entices the viewer to wait for the next piece of that clue.

Another phenomenon is the way in which all the characters in the film take advantage of Leonard's disability, including Leonard himself. The motel owner rents Leonard two rooms; Teddy gets Leonard to kill multiple bad guys by fooling him into thinking that they are John Gs, and Natalie tricks Leonard into hitting her, then passing it off as a beating she received at Dodd's hands, thus setting Leonard out to get revenge for her by beating up Dodd. In the non-linear version, one conclusion that we come to after seeing Natalie hand in Teddy's DMV to Leonard is that she is setting up Leonard to kill Teddy because of whom her boyfriend Jimmy was killed. But we find out in the end that it was Leonard himself who set Teddy up. In the last sequence, in which Leonard kills Jimmy, we see him take Jimmy's clothes and his Jaguar, which Leonard promptly forgets by the next scene and after getting a tattoo of Teddy's numberplate, he drives off to see Natalie at her bar for the first time. While Natalie is a drug dealer and is dating another, when we learn what Leonard did, it colours all the scenes we have seen her in so far, and her betrayal of Leonard makes complete sense. Leonard, in her boyfriend's clothes, driving his car, also spends the night with Natalie, who is clearly mourning the loss of her partner.

'If you tell that story the right way around, it's unwatchable. It's pure cruelty. You have to be under the illusion that this guy is under for it to be bearable. You have to have his optimism and his ignorance for it to be okay. Otherwise, it is literally just a couple of characters torturing somebody.'

(Christopher Nolan in an interview with Shone 2020)

The comprehension of all these payoffs only happens after the viewing of the film, and this increases the intellectual appeal of the narrative so that the audience is compelled to think about it post-screening and maybe even want to watch it again with all the information at hand. Such delayed payoffs increase the satisfaction of seeing every little puzzle get solved along the way, and therefore the non-linearity adds to the complex viewing experience of *Memento*.

#### 4.2.4 Evidence for Metaphor

Much has already been written about *Memento* by scholars fascinated by its alternating, bent-in-the-middle timeline, and I add to the discourse only by way of looking at the medium of the film as the stand-in for the target domains of mind/body and memory.

At the outset, I posit that the FILM (body/text/structure/narrative) stands in for Leonard's MIND and his MEMORIES. As a result, many of the metaphoric entailments overlap and can be interchangeable between film, mind, and memory. We have already shown how film can be treated as an object and container.<sup>15</sup> Therefore, some OBJECT and CONTAINER metaphors can also be used to describe the structure of the narrative here. The base metaphor here is

FILM NARRATIVE IS LEONARD'S MIND/MEMORY and

LEONARD'S MIND/MEMORY ARE TATTOOES and POLAROIDES.

The evidence for this lies in the way in which the director uses the cutting up of the story in sequences and manipulates them to make narrative comprehension difficult for the

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<sup>15</sup> See chapter two: *21 Grams*

viewers and how the audience comprehends the narrative. Ghislotti observes that puzzle films like *Memento* bring to the fore the actual process by which the audience watches films and the steps they take to make sense of narratives (2019). The film is intriguing because we want to solve the puzzle but are also unable to assemble the events of the narrative in order during the viewing (Barratt et al. 2009). The atypical structure of the narrative makes it difficult for the natural memory processes of the viewer to function normally. For normal comprehension of the causal chain, the events must be viewed in order of transpiring to understand the effects. With *Memento*, that becomes next to impossible because the main action sequences (coloured scenes) are arranged backwards, i.e. event two is shown before event one, making it difficult to keep the connections in the working memory, disrupting causality and confusing the viewer while forcing them into a similar frame of mind as Leonard (Barratt et al. 2009). Similar, of course, is the same, as the narrative, by its very nature, needs to be known in its entirety to be comprehensible, and the filmmaker can only enhance the difficulty of comprehension in order to evoke a similar feeling.<sup>16</sup>

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<sup>16</sup> Noel Carroll observes that this technique is very effective in giving the viewers a taste of what Leonard is experiencing (Kania et al. 2009). Stefano Ghislotti discusses the effects of *Memento* in detail in his essay while also building a step-by-step analysis of how the techniques work (Barratt et al. 2009).

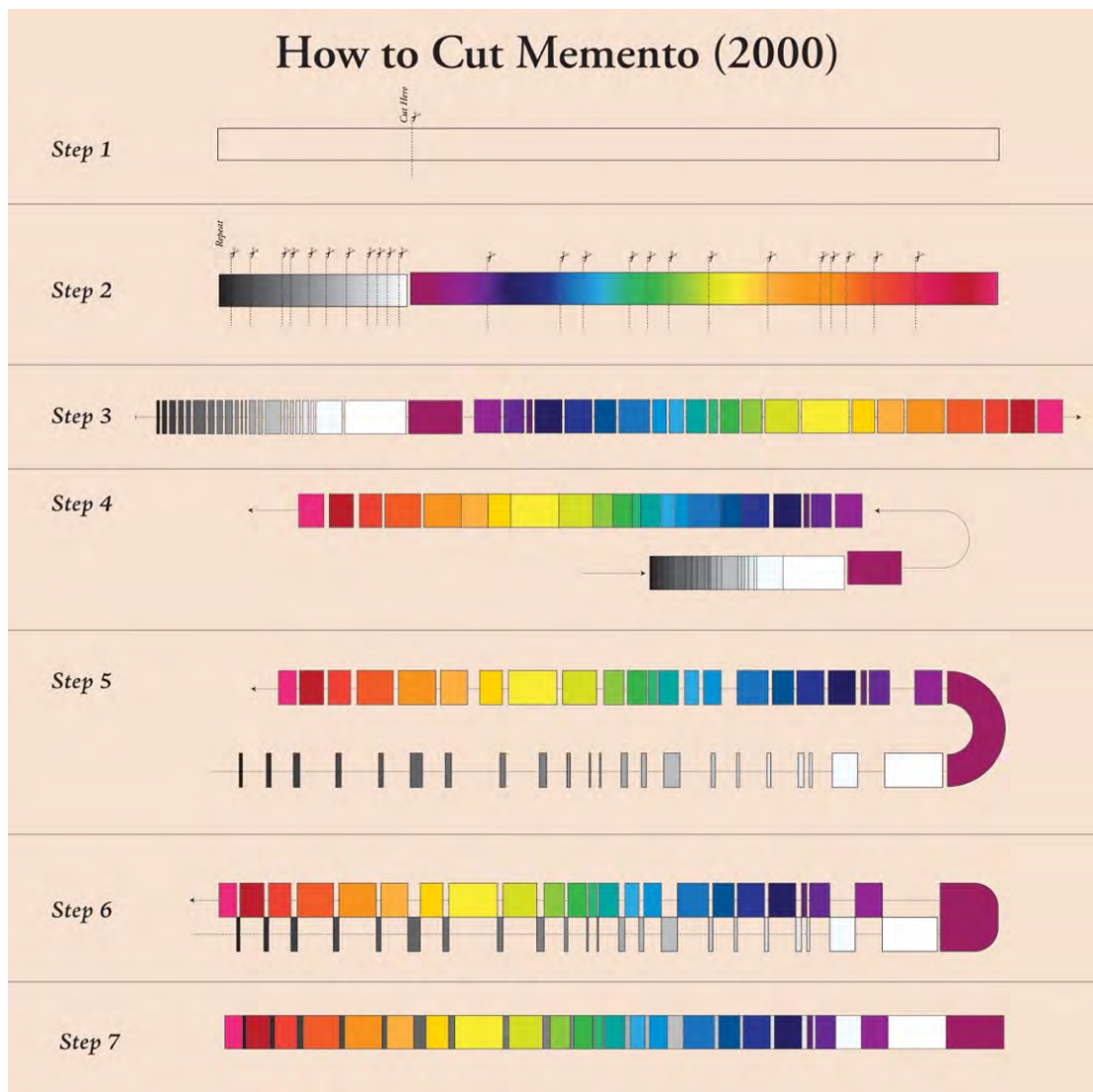


Figure 4.18 How to Cut Memento

### FILM/MIND/MEMORY IS A MALLEABLE OBJECT

The body of the film has been cut up, bent and folded onto itself, much like one would fold a strip of paper. This is evident in the visualisations of the structure in Figure 4.18 and is corroborated by the director (Nolan 2001). Nolan often draws the hairpin bend structure to elucidate the technique of *Memento*. The resultant narrative structure forces the audience into a similar state of confusion as the protagonist and keeps them in ‘a permanent state of in medias res’ (Shone 2020). This suggests that we can identify the FILM AS A MALLEABLE OBJECT metaphor in the design. With the design graphic, the

puzzle of the film becomes immediately apparent and easier for the questioning viewer. This kind of interpretive activity was encouraged by the supporting information presented on the official website, for e.g., creation of newspaper articles of Leonard having escaped a mental asylum (Kania et al. 2009). These additional clues, which, while not available during the viewing, builds up the story world of the film and incites viewers to go looking outside of the medium to solve the problem. In a sense, the film then becomes one part of the puzzle that is the story, which needs to be solved for the story to be understood.

From the film, we connect the same metaphor to Leonard's mind and memory. As he remembers only about 10 min. of any given point in the past, the scenes themselves become sort of like Polaroid pictures for the audience. The units made by the coloured scenes are neatly divided by the black and white scenes and are distinct from each other. Especially since they don't play in order, they become even more discrete. Nolan also used different takes for the overlapping scenes at the start of every coloured sequence to make them feel like different versions of the same memory, thus making the viewer question each repetitive piece of information. The scenes then become parts of Leonard's mind/memory and the story of the film, making them open to manipulation and controlled by the overall design vision in terms of the ordering and sequencing of information. The ordering affects comprehension by the primacy effect, thereby constantly changing the meaning of each sequence unit with every exposition/cue that is presented. With all the expositions in place at the end of the film, the meaning of the disparate sequences of narrative also tends to change, making the film body malleable and the sequences open to semantic transformation.

**THE PAST IS A PLACE OF CONFINEMENT/ INSTRUMENT OF CONSTRAINT/  
CAPTOR/ PURSUER**

The B&W sequences show the flashbacks of Sammy Jenkins's story that explains Leonard's own disability. Towards the end, we also see the person on the phone manipulate Leonard's understanding of his situation and nudge him towards killing Jimmy, believing he is John G. And at the end of this conversation, Leonard realises that he doesn't know who he is talking to on the phone. The B&W treatment of this series was also commonly used to depict flashbacks in conventional cinema. And in a linear progression, these open the storyline. This can be interpreted as Leonard being a captive of his own past, reiterating Sammy Jenkins's story to keep himself trapped in his warped idea of revenge while physically trapped (of his own volition) in room 21 of the motel. In the non-linear progression, we keep coming back to this setting for each bit of exposition. In a sense, the past never stops pursuing Leonard and, by extension and design, us.

**MEMORY IS RETRIEVING OBJECTS; MEMORISING IS STORING OBJECTS,  
and most significantly, REMEMBERING IS RETRIEVING OBJECTS.**

Leonard uses a system of recording information that he is unable to retain in his memories. This consists of Polaroid pictures with a notation and tattoos he gets of the important milestones. The Polaroid pictures record people he meets, places he lives in and things he uses (like the Jaguar). The pictures also contain some handwritten notes that remind him of why he is in contact with those characters and their motivation. For example, Leonard figures out that Natalie is not helping him but is unable to record that information because he cannot find a pen in time. In the next interaction with her, he takes on the role of her saviour and later even sleeps with her without knowing her

deception. While Leonard believes this system of recording information is perfect, we, as the audience, are made aware of its unreliability again and again. We infer that with each coloured sequence, Leonard makes a new memory that goes into his filing system, and to remember again, he retrieves the object (either the Polaroid pictures or by reading his tattoos).

At this juncture, I would like to bring to attention the image schema of SPG. The SPG schema, as has been discussed earlier, manifests as a path schema, a path that has a beginning, a clear direction and a definite end goal. Considering that LIFE, STORY, and NARRATIVE all can be described with the SPG schema, the entailments of the internal schematic structure/behaviour come into play with the narrative movement of *Memento* too. Any kind of diversion from a clear-flowing narrative that has distinctive cause-and-effect chains built in will cause a blockage (Figure 4.19).<sup>17</sup> Consider two cases for

blockages here, with the first being the alternating colour and B&W sequences. Both strands, in turn, cause an impediment in the comprehension of the other narrative strand. Secondly, the colour versions being inverted (placed front to back, not

played backwards) creates yet another level of complication. I suggest that the path schema and the force gestalts come into play at a very fundamental level in the medium of film, given the linearity of the medium. As Shone quoting Nolan says, 'You're trying to break the tyranny of the projector, which is the ultimate linearity' (Shone 2020).

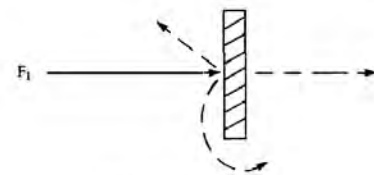


FIGURE 7. BLOCKAGE

Figure 4.19 Blockage; from Mark Johnson, *The Body in the Mind* 1986, p. 46.

<sup>17</sup> Johnson (1986) describes different kinds of force structures that work in the SPG image schema, including compulsion, blockage, counterforce, diversion, removal of restraint, enablement, and attraction, which he further elucidates with examples from modal verbs in the English language. Forceville demonstrates the use of the force schema in animation films in the actions and depictions of the characters (Forceville 2016)

These image schematic structures are helpful for a director working with time within the constraint of the medium.

The design of the narrative of *Memento* relies overwhelmingly heavily on the OBJECT/CONTAINER metaphor and the SPG schema and works in tandem and flawlessly to create the puzzle that is the film. It also helps that the director keeps the complexity at a simple, acquirable level for the audience by only cutting the film into 22+22 sequences, using different colour treatments and repetitive bookend shots to reinforce the connections between the fragments.

### 4.3 *Dunkirk* (Christopher Nolan, 2017)

Christopher Nolan has an impressive oeuvre with eleven films under his belt, each one a bigger spectacle than the last. He is considered to be one of the foremost filmmakers of the 21<sup>st</sup> century and his work pushes the envelope when it comes to complex storytelling. Starting independently with *Following*, gaining critical acclaim with *Memento*, making the most iconic films in the Batman franchise (2005, 2008, 2012), making the dreamscape-traversing cult phenomenon *Inception* (2010), moving on to the science fiction experimentation of *Interstellar* (2014), the big budget grand operatic drama of *Dunkirk* (2017), and finally the mind-boggling time travel film *Tenet* (2020), which audiences are still trying to comprehend, Nolan's films have only grown larger in scale and magnitude. The latest in the pipeline, *Oppenheimer* (to be released), is rumoured to be even grander on a reported budget of \$100 million. Together Nolan's films have grossed \$5 billion in sales worldwide and remain a massive draw for audiences who have come to expect spectacular things from the director. He is considered a singular

filmmaker for the way in which he has revealed his obsession with time and structure in all his films, especially when they are designed to be just complex enough for the mainstream audience. Tom Shone observes that Nolan's films are 'easy to enter, [...] fiendishly difficult to exit' (25) and that post-viewing is when the film actually begins (quite clearly in the case of *Memento*, *Interstellar* and *Tenet*).

*Dunkirk* demands that the perspective of looking at the real-life story be from an omniscient stance. As the audience, one gets to experience the Battle of Dunkirk from three different perspectives. While there were many fronts on which the actual narrative of the evacuation of Dunkirk takes place in reality, the most commonly depicted ones in mainstream films are the point of views of the soldiers on the beach, the RAF pilots in the air, the action happening on the private merchant ships in the water and the action happening on the naval flotilla used in the operation (*The Snow Goose*, Paul Gallico, 1941; *Atonement*, Joe Wright, 2007; *Weekend at Dunkirk*, Henri Verneuil, 1964; *Dunkirk*, Leslie Norman, 1958; , and *Dunkirk*, Denis Villeneuve, 2017 ). Every director who has made a film on the event has had to pick and choose the point of view to focus on.

Like the other films in this research, *Dunkirk* was run through the breakdown process, and 96 sequences were identified. Even the preliminary act of separation in the timelines in the software already reveals two key insights—first of which Nolan has himself spoken about in the film itself: the duration of shots is comparable to the actual duration of the timeline they come from. Throughout his career, Nolan has been 'obsessed with the relative perception of time' (Seitz 2017) and this is quite evident in *Dunkirk's* treatment of each strand of the narrative. The second insight is that the duration and the placement of the sequences seem to build to a continuous crescendo as

he describes his intention to do so in his interviews. We elaborate further in the chapter on this.

We don't do as in-depth an analysis with *Dunkirk* as we do with other films because there is evidence that Nolan is an articulate director who likes to experiment with each film he makes, and thus, his entire body of work requires a breadth of analysis that is currently outside the scope of this research. For now, it suffices to concentrate on the well-publicised motivations of the director behind the non-linearity of this film and its design.

### 4.3.1 About the Film

Nolan's war film was born of a journey in the mid-1990s undertaken by the filmmaker and his partner across the English Channel, which retraced the path that the evacuation boats took in 1940. Nolan was struck by the perilous voyage, and the idea stayed with him till he got a chance to make the film. During his research, he realised that the war effort was an entirely different experience for every individual involved in it, and these realities often contradicted each other. Each veteran he spoke to had a unique perspective of the event, and that was the way he conceived the film, a multi-stranded - braided narrative (Shone 2020).

'The different veterans had a lot of different interpretations about what the 'Dunkirk spirit' means. We had veterans who thought that it applied very much to the little ships arriving to help, other veterans who felt that it obviously applied to the men holding the perimeter, allowing the others to escape. We had people for whom it was simply propaganda. With that many people, 400,000 people on a beach,

give or take, you find a lot of very radically different experiences. You find order, but you also find chaos. You find nobility, but you also find cowardice. That was very much the approach we took in the film. To try and suggest to the audience that they're seeing certain aspects of the thing, but there are myriad other stories. So that everyone is sitting in the corner praying and having their own story and interpretation.'

(Interview with Christopher Nolan, Shone 2020)

Thus, the idea of three different viewpoints came into being. *Dunkirk* contains three parallel stories told in three different spatial and temporal planes. Each story is introduced with a helpful title superimposed upon the first shot of the storyline: The Mole (One Week), The Sea (One Day) and The Air (One Hour) (Figure 4.20).

### 4.3.2 Structure of Dunkirk



Figure 4.20 *Dunkirk* a (00:06:14); b (00:08:17); c (00:09:01)

The film begins with action in Dunkirk, where the Germans have driven the French and the British armies to the coastline. The cornered soldiers have little to do but wait for deliverance. They are also easy targets for bombardments from the German Luftwaffe. A mile-long concrete breakwater named the Mole is where all the soldiers are queued up to be rescued, and The Mole story-strand takes place in this space for a span of a week. Then we have the rescue boats coming from the coast of England, specifically Weymouth, from where the characters set sail for the second strand of the story. This

takes place entirely over the water and over the course of one day. Finally, a squadron of spitfire planes crewed by RAF pilots is tasked with the defence of the evacuation from the third strand, spanning only the last hour of the story-time.

The film narrative is intercut between these three timelines, which converge at the end. The structure of the edit (Figure 4.21) has an interesting parallel in the sound effects used for this film; it looks like the visualisation of the octaves of the ‘Shepard Tone.’



Figure 4.21 Structure of Edit, Dunkirk

#### 4.3.2.1 Shepard’s Tone and the Snowball Effect

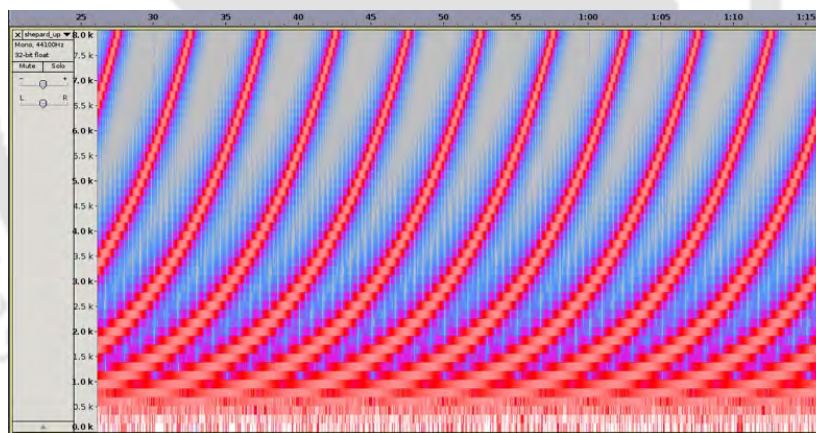


Figure 4.22 Sipavicius, Tautvidas, Spectrum Diagram by GRIN, 20 January 2020, reproduced from <https://www.tautvidas.com/blog/2020/01/creating-the-shepard-tone-with-sonic-pi/>, Accessed 15 April 2023

Nolan stumbled upon the phenomenon of Shepard’s tone while doing preproduction for *The Prestige* (2006). Shepard’s tone is an auditory illusion which was discovered by cognitive scientist Roger Shepard when he observed the staircase-like intervals in musical pitch. The result of his experiments with software that played a series of ascending and descending scales was ‘an impression of infinite ascent, rather like M. C. Escher’s never-ending staircase, in which the notes seemed to be continually rising, even though

logically no keyboard could accommodate such a feat' (Nayman 2017). The three octaves, when played together at different pitches, give the impression of a rising sound (or falling when played the other way around) and make an interesting auditory illusion where the listener feels like the tone keeps rising to infinity. Shepard published his findings (1964), and 'Shepard's tone' as it is famously known now has been used by many sound designers, composers and musicians in their work (Shepard 1964). Nolan used the effect in *The Prestige* and in the Batman series. For *Dunkirk*, Nolan had something more ambitious in mind. Like the three octaves of the Shepard's tone, Nolan divided the storylines into three strands and 'wrote the screenplay in order to literally find the cinematic or narrative equivalent of what the Shepard tone did musically' (Shone 2020).

The intercutting of the film quite literally follows the structure of ascending notes. The Mole has the most screen time, and the air, the least. (Figure 4.23)

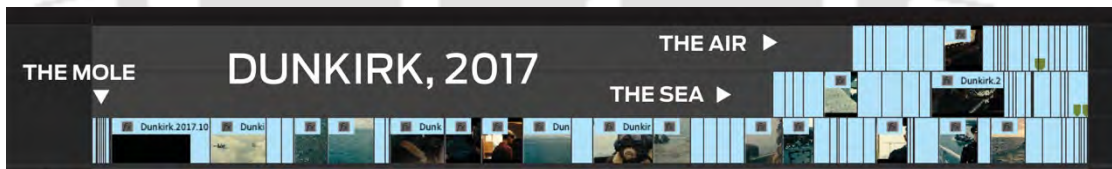


Figure 4.23 Duration of Storylines, Dunkirk

Nolan has explained that everything about *Dunkirk* is about intensity and suspense and that he structured the film from a mathematical and geometric point of view. In an interview with Film4, he confesses a fascination for 'third-act structures', the rising and falling of action, which he terms a snowball effect (Nolan 2017). The movement from land to sea to air was something Nolan and editor Smith Lee spent a lot of time perfecting, so that Nolan could stick to the desired snowball effect rigidly. The resultant experience is that of rising suspense for almost the entirety of the film, aided by

constructing the sequences in such a way that the action from the land to the sea and to the air felt like a continuous building of tension. Adding to this were the situations the characters constantly found themselves in, just about a hundred ways to die while waiting to be rescued. Nolan kept his audience at the edge of their seat, creating empathy and fear for the characters by constantly taking them to the edge. Like Shepard's tone, Nolan created the illusions of continuous peril with the intercutting of the storylines. The next section offers a discussion of the CMT elements that can be read in the film based upon (and perhaps also despite) what the filmmaker says in his exhaustive discourse on its narrative and sound design.

### 4.3.3 Criticism

However, it is important to ask to what extent this extremely self-conscious experiment with sound and narrative design is successful. While it might have been successful at evoking audience emotion, it failed to create narrative clarity for some reviewers. When I watched *Dunkirk* in the theatres, I was struck by the scale of the film but also found myself constantly trying to connect the timelines across the film. At one point, I was certain that the director's intention was to confuse the audience, or rather cut across the storylines so smoothly that instead of drawing attention to the transitions, the attempt seemed to be to counterintuitively minimise the audience perception of the difference.<sup>18</sup> The intercutting of the three strands made the chain of causality continue across the stories, which don't take place in the same temporal frame.

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<sup>18</sup> As discussed before, the transitions between the non-linear sequences have been found to generally help create a link between shots from different temporal strands and aid the viewer in creating a mental timeline of the separate story strands like in the case of *Memento*.

For example, at mark 01:28:00, the General on the Mole looks up to see a plane diving; immediately, we have the Weymouth boat captain also looking at an approaching fighter plane. Intercutting between these two events, which are happening very far from each other, makes the viewer believe the same threat looms on both parties. But that isn't the case. The plane diving at the fishing boat is an ME 109 aiming to shoot, while the one diving at the Mole is a Stuka, which has been shot at by an RAF pilot and crashes into the water (Figure 4.24). By conflating the build-up of both events and showing the payoff one after the other, we realise that we have been reacting to the tension of two separate events.



Figure 4.24 Two Story Strands cut as one: a (01:27:45) to i (01:28:52), Dunkirk.

In the video interview with Film4 cited above, Nolan says that he conceived the film as a mathematical problem, that he diagrams his films exhaustively and tries to design them in such a way that  $2 + 2$  should equal 5 or 6 or 8. In other words, he wants the whole to be greater than the sum of its parts. David Edelstein, writing for the *Vulture* magazine, lambasts Nolan for the muddled use of 'his signature 'Nolan Time,' that arty temporal scramble that Nolan thinks is more illuminating than it is' (2017). Putting the

problem with the editing succinctly, Edelstein notes, ‘when the structure of *Dunkirk* becomes visible, when it stands as a mathematical demonstration of brave individual choices lining up in a tidy row, you might realise that you’ve been had’ (ibid). He also surmises that the non-linearity of the structure keeps the audience otherwise engaged and thus unable to gauge the plot. I too agree that the minimal dialogue forces the audience to be hypervigilant about the visual and sound-based narrative cues that would help them construct the causal chain in the absence of verbal exposition. This might work better when they can construct logical series of propositions instead of having their emotions manipulated while being tricked.

Jake Cole expresses similar concerns in his review of the film. The cross-cutting between temporal stands leads to jarring transition-less movement across shots with broad daylight and pitch darkness. Some of the action is also repeated from different perspectives at random points in the film, for e.g., seeing the boat from the spitfire and the plane from the boat. ‘Nolan’s long-running issues with spatial coherence in his action scenes explode here, with shots running into each other without transition and even seemingly linked images within the same plotlines featuring casual violations of the 180-degree rule and other continuity markers. The editing is meant to heighten the sense of bewilderment facing the Allies, but in the end the film’s confusing structure ensures that any bewilderment is the audience’s own’ (Cole 2017). In a similar vein, Adam Nayman observes that Nolan and his collaborators have created a substantial space for debate as to whether the ‘structural intervention signifies much beyond its own complexity’ (Nayman 2017). He criticises the director’s choices which lead to the dramatic impulses being all over the place instead of in the conventional rising, falling action of a three-act structure. Nayman is referring to the prolonged ‘3<sup>rd</sup> Act structure that Nolan speaks about, and

eventually, it does get exhausting for the viewer who receives no respite.<sup>19</sup> This is compounded by Nolan's refusal to build any kind of backstory for the characters, keeping the information minimalistic, going to the extent of never referring to the enemy or even depicting them, not showing the machinations of the countries behind the curtain of the war, and never offering any personal information about the main characters. Nayman accuses the director of treating his talented cast as absolute forms (Courage, Heroism, Survival, Witness and so on) and forcing them to fit into these stereotypes. Although he finds no fault in the cinematic expertise, praising the framing of the shots, which build to a 'palpable, stomach-churning terror' supported by Hans Zimmer's incredible musical score, Nayman (with other critics) observes that the relentless pacing doesn't allow characters and by extension the audience any space for reflection and detracts from the viewing experience.

#### 4.3.4 Image Schema and Metaphor

With the base metaphor of JOURNEY, Nolan divides the action into three story strands that are temporally and spatially distinct, with a few overlaps. The very first metaphor and schema that we want to establish is SPG: journey along a path and movement. Here the narrative is literally the journey which begins at Dunkirk and moves across the English Channel towards the coast of England. It also rises from land to water to air in a repetitive and prescribed manner, rising and falling in a movement analogous to a sine wave. As cited in the discussion of *Arrival* in chapter three, Mark Johnson describes the

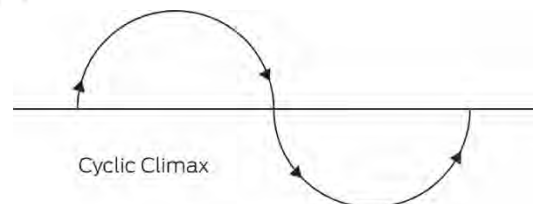


Figure 4.25 Cyclic Climax from Mark Johnson's 'The Body in the Mind', 1986, p. 120

<sup>19</sup> Nayman means that the story of Dunkirk is like the 3<sup>rd</sup> Act of a different story, which would ideally have a first and second act as those enacted on land or fighting with the Germans.

cycle schema as also one that has a fundamental attribute of build-up and release, which are found in the most basic natural phenomena, like the life cycles, cyclic seasons, sexual or emotional tension, illnesses, and recovery (Figure 4.25). This rise/fall movement is illustrated repeatedly in the design of the narrative, and Hans Zimmer's score, heavily using Shepard's tone, reinforces the climactic structure.

Nayman compares the structure of the film to three concentric circles, which I find less appropriate since he also describes the action moving successively from *Dunkirk* to the air to the coast of England. The concentric circle schema has no forward movement, but only radiation from a single point. As shown in *Arrival*, one of the ways to use a circle schema in a medium like film is to start and end at the same point in the story. But I do not see this in *Dunkirk*. Thus, a source path goal metaphor fits the narrative movement better.

When I reverse-edited the film to reveal the structure, I noticed that the editing was quite elegant and had a distinctive repetitive flow till the mid-point of the film. There is a distinct dilation/contraction/stacking of time and space observed in the design. The duration of the storylines reflects the time in which the stories take place. Post-midpoint, when all three strands start to converge, the repetitive pattern is disrupted. One of the most notable instances of crosscutting the build-ups of different events is seen towards the end (as described above). It is arguably impossible to adhere to a pattern-making design directive when it comes to an immersive mainstream narrative. The storyline had to converge somewhere, and the pattern-making process had to come to an end (Figure 4.26).

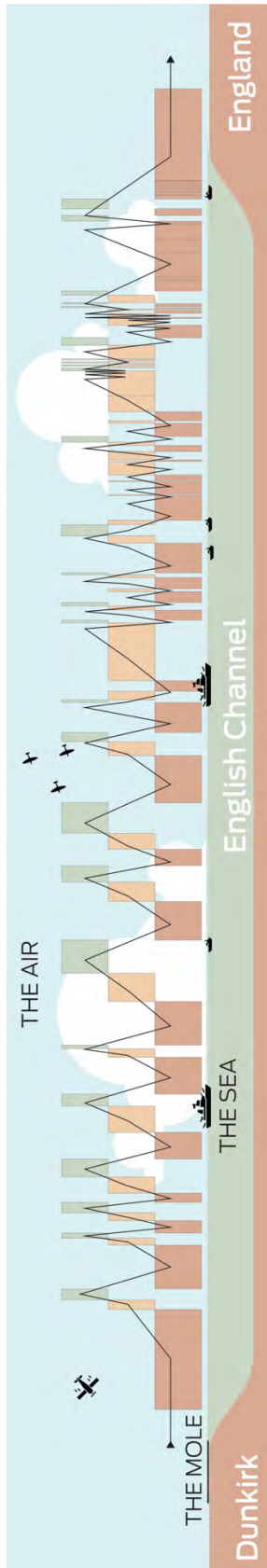


Figure 4.26 (Top) Rising Narrative Movement in Dunkirk

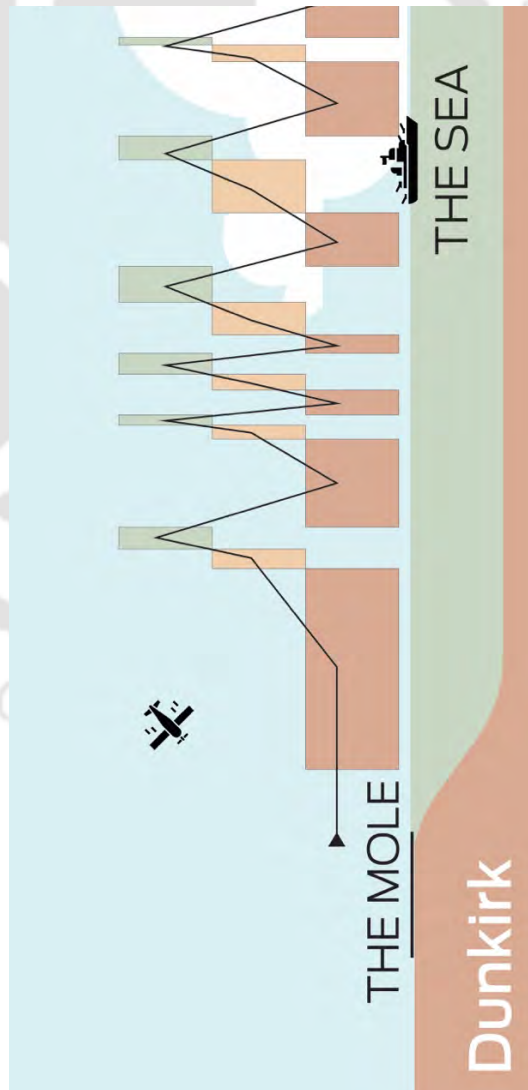


Figure 4.27 (Left) Detail of the Rising Narrative Movement, Dunkirk

The audience loved the grand spectacle, with only a handful of detractors, and we surmise that this is because, at the end of the day, the audience came expecting to see something extraordinary, and they were given that and much more. Nolan's consistency in pushing the boundaries has cultivated an appreciative audience, even when he produces mind-boggling narratives that need one more viewing or three.

#### 4.4. Conclusion

After the exhaustive analyses of *21 Grams* and *Arrival*, the goal of this chapter was to check if the methodology held and if we were able to link the design of the narratives to the themes/stories of the other films. On that front, I believe we were successful in being able to perform, in short, the identification of various conceptual metaphors, their entailments and some image schematic structures at work. This solidified the procedure and made it easier to approach the other 290 films in the collected list, which have been identified in this study as being possibly open to similar analysis. After a cursory pilot study of a film, a future researcher may be able to decide if the text can support a deeper analysis. A quick study may also go a long way in identifying multiple films of a single director that may merit a paradigmatic analysis.

## Chapter Five

### *Findings, Contribution and Future Scope*

‘[I]n a world increasingly dominated by forces that are as difficult to understand as to act upon, causal linearity may be said to have gone into crisis. The recent popularity of the multi-protagonist genre—with its constant emphasis on coincidence and fragmentation, and in the case of movies like *21 Grams*, its articulation within a scrambled narrative structure—is a symptom of this crisis.’

(Montoliú 2009, 114)

The insights gained from the analysis that this study has undertaken suggests that while the crisis of linearity may be a symptom of an increasingly fractured world that is dissatisfied with the enforced linearity of perception, a more optimistic reading of this phenomenon is not impossible. It could, in fact, possibly be read as the opposite of what Montoliú and other scholars fear it to be. Using the compellingly embodied foundations of CMT and image schemata that form a universal network and connect all kinds of phenomenon with all types of viewers is, I believe as a filmmaker, an opportunity to finally give the audience credit for their intelligence and natural drive towards solving problems and to create narratives that despite (or perhaps because of) their cognitive load offer a richly rewarding viewing experience. The ability to impose cognitive order retrospectively or simultaneously upon an apparently chaotic present

experience is satisfying for most and this activity, rehearsed within the safe and time-bound spaces of living room or theatre may by symbolic extension enable the audience to perform similar acts of sanity in the real chaos of the outside world.

The principal objective of this research was to contribute to the discourse around conceptual metaphors and introduce a new perspective within it by applying CMT to the form rather than the content of visual narratives as embodied in complex non-linear mainstream English language films. But the genesis of the idea came from the perspective of a filmmaker. If I, as a filmmaker, wanted to make a non-linear narrative for a larger audience, what would help me? This question led me to explore the tool of image schemas and CMT in the design of NLN structures.

In this concluding chapter, I summarise the key findings of the study, answer some questions posed at the beginning of this investigation and review my contributions to the field. Finally, the chapter discusses the future scope of such a study in the domain of NLNs, CMT and filmmaking as a design process specifically for a larger audience.

### **Context**

The first question I asked myself at the beginning of this research was whether there the non-linearity of the selected films was by accident or design. A little research showed that it was indeed by design and directors, screenwriters, editors, and the rest of the crew had full knowledge and intent that the film would be an NLN at the onset of the production. As the compiled film database shows, non-linear narratives are not prevalent in mainstream cinema. The filmmakers publicised their unconventional choice of design to prepare audiences for a film they knew would be difficult to process. This was done prior to and around the release of the films by talking about the structure, the cinematography,

and their processes. The well-publicised attempts at creating a non-linear structure meant that any incidence of the metaphor had not come accidentally into the film modes, and specific deliberation had gone into the design of the narrative. Once I knew that a screenwriter/director intended to bring forth the experience of temporal distortion, I was able to delve into how the experiments were constructed and whether they worked.

## Writing

I found that the screenwriters who wrote for the form brought their writing from a place of deep introspection. Each of the film texts we analysed had a modicum of personal connection to the writer or the director. For example, Guillermo Arriaga, while writing *21 Grams* was clearly influenced by an accident he had witnessed and William Faulkner's work. Thus, we were able to draw the link from a typographic style employed by the author to the cinematographic choices (film grain, time of day, colour temperature etc.) in the film to distinguish between the three different character storylines. Peter Howitt's script for *Sliding Doors* came from a similar incident which led him to show the protagonist traverse two paths offered by the forking-path narrative. The structure of the film constantly reminds the viewer that a 'sliding door moment' can take them on a completely different trajectory leading to life changing experiences. In case of *Arrival*, Heisserer was following the blueprint that Ted Chiang had already created in the guise of the story and in translating the author's style to a mainstream Hollywood film script, Heisserer reimagined it in a style unique to the film. Finally in *Dunkirk*, Nolan picked the idea of the never-ending Shepard's tone and employed it brilliantly to bring to us a mathematical derivation of an exceedingly, if tragically, human, subjective and multi-faceted phenomenon—the experiences of the soldiers on the beach of Dunkirk and their rescuers.

These findings cemented the idea that the contextual place these films came from is paramount to gaining an understanding of the 'why' behind the design of non-linear narratives. Perhaps they are a symptom of the filmmakers own transformative encounters with moments of personal crisis. Furthermore, we surmise that in the future, a study of the context of each film will aid in understanding the motivations of the filmmakers and offer unique solutions that they have applied to their own work.

The analysis of image-based metaphors in films is a rich and thriving field, but analyses of the metaphor in the structure of non-linear narratives remain a niche category. One reason is that filmmaking in the form-follows-content vein is challenging and most often crafted only by directors who intuitively gravitate towards such a presentation or those who have already experimented with it once in low-risk projects within their oeuvres. It is definitely not a standard formula, and there are no guarantees of its success at the box office. In Christopher Nolan's case, it is possibly his obsession with the play of time as is evident in all his films that explains this penchant for non-linearity (Dargis 2017). As an acclaimed filmmaker, he boasts films that have been highly successful in the market and consequently, producers can bank on his work to recover their investments. In this sense, he has an extravagant amount of freedom in experimenting with the form. This is not the case with all directors, which makes using a graphically translatable metaphor in non-linear representation that much rare. This is one relevance of such a study for future filmmakers who want to design complex narratives in tune with the viewer's embodied cognitive aspects.

## **Methodology**

As discussed earlier, I drew upon CMT and other theories of cognition and perception while constructing this methodology. The process of analyses was adjusted slightly for

each film text, and I was able to demonstrate how the basic steps of Context, Content, Identification of Theme/Metaphor, and Visual Representation helped us identify the metaphors at work.

While it is fortunately next to impossible to have a mathematical formula for film text analyses, given the multitude of modes that engage a viewer, we hope the base methodology we explored here can help film scholars begin their journey towards a similar study of such texts.

A methodology like this is hard to quantify, and we envision it as an ever-changing, accommodating, multimodal approach to the enquiry. Currently, it is only in the first stages of evolution and has the potential to cover many other facets of the medium. I hope to continue expanding and perfecting the methodology for the film text analyses. Auteur-based films or arthouse cinema is traditionally accorded more value in scholarship since artistic choices indulged in without the pressure of box-office returns is a liberating one for filmmakers and offers richer grounds for hermeneutics. This study wanted to consider the opposite end of the spectrum, but having initiated the enquiry, it would be a natural extension to also consider non-mainstream NLNs with the applied methodology in the future.

I also envisage utilising digital technology to automate some functions of the text breakdowns or perhaps even to perform deep data mining at a cross-section of the list of films, the way Heftbarger does for Dziga Vertof's films (2019). This brings us to our first tangible contribution with significant scope for the future—the List of Non-Linear Narratives in Cinema.

## List of films

The list of non-linear films was collected and annotated as much as possible during the duration of this research. I consider this a starting point that can be added to in a multitude of ways with more granular categorization and metadata annotation for each film text analysed. For example, one of the categories we would add would be of image schemas and metaphors that are found during analyses. It will make future research much easier when comparing across the variables and building hypotheses in the field. The list of 290 films, at the moment, is an abundant corpus which constitutes a fertile ground to further the research of CMT and non-linear film texts. For future work, I hope to expand upon and add to the list of films while continuing to analyse one text at a time. Some of the goals to categorise the films in more ways than we have done now are as follows:

- Typology of non-linearity—using one of the many typologies put together by scholars, which will also give us an idea of the type and extent of non-linearity.
- Types of modes in which metaphors can be found such as music, dialogue, framing, camera movement, lighting, colour, structure etc.
- Types of conceptual metaphors
- Types of the basic image schemas (CONTAINER, SPG, BALANCE etc.)
- This, in turn, gives us the ability to categorise films with themes like memory, fate, and time, drawn from the basic conceptual metaphors of CMT

I firmly believe that this list is a gateway to a body of work that can greatly impact the study of metaphors in NLNs.

An exciting output of this study was the use of the Master Metaphor List and basic image schemas (Gokhale, Mokashi-Punekar, and Basu 2022; 2023). We hope to develop a combined list that will offer a ready compendium for film scholars first. For designers and filmmakers, this list will need to be constructed differently. The primary distinction being that it needs to become a repository or a primer of sorts to help the designer/filmmaker make decisions regarding the appropriateness of usage. We envisage that once metaphors and schemas categorise the films, there will be enough material for case studies to be converted into a type of manual. This compilation will offer the same data but be targeted towards a reader who wishes to understand how to use metaphors and schemas in designing a narrative.

### **Linear in the NLN**

After the analyses of the five films selected for this study, I was able to use the evidence to make several inferences. The very first one was the incidence of linearity in the non-linear presentation. As a form, non-linearity habitually distorts causality and creates a cognitively complex experience for the audience by amplifying the demands on the working memory (Kiss and Willemsen 2017). *21 Grams* is highly fragmented, and at first look, there seemed to be no coherent design in the structure. The process of linearising the non-linear narrative and comparing it to the original in a bipartite diagram demonstrated that despite looking like a chaotic narrative progression, the film was quite linear except for some outlier sequences. Furthermore, each story strand of the 3-Act structure—the inciting incident, the plot points, and the climax—take place in a successively linear progression even in the non-linear structure, a phenomenon that is artfully camouflaged. This conventional structure is the backbone of films made for a

wider audience. Thus, it is not something a director can move away from if she wants her film to work on a larger scale, but she can conceal the process.

With *Arrival*, besides the V/Ms the film is entirely linear, and the realisation of the looping narrative at the end, produces a similar experience for the audience as it does for the protagonist—that of realisation or understanding. In the case of *Sliding Doors*, both storylines follow a linear presentation and have an alternating pattern that the viewer learns to discern between the two tracks. *Memento*, with its folded-over-alternating-half-retrograde structure, is the more difficult of the selected film texts in terms of comprehension, but the director offers enough cues in the telling to help make sense. Finally, *Dunkirk* is three linear stories of different durations interwoven together, and the director uses the structure to elicit a specific experience. Thus, we find, that even in highly fragmented non-linear narratives in the selection, the core of the story is still linear to aid comprehension, and the narrative beats that form the 3-Act structure hold in the non-linear presentations too. Ultimately, it is impossible to escape the inherent linearity of the medium. My analysis tries to reveal the methods used by filmmakers to camouflage linearity so that future practitioners may learn the ways in which the linear can be successfully non-linearised.

### **Taxonomy**

This brings us to the 'network of propositions' as Kiss and Willemsen term it, that keeps the narrative dynamic. At the onset of this study, I posited that I would be able to develop a taxonomy of cinematic transitions based on their conventional use and as a network of propositions that drive the non-linear narratives forward. The five films allowed us to find evidence for our conjecture in several ways.

In *21 Grams*, these manifested as propositions that either linked the disparate fragments together or created a conflict or collision between the shots. For e.g., dramatic functions like answering a question posed by the earlier sequence in the next, or creating a contrasting visual that compels the viewer to compare the lives of the characters. For *Arrival*, the transitions were mostly mnemonic cues, recurring motifs and staging or composition clues that also reinforce Heisserer's attempt to mislead the viewer. *Sliding Doors* used conventional in-camera transitional effects, like panning in a single location, to show both storylines happening simultaneously. The film also had mirroring situations that became the underlying logic for the placement of the sequences.

I was, therefore, able to conclude that these transitions, propositional networks, or story strands are what created the narrative flow between the disparate sequences of the narrative.

For the purpose of this study, I identified some modes of metaphoric transitions in the selected films only. Besides being a categorization of the types of transitions, the taxonomy has also become the centre of the argument for the use of NLNs. The future scope for this is to quantify and add to the taxonomy while creating a database for future filmmakers.

In this regard I envisage a repository of all kinds of cinematic transitions, those which will be able to categorise the variety of ways (digitally and manually) in which a narrative moves forward and makes sense to the viewer beyond the NLN aspect of the current study. To such a repository, it would be a tremendous contribution to add examples from world cinema and I can imagine it would only enrich the study of filmmaking for students, practitioners, and scholars alike.

## CMT and Image Schemas

I now come to the crux and the driver of this study—Conceptual Metaphor Theory and embodied image schemata. CMT and embodied image schema scholarship in visual metaphors at work in the cinematic medium have a long and established history. My study brings to the fore the incidence of the metaphor in the structure of the narrative which has little representation in scholarship at the moment.

In the analyses of the film texts, I was able to provide evidence of the most basic of image schemas and some conceptual metaphors. In *21 Grams*, I described the image schema of CONTAINER/OBJECT on an SPG, and the metaphors LIFE/STORY/FILM IS A FRAGILE OBJECT. In *Arrival*, the prologue of the film is also the epilogue, and this gave us the looping design, wherein we were able to argue for the identification of the base image schemas as CONTAINER, SPG, CIRCLE/CYCLE and using the metaphors, FILM/STORY IS AN OBJECT, STORY IS A JOURNEY, with objects being subject to manipulation which clearly demonstrate the TIME IS A CIRCLE metaphor at work. As a comparative analysis, we also compared the original analogy of a rising column of ash used by the protagonist (written by the author but not reflected in the formal structure of the novella's design) in the story with the metaphor in the film.

Further, in *Memento*, we were able to demonstrate how the structure of the narrative created an empathic response in the viewers and compelled them to experience the story world through the protagonists' eyes. With the base schemas of CONTAINER, SPG and FORCE the metaphors we identified in the structure of the narrative were FILM AS A MALLEABLE OBJECT; MEMORY AS A FRAGILE/ MALLEABLE OBJECT, THE PAST IS AN PLACE OF CONFINEMENT/ INSTRUMENT OF CONSTRAINT/

CAPTOR/ PURSUER; MEMORY IS RETRIEVING OBJECTS; MEMORISING IS STORING OBJECTS and REMEMBERING IS RETRIEVING OBJECTS.

Similarly, in *Sliding Doors*, we revealed how the zig-zag movement put us in the protagonist's shoes as both versions of her experience good and bad fortunes in a manifestation of the SPG schemas.

The metaphoric interpretations that each film analysis supported were revelatory moments, because as designers and filmmakers, we frequently look at linguistic propositions for metaphors, but this formalization of the connection between embodiment, metaphors and image schematic structures was entirely new to our practice. I thus consider the detection of image schemas and metaphors in the narrative structures and their subsequent validation as a prominent finding and contribution of this study. Additionally, these became the basis for the graphic visualizations of the structures that we created for each film.

It is indisputable that the study of conceptual metaphors and their linked image schemas not only reflect the themes of the selected film texts, but we also see the application of the study with far-reaching effects into many modalities of narrative and visual design.

At this juncture, we are convinced that each film text analysed in the future will have metaphoric implications embedded deep into each of its modes and this makes the creation of film texts and their study, infinitely richer. In today's day and age, this granular complexity is of great significance to the consumer of such mediums and might be the gateway for creators to engage audiences in interminable ways.

## Graphic visualization of the non-linear structures

As a designer, the visualization aspect of the film structures was something that primarily drew my attention and reinforced my line of enquiry when I found the connections between Rudolph Arnheim's work on visual perception (1974), which formed the basis of Mark Johnson's embodied Image Schemas(1990), which in turn he put together after Lakoff and Johnson's pivotal Conceptual Metaphor Theory was published (1982). There was always a risk of enforcing aesthetic choices on the graphics created for the structures, but I hope I was able to use the designs primarily as a visual aid in finding patterns and useful insights in the structure of the narrative.

While I don't see the need for a rigid mathematical graph as prescribed by Kim et. al. (2018) for practical purposes or the highly quantified area of Cinemetrics which leads to statistical diagrams, I do see the function of knowing how the narrative behaves in a two-dimensional space. The structure of *Memento's* hairpin bend was already visible in this format. The visualizations helped me identify and demonstrate the image schemas in the structure of the narrative.

I was able to show that potential connections and relationships which would be difficult to visualise otherwise were brought to the surface here. The linear undeniably dictates the non-linear, the manipulation of the story or film like an object brings forth interesting patterns that can be made intuitive to the reading of the text by viewers with the use of CMT and image schemas. Inherently, design as a field is for not for a niche audience while art is personal and open to interpretation. The approach to this research topic was at its core driven by the desire to bring about novelty in mainstream

storytelling and therefore, for now, I steered clear of art house films<sup>1</sup> or abstract film texts.

The analyses of film texts of the non-linear variety are just a few steps away from asking future filmmakers to use such and such metaphor in their own films. It is the aspiration of this study that the insights from this research be converted into directly actionable points for creators to use as a compendium while conceptualizing cinematic narratives.

As I begin with Flusser, I would like to end this study by invoking the analogy he articulates between the work of an editor and the projected powers of God to explain the new dimensions offered by the non-linearity of technology-images:

‘[The editor] is able to intervene in the course of history in a way that the transcendent God is not entitled to: He can reorganise the progression of events. He can shuffle single phases of history, decelerate or accelerate their succession, he can make them run backwards and he can repeat them at several points in history. In short, he does not intend to re-establish the eternal recurrence of the same, but to split the historical time, in its linearity, into different dimensions—not to make a circle out of the line, but different extensive forms (triangles, spirals, labyrinths). [...] He is capable of doing something that the transcendent God of history was not capable of; to throw the historical time out of its linear joints and project it on a surface. That is an

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<sup>1</sup> A film made primarily for aesthetic reasons rather than commercial profit, often of an experimental nature or having an unconventional or highly symbolic content, aimed typically at a limited audience.

unprecedented gesture. The time is out of joint, not only because past and future lose every meaning through this gesture and the whole time becomes present. It is out of joint because one can handle it without participating in it.’

(Flusser 1992, translated by Eckel 2012)

This study has proposed that even in crisis-driven, out-of-joint times, perhaps especially in such times, the techniques, and artifices that artists working with an exquisitely and self-consciously artificial medium use to first create, then break, the order of an artificial reality empowers their audience to create their own reality out of consciously, thoughtfully, and manually crafted fragmentation. This study is an acknowledgement of the crucial value of this craft in an age in which almost every human activity, from utmost drudgery to transcendental creative play is always already an automated one.

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## List of Publications and Presentations

Gokhale, S.M, Basu, D., Mokashi-Punekar, R., (2021) presented *The Accident Metaphor in Arriaga's 21 Grams. Use of Metaphors in the Design of Non-Linear Film Narratives*. Narratives of Temporality: Continuities, Discontinuities, Ruptures International Conference organised by the London Centre for Interdisciplinary Research on 24-25 July 2021

Gokhale, S. M., Basu, D., Mokashi-Punekar, R., (2021). *Mind's Eye and the Cinematic Lens -An analysis of metaphoric themes and their cinematic adaptation in Kirsten Sheridan's 'Disco Pigs'*. Ergonomics for Design and Innovation: Humanizing Work and Work Environment: Proceedings of HWWE 2021: 391 (Lecture Notes in Networks and Systems).

Gokhale, S. M., Basu, D., Mokashi-Punekar, R., (2023). *The TIME IS CIRCLE/CYCLE metaphor in Denis Villeneuve's Arrival (2017)*. International Conference on Research into Design'19, Conference Proceedings (upcoming publication)



## Appendix 1

## List of Non-Linear Films

TM\*: Tomatometer Rottentomatoes.com

AS\*\*: Audience Score from Rottentomatoes.com

| No. | Film                                   | Director                 | Year | Language                         | Country                                  | IMDB | TM* | AS** | Genre                  | Duration | Synopsis (3 Liner)   |
|-----|--|--------------------------|------|----------------------------------|--|------|-----|------|------------------------|----------|--|
| 1   | 11.14                                  | Greg Marcks              | 2003 | English                          | USA, Canada                              | 7.2  | 92% | 76%  | Indie film/Dark comedy | 1h 26min | The events leading up to an 11:14 p.m. car crash, from five very different perspectives.   |
| 2   | 2046                                   | Wong Kar-wai             | 2004 | Cantonese, Japanese, Mandarin    | Hong Kong, China, France, Italy, Germany | 7.5  | 86% | 85%  | Drama/Fantasy          | 2h 9min  | Several women enter a science fiction author's life over the course of a few years, after the author has lost the woman he considers his one true love.  |
| 3   | 11 Minutes                             | Jerzy Skolimowski        | 2015 | Polish, English                  | Poland, Ireland                          | 5.7  | 74% | 37%  | Thriller/Drama         | 1h 21min | The lives of several Varsovians are intertwined for just 11 minutes. These minutes turn out to be crucial for their ultimate fate.   |
| 4   | 13 Conversations About One Thing       | Jill Sprecher            | 2001 | English, German, Italian         | USA                                      | 7.1  | 83% | 71%  | Drama/Indie film       | 1h 44min | In New York City, the lives of a lawyer, an actuary, a house-cleaner, a professor and the people around them intersect as they ponder order and happiness in the face of life's cold unpredictability.   |
| 5   | 200 Motels                             | Frank Zappa, Tony Palmer | 1971 | English                          | USA                                      | 5.8  | 57% | 68%  | Musical/Rockumentary   | 1h 38min | The great Frank Zappa's outrageous psychedelic precursor to today's music videos features "The Mothers of Invention" wreaking havoc in a typical American town. Ringo Starr narrates.  |
| 6   | Memento                                | Christopher Nolan        | 2000 | English                          | USA                                      | 8.5  | 92% | 94%  | Psychological thriller | 1h 53m   | A man with short-term memory loss attempts to track down his wife's murderer.  |
| 7   | 500 Days of Summer                     | Marc Webb                | 2009 | English                          | USA                                      | 7.7  | 85% | 84%  | Romance/Drama          | 1h 35min | After being dumped by the girl he believes to be his soulmate, hopeless romantic Tom Hansen reflects on their relationship to try and figure out where things went wrong and how he can win her back.  |
| 8   | 5x2                                    | Francois Ozon            | 2004 | English, French, Italian         | France                                   | 6.6  | 65% | 69%  | Romance/Drama          | 1h 30min | Five stages in the romance between a woman and a man.  |
| 9   | 71 Fragments of a Chronology of Chance | Michael Haneke           | 1994 | German                           | Austria, Germany                         | 7.2  | 60% | 74%  |                        |          | The drama consists of varied characters in each storyline: a Romanian boy who immigrated illegally into Austria and lives on the streets of Vienna; a religious bank security worker; a lonely old man staring at a TV screen; a childless couple considering adoption; a frustrated student and so on.  |
| 10  | 8½                                     | Federico Fellini         | 1963 | English, French, German, Italian | Italy                                    | 8    | 98% | 92%  | Drama/Fantasy          | 2h 18min | A harried movie director retreats into his memories and fantasies.   |
| 11  | A Japanese Tragedy                     | Keisuke Kinoshita        | 1953 | Japanese                         | Japan                                    | 7.3  | NA  | 75%  | Drama/World Cinema     | 1h 56min | Alternating in time, between the end of World War II and 1953, Haruko, a widow, does what she can to keep her daughter Utako and son Seiichi safe, fed, and sheltered. By 1953, it's clear that the children, as they enter adulthood, want little to do with their mother. They have a different view of their childhood and her sacrifices: in their eyes, she abandoned them to live a life of pleasure. The self-pitying Haruko is sure her life was one of pain and humiliation, for her children. As Seiichi, now a medical student, announces his plans to let a wealthy man adopt him, and as Utako considers the offer to go away with a married man who is her English teacher, what is left for Haruko? |
| 12  | A La Folie.. Pas Du Tout               | Leatitia Colombani       | 2002 | French                           | France                                   | 7.2  | 71% | 84%  | Thriller/Romance       | 1h 32min | A young woman who is in love with a married doctor becomes dangerous when her attempts to persuade him to leave his wife are unsuccessful. However, when things are seen from his point of view, the real situation becomes clear.   |
| 13  | A Movie                                | Bruce Conner             | 1958 | English                          | USA                                      | 7    | NA  | NA   | Short/Experimental     | 12min    | Clips of atomic explosions, pornography, and B-movies are spliced together to evoke certain emotions.  |
| 14  | Abandon                                | Stephen Gaghan           | 2002 | English                          | USA                                      | 4.9  | 16% | 31%  | Thriller/Mystery       | 1h 39min | An investigation of a college student's missing boyfriend becomes quite strange when she begins to see him periodically.   |

| No. | Film                               | Director                    | Year | Language                                   | Country                         | IMDB | TM* | AS** | Genre                   | Duration | Synopsis (3 Liner)   |
|-----|------------------------------------|-----------------------------|------|--|---------------------------------|------|-----|------|-------------------------|----------|--|
| 15  | Across the Hall                    | Alex Merkin                 | 2009 | English                                    | USA                             | 6    | NA  | 39%  | Thriller/Short          | 1h 33min | A thriller about a standoff between a young man, his fiancée and his best friend who comes to his aide.  |
| 16  | Adaptation.                        | Spike Jonze                 | 2002 | English                                    | USA                             | 7.7  | 91% | 85%  | Comedy/Drama            | 1h 54min | A lovelorn screenwriter becomes desperate as he tries and fails to adapt "The Orchid Thief" by Susan Orlean for the screen   |
| 17  | Alexander                          | Oliver Stone                | 2004 | English, Chinese                           | Germany, France, Italy, UK, USA | 5.6  | 16% | 35%  | War/Adventure           | 2h 55min | Alexander, the King of Macedonia and one of the greatest army leaders in the history of warfare, conquers much of the known world.   |
| 18  | American Gun                       | Alan Jacobs                 | 2002 | English                                    | USA                             | 6.1  | 40% | 41%  | Drama/Indie film        | 1h 35min | When his daughter is shot just before Christmas, Martin Tillman journeys across the U.S. using the gun's serial number to track down the truth behind Penny's killing.   |
| 19  | Amores Perros                      | Alejandro González Iñárritu | 2000 | Spanish                                    | Mexico                          | 8.1  | 93% | 94%  | Thriller/Drama          | 2h 34min | A horrific car accident connects three stories, each involving characters dealing with loss, regret, and life's harsh realities, all in the name of love.  |
| 20  | Andha Naal                         | Sundaram Balachander        | 1954 | Tamil                                      | India                           | 8    | NA  | NA   | Thriller/ Tamil cinema  | 2h 10min | After an engineer is shot dead, several people around him relate different versions and the related incidents that may have led to the murder.   |
| 21  | Annie Hall                         | Woody Allen                 | 1977 | English, German                            | USA                             | 8    | 96% | 92%  | Comedy/Romance          | 1h 33min | Alvy Singer, a divorced Jewish comedian, reflects on his relationship with ex-lover Annie Hall, an aspiring nightclub singer, which ended abruptly just like his previous marriages.   |
| 22  | Ararat                             | Atom Egoyan                 | 2002 | English, Armenian, French, German, Turkish | Canada, France                  | 6.6  | 55% | 71%  | Drama/Political drama   | 1h 55min | Interrogated by a customs officer, a young man recounts how his life was changed during the making of a film about the Armenian genocide<br>Singer, a divorced Jewish comedian, reflects on his relationship with ex-lover Annie Hall, an aspiring nightclub singer, which ended abruptly just like his previous marriages.  |
| 23  | Dunkirk                            | Christopher Nolan           | 2017 | English                                    | UK, Netherlands, France, USA    | 8    | 92% | 81%  | Drama/Thriller          | 1h 46min | In May 1940, Germany advanced into France, trapping Allied troops on the beaches of Dunkirk. Under air and ground cover from British and French forces, troops were slowly and methodically evacuated from the beach using every serviceable Naval and civilian vessel that could be found. At the end of this heroic mission, three hundred thirty thousand French, British, Belgian, and Dutch soldiers were safely evacuated. |
| 24  | Atonement                          | Joe Wright                  | 2007 | English                                    | UK, France, Germany             | 7.8  | 83% | 80%  | Romance/Drama           | 2h 3min  | Thirteen-year-old fledgling writer Briony Tallis irrevocably changes the course of several lives when she accuses her older sister's lover of a crime he did not commit.   |
| 25  | Away from Her                      | Sarah Polley                | 2006 | English                                    | Canada                          | 7.5  | 94% | 81%  | Drama/Indie film        | 1h 50min | A man coping with the institutionalization of his wife because of Alzheimer's disease faces an epiphany when she transfers her affections to another man, Aubrey, a wheelchair-bound mute who also is a patient at the nursing home.   |
| 26  | Arrival                            | Denis Villeneuve            | 2016 | English                                    | USA, Canada                     | 7.9  | 94% | 82%  | Drama/Mystery           | 1h 56min | Linguistics professor Louise Banks leads an elite team of investigators when gigantic spaceships touchdown in 12 locations around the world. As nations teeter on the verge of global war, Banks and her crew must race against time to find a way to communicate with the extra-terrestrial visitors. Hoping to unravel the mystery, she takes a chance that could threaten her life and quite possibly all of mankind.         |
| 27  | Bad Times at the El Royale         | Drew Goddard                | 2018 | English                                    | USA                             | 7.1  | 74% | 73%  | Crime/ Drama/ Mystery   | 2h 21min | Early 1970s. Four strangers check in at the El Royale Hotel. The hotel is deserted, staffed by a single desk clerk. Some of the new guests' reasons for being there are less than innocent and some are not who they appear to be.   |
| 28  | Bad Timing                         | Nicolas Roeg                | 1980 | English                                    | UK                              | 7    | 50% | 75%  | Drama/ Mystery/Thriller | 2h 3min  | A psychiatrist, living in Vienna, enters a torrid relationship with a married woman. When she ends up in the hospital from an overdose, an inspector becomes set on discovering the demise of their affair.  |
| 29  | Batman Begins                      | Christopher Nolan           | 2005 | English                                    | USA, UK                         | 8.2  | 84% | 94%  | Action/Crime            | 2h 20min | After training with his mentor, Batman begins his fight to free crime-ridden Gotham City from corruption.  |
| 30  | Before the Devil Knows You're Dead | Sidney Lumet                | 2007 | English                                    | USA                             | 7.3  | 88% | 71%  | Crime/ Drama/ Thriller  | 1h 56min | When two brothers organize the robbery of their parents' jewellery store the job goes horribly wrong, triggering a series of events that sends them, their father and one brother's wife hurtling towards a shattering climax.   |

| No. | Film                        | Director                  | Year | Language                                | Country                  | IMDB | TM*  | AS** | Genre                     | Duration | Synopsis (3 Liner)   |
|-----|-----------------------------|---------------------------|------|---|--------------------------|------|------|------|---------------------------|----------|--|
| 31  | Before the Rain             | Milčo Mančevski           | 1994 | Macedonian                              | North Macedonia          | 8    | 92%  | 94%  | Drama/Romance/War         | 1h 55min | Three interconnected stories of love under the threat of civil war in Macedonia and London.  |
| 32  | Beginners                   | Mike Mills                | 2010 | English                                 | United States            | 7.2  | 85%  | 77%  | Comedy/Romance            | 1h 44min | Beginners is a 2010 American romantic comedy-drama film written and directed by Mike Mills. It tells the story of a man reflecting on the life and death of his father, while trying to forge a new romantic relationship with a woman dealing with father-issues of her own. The film is based on the coming out of Mills' own father at the age of 75, five years before his death.[3]   |
| 33  | Belle de Jour               | Luis Buñuel               | 1967 | French, Spanish                         | France, Italy            | 7.7  | 95%  | 86%  | Romance/Drama             | 1h 42min | A frigid young housewife decides to spend her midweek afternoons as a prostitute.  |
| 34  | Betrayal                    | David Hugh Jones          | 1983 | English                                 | USA                      | 7.1  | 86%  | 77%  | Drama/Thriller            | 1h 35min | An affair between a literary agent and his best friend's wife. The story unfolds in reverse-chronological order.   |
| 35  | Bhumika                     | Shyam Benegal             | 1977 | Hindi                                   | India                    | 7.4  | -    | 89%  | Drama                     | 2h 22min | A girl learns music from her courtesan grandmother and breaks into the burgeoning show business industry of 1930s Bombay, which eventually leads to decades of superstardom as well as romantic entanglements.   |
| 36  | Blowup                      | Michelangelo Antonioni    | 1966 | English                                 | USA, UK, Italy           | 7.6  | 88%  | 84%  | Drama/ Mystery/Thriller   | 1h 51min | A fashion photographer unknowingly captures a death on film after following two lovers in a park.  |
| 37  | Blue Valentine              | Derek Cianfrance          | 2010 | English                                 | USA                      | 7.3  | 86%  | 77%  | Romance/Drama             | 2h 00min | The relationship of a contemporary married couple, charting their evolution over a span of years by cross-cutting between time periods.  |
| 38  | Breakfast on Pluto          | Neil Jordan               | 2005 | English                                 | UK, Ireland              | 7.2  | 57%  | 80%  | Comedy/Drama              | 2h 15min | In the 1970s, a young trans woman, Patrick "Kitten" Braden, comes of age by leaving her Irish town for London, in part to look for her mother and in part because her gender identity is beyond the town's understanding.  |
| 39  | Breathless                  | Jean-Luc Godard           | 1960 | French, English                         | France                   | 7.8  | 97%  | 90%  | Crime/ Drama              | 1h 30min | A small-time thief steals a car and impulsively murders a motorcycle policeman. Wanted by the authorities, he reunites with a hip American journalism student and attempts to persuade her to run away with him to Italy.  |
| 40  | Brideshead Revisited        | Julian Jarrold            | 2008 | English, Arabic, French, Italian, Latin | UK                       | 6.7  | 62%  | 52%  | Romance/Drama             | 2h 14min | A poignant story of forbidden love and the loss of innocence set in England prior to World War II.   |
| 41  | Broadway Danny Rose         | Woody Allen               | 1984 | English                                 | USA                      | 7.4  | 100% | 84%  | Comedy                    | 1h 26min | In his attempts to reconcile a lounge singer with his mistress, a hapless talent agent is mistaken as her lover by a jealous gangster.   |
| 42  | Calendar                    | Atom Egoyan               | 1993 | English, Armenian                       | Canada, Germany, Armenia | 6.8  | 100% | 73%  | Comedy/Drama/Romance      | 1h 18min | A photographer and his wife take photographs of Armenian churches for use in a calendar. Their driver, a local resident, expounds on the history of the churches while the wife translates. The photographer becomes jealous of his wife's bonding with the driver. In a series of flash-forwards, the photographer stages identical dinners with several women, who pretend to talk on the phone while he writes. His wife, now estranged from him, leaves repeated messages on his answering machine, asking why he never contacts her. Yet another thought-provoking look into strange, intertwined relationships from the always enigmatic Egoyan. |
| 43  | Captain Marvel (film)       | Anna Boden and Ryan Fleck | 2019 | English                                 | USA                      | 6.8  | 79%  | 45%  | Action/ Adventure/ Sci-Fi | 2h 04min | Carol Danvers becomes one of the universe's most powerful heroes when Earth is caught in the middle of a galactic war between two alien races.   |
| 44  | Catch-22                    | Mike Nichols              | 1970 | English                                 | USA                      | 7.1  | 79%  | 76%  | Crime/ Drama/War          | 2h 01min | A man is trying desperately to be certified insane during World War II, so he can stop flying missions.  |
| 45  | Celine and Julie Go Boating | Jacques Rivette           | 1974 | French                                  | France                   | 7.5  | 97%  | 88%  | Crime/ Drama/Fantasy      | 3h 10min | A mysteriously linked pair of young women find their daily lives pre-empted by a strange boudoir melodrama that plays itself out in a hallucinatory parallel reality.  |

| No. | Film  | Director                    | Year | Language   | Country                     | IMDB | TM* | AS** | Genre                     | Duration | Synopsis (3 Liner)  |
|-----|---|-----------------------------|------|--|-----------------------------|------|-----|------|---------------------------|----------|---|
| 46  | Chaos   | Hideo Nakata                | 2000 | Japanese   | Japan                       | 6.6  | 71% | 62%  | Crime/ Mystery/Thriller   | 1h 30min | A man gets involved in a kidnapping scheme with the wife of a wealthy businessman. She lets herself be tied up and confined in his house while he sends the ransom demand. When he returns home that night, however, he finds her lying dead on the floor. In a panic he buries her body deep in the woods and tries to return to his ordinary life. One day, he thinks he spots her walking down the street. Is his mind playing tricks on him, or has she somehow returned from the grave?                |
| 47  | Charming Billy                                    | Wm. R. Pace                 | 1999 | English  |                             | 6.5  | -   | 62%  | Drama/ Thriller           | 1h 19min | Billy Starkman is a seemingly ordinary man living in a small Midwestern town who one day wakes up, murders his family, climbs a rural water tower with a high-powered hunting rifle and begins shooting innocent people. Threading the terribly tragic with the maddeningly mundane, Charming Billy attempts to imagine what could possibly lead a man to commit the unimaginable.  |
| 48  | Che   | Steven Soderbergh           | 2008 | English, Spanish   | Spain, Germany, France, USA | 7.2  | 68% | 75%  | Biography/ Drama/ History | 2h 09min | In 1956, Ernesto 'Che' Guevara and a band of Castro-led Cuban exiles mobilize an army to topple the regime of dictator Fulgencio Batista.   |
| 49  | Chelsea Girls                                     | Andy Warhol, Paul Morrissey | 1966 | English  | USA                         | 5.9  | 50% | 73%  | Drama                     | 3h 30min | Lacking a formal narrative, Warhol's art house classic follows various residents of the Chelsea Hotel in 1966 New York City, presented in a split screen with a single audio track in conjunction with one side of screen.  |
| 50  | Citizen Kane                                      | Orson Welles                | 1941 | English  | USA                         | 8.3  | 99% | 90%  | Drama/Mystery             | 1h 59min | Following the death of publishing tycoon Charles Foster Kane, reporters scramble to uncover the meaning of his final utterance; 'Rosebud'.  |
| 51  | City of God                                       | Fernando Meirelles          | 2002 | Portuguese   | Brazil                      | 8.6  | 91% | 97%  | Crime/ Drama              | 2h 11min | In the slums of Rio, two kids' paths diverge as one struggles to become a photographer and the other a kingpin.   |
| 52  | Close-Up  | Abbas Kiarostami            | 1990 | Persian  | Iran                        | 8.3  | NA  | NA   | Biography/ Drama/ Crime   | 1h 38min | The true story of Hossain Sabzian, a cinephile who impersonated the director Mohsen Makhmalbaf to convince a family they would star in his so-called new film.  |
| 53  | Closer  | Mike Nichols                | 2004 | English  | USA                         | 7.2  | 68% | 81%  | Drama/Romance             | 1h 41min | The relationships of two couples become complicated and deceitful when the man from one couple meets the woman of the other.  |
| 54  | Code Unknown Incomplete Tales of Several Journeys | Michael Haneke              | 2000 | French, Romanian, Malinka, French Sign Language, English | France, Austria, Romania    | 7.2  | 74% |      | Drama/Romance             | 1h 58min | A young man harasses a homeless woman, another man protests, the police arrest both and the woman has to leave the country. What were their various story-lines leading up to this event?   |
| 55  | Comet   | Sam Esmail                  | 2014 | English  | USA                         | 6.8  | 42% | 52%  | Comedy/ Drama/ Romance    | 1h 30min | Set in a parallel universe, Comet bounces back and forth over the course of an unlikely but perfectly paired couple's six-year relationship.  |
| 56  | Confessions of a Dangerous Mind                   | George Clooney              | 2002 | English  | USA                         | 7    | 79% | 75%  | Biography/Comedy/ Crime   | 1h 53min | An adaptation of the cult memoir of game show impresario Chuck Barris (Sam Rockwell), in which he purports to have been a C.I.A. hitman.  |
| 57  | Cremaster 2                                       | Matthew Barney              | 1999 | English  | USA                         | 6.7  | 73% | 80%  | Drama                     | 1h 19min | This experimental film alternates between symbolic depictions of events from the life of notorious Mormon murderer Gary Gilmore and sustained shots of barren landscapes and beehives. Career criminal Gilmore (Matthew Barney) murders two men and, after being apprehended, demands to be put to death by firing squad. The execution absolves Gilmore of his sins, and he enters a hive-like heaven, where he begins a search for the elusive Harry Houdini (Norman Mailer), who may be his grandfather. |
| 58  | Cremaster 3                                       | Matthew Barney              | 2002 | English  | USA                         | 7.1  | 63% | 85%  | Drama/Fantasy             | 2h 58min | The third film of a five-part art-installation epic -- it's part-zombie movie, part-gangster film.  |
| 59  | Cremaster 5                                       | Matthew Barney              | 1997 | English  | USA                         | 6.6  | 63% | 74%  | Musical/ Drama            | 51min    | A five-act opera, sung in Hungarian, set in the late nineteenth century Budapest.   |
| 60  | Daughters of the Dust                             | Julie Dash                  | 1991 | Gullah, English  | USA                         | 6.6  | 94% | 65%  | Drama/History/ Romance    | 1h 54min | Languid look at the Gullah culture of the sea islands off the coast of South Carolina and Georgia where African folk-ways were maintained   |

| No. | Film                                  | Director                    | Year    | Language         | Country                          | IMDB | TM* | AS** | Genre                      | Duration | Synopsis (3 Liner)  |
|-----|---------------------------------------|-----------------------------|---------|------------------|----------------------------------|------|-----|------|----------------------------|----------|---|
|     |                                       |                             |         |                  |                                  |      |     |      |                            |          | well into the 20th Century and was one of the last bastions of these mores in America. Set in 1902.   |
| 61  | Dekalog (TV series)                   | Krzysztof Kieslowski        | 1989-90 | Polish           | Poland, West Germany             | 9.1  | NA  | NA   | Drama                      | 9h 32min | Ten television drama films, each one based on one of the Ten Commandments.  |
| 62  | Destiny                               | Fritz Lang                  | 1921    | German           | Germany                          | 7.6  | 90% | 88%  | Drama/Fantasy/Horror       | 1h 38min | When a woman's fiancé disappears, Death gives her three chances to save him from his fate.  |
| 63  | Diamonds of the Night                 | Jan Němec                   | 1963    | Czech            | Czechoslovakia                   | 7.4  | 92% | 76%  | Drama/ War                 | 1h 10min | Two Jewish boys escape from a train transporting them from one concentration camp to another. The film goes beyond the themes of war and anti-Nazism and concerns itself with man's struggle to preserve human dignity.   |
| 64  | Distant Voices, Still Lives           | Terence Davies              | 1988    | English          | UK                               | 7.4  | 80% | 81%  | Drama                      | 85mins   | is a 1988 British period drama film written and directed by Terence Davies. It evokes working-class family life in Liverpool during the 1940s and early 1950s, paying particular attention to the role of popular music, Hollywood cinema, light entertainment and the public house within this tight-knit community.<br><br>The film is made up of two separate films, shot two years apart, but with the same cast and crew. The first section, 'Distant Voices', chronicles the early life of a working-class Catholic family living under a thoroughly psychotic, abusive, violent and mostly hateful father. The second section, 'Still Lives', sees the children grown up and emerging into a brighter 1950s Britain, only a few years from rock and roll and The Beatles, yet somehow still a lifetime away. |
| 65  | Donnie Darko                          | Richard Kelly               | 2001    | English          | USA                              | 8.1  | 86% |      | Drama/Fantasy/Thriller     | 1h 53min | After narrowly escaping a bizarre accident, a troubled teenager is plagued by visions of a man in a large rabbit suit who manipulates him to commit a series of crimes.   |
| 66  | Doom                                  | Andrzej Bartkowiak          | 2005    | English          | USA, UK, Czech Republic, Germany | 5.2  | 18% | 34%  | Action/ Horror/ Sci-Fi     | 1h 44min | Space Marines are sent to investigate strange events at a research facility on Mars but find themselves at the mercy of genetically enhanced killing machines.  |
| 67  | Downloading Nancy                     | Johan Renck                 | 2008    | English          | USA                              | 5.8  | 19% | 43%  | Drama/Thriller             | 1h 42min | An unhappy wife orders a guy she meets over the Internet to kill her, but the two of them fall in love.   |
| 68  | 21 grams                              | Alejandro González Iñárritu | 2003    | English          | USA                              | 7.7  | 80% | 86%  | Drama/Crime film           | 2h 4min  | Paul Rivers, an ailing mathematician lovelessly married to English émigré; Christina Peck, who's hiding a secret past; and Jack Jordan, an ex-convict who has found Jesus are brought together by a terrible accident which changes their lives. / A freak accident brings together a critically ill mathematician, a grieving mother, and a born-again ex-con.   |
| 69  | Elephant                              | Gus Van Sant                | 2003    | English, German  | USA                              | 7.2  | 73% | 79%  | Drama/Teen                 | 1h 21min | Several ordinary high school students go through their daily routine as two others prepare for something more malevolent.   |
| 70  | Enemy                                 | Denis Villeneuve            | 2013    | English, Spanish | Canada, Spain                    | 6.9  | 71% | 64%  | Thriller/Mystery           | 1h 30min | A man seeks out his exact look-alike after spotting him in a movie.   |
| 71  | Eternal Sunshine of the Spotless Mind | Michel Gondry               | 2004    | English          | USA                              | 8.3  | 92% | 94%  | Drama/Science fiction film | 1h 48min | When their relationship turns sour, a couple undergoes a medical procedure to have each other erased from their memories.   |
| 72  | eXistenZ                              | David Cronenberg            | 1999    | English          | Canada, UK, France               | 6.8  | 74% | 69%  | Sci-fi/Horror              | 1h 37min | A game designer on the run from assassins must play her latest virtual reality creation with a marketing trainee to determine if the game has been damaged.   |
| 73  | Exotica                               | Atom Egoyan                 | 1994    | English          | Canada                           | 7.1  | 97% | 83%  | Drama/Mystery              | 1h 43min | A man plagued by neuroses frequents the club Exotica in an attempt to find solace, but even there his past is never far away.   |
| 74  | F for Fake                            | Orson Welles                | 1973    | English          | France, Iran, West Germany       | 7.8  | 88% | 88%  | Documentary/ Docudrama     | 1h 30min | A documentary about fraud and fakery.   |
| 75  | Firestorm                             | Dean Semler                 | 1998    | English          | USA                              | 4.8  | 12% | 26%  | Action/Disaster            | 1h 29min | Firefighter Jesse Graves has to save ornithologist Jennifer and other people caught in a forest fire, which was set up by the lawyer of convicted killer Earl Shaye, who escaped from the prison with several of his inmates  |

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|-----|------------------------|-------------------|------|------------------|------------------|------|------|------|------------------------|----------|---|
|     |                        |                   |      |                  |                  |      |      |      |                        |          | posing as firefighters to recover thirty-seven million dollars in stashed loot.   |
| 76  | Flags of Our Fathers   | Clint Eastwood    | 2006 | English          | USA              | 7.1  | 73%  | 69%  | War/Action             | 2h 15min | The life stories of the six men who raised the flag at the Battle of Iwo Jima, a turning point in World War II.   |
| 77  | Following              | Christopher Nolan | 1998 | English          | UK               | 7.5  | 81%  | 85%  | Thriller/Crime         | 1h 10min | A young writer who follows strangers for material meets a thief who takes him under his wing.   |
| 78  | Forgotten              | Jang Hang-jun     | 2017 | Korean           | South Korea      | 7.5  | NA   | 83%  | Thriller/Mystery       | 1h 49m   | When his abducted brother returns seemingly a different man with no memory of the past 19 days, Jin-seok chases after the truth behind the kidnapping.  |
| 79  | Fried Green Tomatoes   | Jon Avnet         | 1991 | English          | USA              | 7.7  | 74%  | 91%  | Drama/Comedy           | 2h 10min | A housewife who is unhappy with her life befriends an old lady in a nursing home and is enthralled by the tales she tells of people she used to know.   |
| 80  | Gambit                 | Ronald Neame      | 1966 | English          | USA              | 7.1  | NA   | 80%  | Crime/Thriller         | 1h 49min | An English cat burglar needs a Eurasian dancer's help to pull off the perfect heist, but even the most foolproof schemes have a way of backfiring.  |
| 81  | Genealogies of a Crime | Raúl Ruiz         | 1997 | French           | France, Portugal | 6.5  | 67%  | 41%  | Crime/ Drama/Thriller  | 1h 54min | At her son's funeral, Solange, a lawyer famous for losing hopeless cases, agrees to defend René, her son's age, accused of murdering his wealthy aunt, Jeanne, who's part of the Franco-Belgian Psychoanalytic Society, known for odd views and methods. She reads Jeanne's journal, documenting René's criminal tendencies. Solange believes him innocent, manipulated into the murder or framed. Odd psychiatrists turn up, including Georges Didier, who runs FBPS, and his rival, Christian, who believes crime originates in a story's taking hold of a person. After the verdict, René and Solange's relationship changes, Georges and his society commit a bizarre act, and the police record Solange's story. |
| 82  | Ghosts of Mars         | John Carpenter    | 2001 | English          | USA              | 4.9  | 23%  | 24%  | Action/Horror/ Sci-Fi  | 1h 37min | In 2176, a Martian police unit is sent to pick up a highly dangerous criminal at a remote mining post. Upon arrival, the cops find that the post has become a charnel house.  |
| 83  | Glastonbury            | Julien Temple     | 2006 | English          | UK               | 6.6  | 73%  | 68%  | Documentary/Music      | 2h 15min | A documentary on the 30th anniversary of Britain's best-known music festival.   |
| 84  | Go                     | Doug Liman        | 1999 | English          | USA              | 7.2  | 91%  | 78%  | Comedy/ Crime          | 1h 43min | Sugihara, born in Japan but with North Korean parents, falls in love with a Japanese girl after changing from a North Korean school to a Japanese school. His boxer dad teaches him boxing - skills used a lot.   |
| 85  | Gone Girl              | David Fincher     | 2014 | English          | USA              | 8.1  | 87%  | 87%  | Drama/Thriller/Mystery | 2h 29min | With his wife's disappearance having become the focus of an intense media circus, a man sees the spotlight turned on him when it's suspected that he may not be innocent.   |
| 86  | Groundhog Day          | Harold Ramis      | 1993 | English          | USA              | 8    | 72%  |      | Drama/Fantasy          | 1h 41min | A self-centered Pittsburgh weatherman finds himself inexplicably trapped in a small town as he lives the same day over and over again.  |
| 87  | Gummo                  | Harmony Korine    | 1997 | English          | USA              | 6.7  | 37%  | 73%  | Drama/Comedy           | 1h 28min | Lonely residents of a tornado-stricken Ohio town wander the deserted landscape trying to fulfil their boring, nihilistic lives.   |
| 88  | Happenstance           | Laurent Firode    | 2000 | French           | Philippines      | 6.8  | 64%  | 74%  | Drama/Comedy/ Romance  | 1h 30min | How, thanks to what's known as the "Butterfly theory" (a random series of unlinked events), can a young woman and a young man meet ?  |
| 89  | Happiness              | Todd Solondz      | 1998 | English, Russian | USA              | 7.7  | 82%  | 89%  | Drama/Comedy           | 2h 19min | The lives of several individuals intertwine as they go about their lives in their own unique ways, engaging in acts society as a whole might find disturbing in a desperate search for human connection.  |
| 90  | Harakiri               | Masaki Kobayashi  | 1962 | Japanese         | Japan            | 8.6  | 100% | 97%  | Action/Drama/Mystery   | 2h 15min | When a ronin requesting seppuku at a feudal lord's palace is told of the brutal suicide of another ronin who previously visited, he reveals how their pasts are intertwined - and in doing so challenges the clan's integrity.  |
| 91  | Haven                  | Frank E. Flowers  | 2004 | English          | USA              | 5.8  | 13%  | 60%  | Crime/ Drama           | 1h 58min | On Friday the 13th, different people meet on Grand Cayman - a US money launderer and his daughter, a lawyer, a young fisherman in love with a rich man's daughter, other high school students, a crime gang etc.  |

| No. | Film                           | Director           | Year | Language                | Country                       | IMDB | TM* | AS** | Genre                         | Duration | Synopsis (3 Liner)  |
|-----|--------------------------------|--------------------|------|-------------------------|-------------------------------|------|-----|------|-------------------------------|----------|---|
| 92  | He Loves Me... He Loves Me Not | Laetitia Colombani | 2002 | French                  | France                        | 7.2  | 71% | 84%  | Romance/Thriller              | 1h 32min | A young woman who is in love with a married doctor becomes dangerous when her attempts to persuade him to leave his wife are unsuccessful. However, when things are seen from his point of view, the real situation becomes clear.  |
| 93  | Head                           | Bob Rafelson       | 1968 | English, Italian        | USA                           | 6.5  | 75% | 71%  | Comedy/Fantasy/Musical        | 1h 26min | The Monkees are tossed about in a psychedelic, surrealist, plotless, circular bit of fun fluff.   |
| 94  | Hell Ride                      | Larry Bishop       | 2008 | English                 | USA                           | 5.1  | 10% | 30%  | Action/Drama/Thriller         | 1h 24min | Two rival bikers gangs, the Victors and the Six-Six-Six's, refuel their decades-old rivalry.  |
| 95  | Hiroshima, My Love             | Alain Resnais      | 1959 | French                  | France, Japan                 | 7.9  | 98% | 89%  | Drama/Romance                 | 1h 30min | A French actress filming an anti-war film in Hiroshima has an affair with a married Japanese architect as they share their differing perspectives on war.   |
| 96  | I                              | Shankar            | 2015 | Tamil                   | India                         | 7.4  | 56% | 57%  | Action/Drama/Romance          | 3h 08min | A deformed hunchback kidnaps a bride on the day of her marriage and holds her hostage while his connection to her and his targets is revealed in a series of flashbacks that unfold as he starts seeking revenge.   |
| 97  | I Love Your Work               | Adam Goldberg      | 2005 | English                 | USA                           | 5.3  | 22% | 44%  | Drama/Mystery                 | 1h 51min | The film follows fictional movie star Gray Evans through the disintegration of his marriage, his gradual mental breakdown, and his increasing obsession with a young film student who reminds Gray of his own life before becoming famous. A dark psychological drama, this movie explores the pressures of fame and the difference between getting what you want and wanting what you get. |
| 98  | I'm Not There                  | Todd Haynes        | 2007 | English                 | USA, Germany                  | 6.9  | 77% | 69%  | Biography/ Drama/ Music       | 2h 15min | Ruminations on the life of Bob Dylan, where six characters embody a different aspect of the musician's life and work.   |
| 99  | Identity                       | James Mangold      | 2003 | English                 | USA                           | 7.3  | 62% | 75%  | Thriller/Mystery              | 1h 30min | Stranded at a desolate Nevada motel during a nasty rain storm, ten strangers become acquainted with each other when they realize that they're being killed off one by one.  |
| 100 | In Praise of Love              | Jean-Luc Godard    | 2001 | French                  | France, Switzerland           | 6.4  | 52% | 63%  | Drama                         | 1h 37min | An author works on a project on the subject of love, and, in the process, crosses paths with a former love in his life.   |
| 101 | In the Mood for Love           | Wong Kar-wai       | 2000 | Cantonese               | HongKong, France              | 8.1  | 91% | 94%  | Drama/Romance                 | 1h 38min | Two neighbors form a strong bond after both suspect extramarital activities of their spouses. However, they agree to keep their bond platonic so as not to commit similar wrongs.   |
| 102 | In the Shadow of the Sun       | Derek Jarman       | 1980 | English                 | UK                            | 6.5  | 25% | 33%  | Fantasy                       | 51min    | A collection of Super 8 films shot by Derek Jarman between 1972 and 1975, edited to the music of Throbbing Gristle.   |
| 103 | Inception                      | Christopher Nolan  | 2010 | English                 | USA, UK                       | 8.8  | 86% | 91%  | Science fiction film/Thriller | 2h 28min | A thief who steals corporate secrets through the use of dream-sharing technology is given the inverse task of planting an idea into the mind of a C.E.O., but his tragic past may doom the project and his team to disaster.  |
| 104 | Inglorious Bastards            | Quentin Tarantino  | 2009 | English, German, French | USA, Europe                   | 8.3  | 89% | 88%  | Adventure/Drama/War           | 2h 33min | A thief who steals corporate secrets through the use of dream-sharing technology is given the inverse task of planting an idea into the mind of a C.E.O., but his tragic past may doom the project and his team to disaster.  |
| 105 | Inland Empire                  | David Lynch        | 2006 | English, Polish         | France, Poland, United States | 6.9  | 72% | 75%  | Fantasy/Drama/Mystery         | 3h       | As an actress begins to adopt the persona of her character in a film, her world becomes nightmarish and surreal.  |
| 106 | Interiors                      | Woody Allen        | 1978 | English                 | USA                           | 7.3  | 80% | 79%  | Drama                         | 1h 32min | Three sisters find their lives spinning out of control in the wake of their parents' sudden, unexpected divorce.  |
| 107 | Interstellar                   | Christopher Nolan  | 2014 | English                 | USA, UK                       | 8.6  | 71% | 86%  | Drama/Mystery                 | 2h 49min | A team of explorers travel through a wormhole in space in an attempt to ensure humanity's survival  |
| 108 | Into the Wild                  | Sean Penn          | 2007 | English                 | USA                           | 8.1  | 83% | 89%  | Biography/Drama/Adventure     | 2h 28min | After graduating from Emory University, top student and athlete Christopher McCandless abandons his possessions, gives his entire \$24,000 savings account to charity and hitchhikes to Alaska to live in the wilderness.   |

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|-----|--------------------------|-----------------------------|------|-------------------------------|----------------------------|------|-----|------|-----------------------------|----------|--|
| 109 | Intolerance              | D. W. Griffith              | 1916 | English                       | USA                        | 7.7  | 97% | 77%  | Drama/History               | 3h 17min | The story of a poor young woman, separated by prejudice from her husband and baby, is interwoven with tales of intolerance from throughout history.  |
| 110 | Babel                    | Alejandro González Iñárritu | 2006 | English                       | USA                        | 7.4  | 69% | 77%  | Drama/ Ensemble Film        | 2h 22min | Tragedy strikes a married couple on vacation in the Moroccan desert, touching off an interlocking story involving four different families.   |
| 111 | It                       | Tommy Lee Wallace           | 1990 | English                       | USA, Canada                | 6.8  | 68  | 63%  | Drama/Horror/Mystery        | 3h 12min | In 1960, seven preteen outcasts fight an evil demon that poses as a child-killing clown. Thirty years later, they reunite to stop the demon once and for all when it returns to their hometown.                              |
| 112 | Jacob's Ladder           | Adrian Lyne                 | 1990 | English                       | USA                        | 7.5  | 73% | 36%  | Drama/Horror/Mystery        | 1h 53min | A postal worker is haunted by flashbacks to his earlier marriage, his torturous days of duty during the Vietnam war and his now-dead son.  |
| 113 | JCVD                     | Mabrouk El Mechri           | 2008 | English, French               | Belgium, France            | 7.1  | 84% | 74%  | Action/Comedy/Crime/Drama   | 1h 37min | Hollywood star, JCVD returns to his hometown seeking salvation and tranquility. But, he gets involved in a bank robbery and is mistaken by the police as the mastermind behind the robbery.                                  |
| 114 | Je t'aime Je t'aime      | Alain Renais                | 1968 | French,Dutch,English          | France, Italy              | 7.2  | 89% | 81%  | Drama/Sci-fi                | 1h 31min | After a botched suicide, a man (Claude Rich) gets the chance to be a test subject for a newly developed time-machine.  |
| 115 | Jesus' Son               | Alison Maclean              | 1999 | English                       | USA, Canada                | 6.9  | 80% | 83%  | Drama                       | 1h 47min | A young man turns from drug addiction and petty crime to a life redeemed by a discovery of compassion.   |
| 116 | Jigsaw                   | The Spierig Brothers        | 2017 | English                       | USA                        | 5.8  | 32% | 89%  | Crime/Horror/Drama/Mystery  | 1h 32min | Bodies are turning up around the city, each having met a uniquely gruesome demise. As the investigation proceeds, evidence points to one suspect: John Kramer, the man known as Jigsaw, who has been dead for over 10 years. |
| 117 | Joint Security Area      | Park Chan-wook              | 2000 | Korean                        | South Korea                | 7.8  | 88% | 91%  | Action/Drama/Thriller       | 1h 50min | After a shooting incident at the North/South Korean border/DMZ leaves 2 North Korean soldiers dead, a neutral Swiss/Swedish team investigates, what actually happened.   |
| 118 | Ju-on                    | Takashi Shimizu             | 2000 | Japanese                      | Japan                      | 6.9  | 64% | 66%  | Horror/Mystery              | 1h 10min | A teacher visits the house of one of his students after the boy goes missing, only to have a horrifying excuse for his absence from school.  |
| 119 | Ju-on 2                  | Takashi Shimizu             | 2000 | Japanese                      | Japan                      | 6.1  | 56% | 69%  | Horror/Mystery              | 1h 16min | On his request, the sensitive sister of a real estate agent visits a house he intends to put on sell, only to cross paths with its resident curse.   |
| 120 | Ju-on: The Grudge        | Takashi Shimizu             | 2003 | English                       | USA                        | 5.9  | 40  | 46%  | Horror/thriller             | 1h32 min | A mysterious and vengeful spirit marks and pursues anybody who dares enter the house in which it resides.  |
| 121 | Ju-on: The Grudge 2      | Takashi Shimizu             | 2003 | English                       | USA                        | 5.1  | 12% | 40%  | Horror/thriller             | 1h 42min | As their curse spreads on, the ghosts find their chance to live once again through the pregnancy of a cursed woman.  |
| 122 | Kill Bill                | Quentin Tarantino           | 2003 | English                       | USA                        | 8.1  | 85% | 81%  | Action/Crime/Drama/Thriller | 1h 51min | After awakening from a four-year coma, a former assassin wreaks vengeance on the team of assassins who betrayed her.   |
| 123 | L'Appartement            | Gilles Mimouni              | 1996 | English/Japanese/French       | France                     | 7.4  | 86% | 86%  | Drama/Mystery/Romance       | 1h 56min | A recently engaged man sees a former lover and becomes obsessed with meeting her again.  |
| 124 | La Commare Secca         | Bernardo Bertolucci         | 1962 | Italian                       | Italy                      | 6.8  | 86% | 66%  | Drama/Mystery/Crime         | 1h 28min | A prostitute is killed near the Tiber River in a park. The police follow the people that were present in the park the same night in order to question them, for one among them is the killer.                                |
| 125 | La Dolce Vita            | Federico Fellini            | 1960 | Italian/French/German/English | USA, France, Italy         | 8    | 96% | 90%  | Comedy/Drama                | 2h 54min | A series of stories following a week in the life of a philandering tabloid journalist living in Rome.  |
| 126 | La Jetée                 | Chris Marker                | 1962 | French                        | France                     | 8.3  | 93% | 93%  | Drama/Romance/Sci-fi        | 28min    | A look at the past, present, future and the after effects of the World War III, tracing the life of a man, a slave who travels in time to find a solution to the world's destiny.  |
| 127 | La Môme (La Vie en Rose) | Olivier Dahan               | 2007 | English/ French               | UK, France, Czech Republic | 7.6  | 74% | 84%  | Biography/Drama/Music       | 2h 20min | Edith Piaf, a victim of poverty during her childhood, ends up attaining global renown as a charming singer. However, despite her many friendships and romances, personal crises ravage her.                                  |

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|-----|-----------------------------|----------------------|------|-----------------------------------|----------------------------------|------|------|------|--------------------------|----------|---|
| 128 | Last Days                   | Gus Van Sant         | 2005 | English                           | USA                              | 5.8  | 58%  | 50%  | Drama/Music              | 1h37min  | Blake, an introspective artist, feels isolated and lonely under the weight of fame, drug addiction and professional obligations. He chooses to spend his final hours all by himself.  |
| 129 | Last Year at Marienbad      | Alain Resnais        | 1961 | French                            | France,Italy                     | 7.8  | 94%  | 85%  | Drama/Mystery            | 1h 34min | In a strange and isolated chateau, a man becomes acquainted with a woman and insists that they have met before.   |
| 130 | Lisa and the Devil          | Mario Bava           | 1973 | Spanish/Italian                   | Italy,West Germany,Spain         | 6.4  | 62%  | 50%  | Horror/Mystery/Fantasy   | 1h 35min | A tourist spends the night in a derelict Spanish villa seemingly held in the supernatural grip of an eccentric butler, who resembles a depiction of the Devil she had seen on an ancient fresco.                            |
| 131 | Lola Montès                 | Max Ophüls           | 1955 | French                            | France                           | 7.3  | 82%  | 77%  | Biography/Drama/Roman ce | 1h 56min | When she is reduced to appearing in a circus, a notorious beauty thinks back on her past loves.   |
| 132 | Lone Star                   | John Sayles          | 1996 | English                           | USA                              | 7.4  | 94%  | 83%  | Western/Mystery          | 2h 15min | When the skeleton of his murdered predecessor is found, Sheriff Sam Deeds unearths many other long-buried secrets in his Texas border town.   |
| 133 | Lost Highway                | David Lynch          | 1997 | English                           | USA, France                      | 7.6  | 62%  | 87%  | Mystery/Thriller         | 2h 14min | Anonymous videotapes presage a musician's murder conviction, and a gangster's girlfriend leads a mechanic astray.   |
| 134 | Love Exposure               | Sion Sono            | 2008 | Japanese                          | Japan                            | 8.1  | 91%  | 88%  | Comedy/Drama/Action      | 3h 57min | A bizarre love triangle forms between a young Catholic upskirt photographer, a misandric girl and a manipulative cultist.   |
| 135 | Love Letter                 | Shunji Iwai          | 1995 | Japanese                          | Japan                            | 7.9  | NA   | 96%  | Drama/Romance            | 1h 57min | When exchanging letters two women discover new things about a man they knew.  |
| 136 | Lust for Vengeance          | Sean Weathers        | 2001 | English                           | USA                              | 5.9  | NA   | 94%  | Mystery/Thriller         | 1h 25min | A psychotic serial killer makes 5 women obsessed with sex & drugs pay for their sins.   |
| 137 | Lust Stories Bhumi          | Various              | 2018 | Hindi                             | India                            | 6.4  | 100% | 63%  | Drama                    | 2h 0m    | Four stories that shed light on modern relationships from the viewpoint of the Indian woman, from strained marriages to sexual hiccups.   |
| 138 | Magical Mystery Tour        | Bernard Knowles      | 1967 | English                           | UK                               | 6.2  | 62%  | 57%  | Comedy/Fantasy/Musical   | 55min    | The Beatles charter a special bus for a surreal mystery tour.   |
| 139 | Magnolia                    | Paul Thomas Anderson | 1999 | English/German/F rench            | USA                              | 8    | 83%  | 89%  | Drama                    | 3h 8min  | An epic mosaic of interrelated characters in search of love, forgiveness, and meaning in the San Fernando Valley.   |
| 140 | Mamma Mia! Here We Go Again | Ol Parker            | 2018 | English                           | USA, UK                          | 6.6  | 79%  | 66%  | Romantic Comedy/Musical  | 1h 54m   | Five years after the events of Mamma Mia! (2008), Sophie prepares for the grand reopening of the Hotel Bella Donna as she learns more about her mother's past.  |
| 141 | Man of Steel                | Zack Snyder          | 2013 | English                           | USA, UK                          | 7    | 56%  | 75%  | Action/Adventure         | 2h 23m   | An alien child is evacuated from his dying world and sent to Earth to live among humans. His peace is threatened, when other survivors of his home planet invade Earth.   |
| 142 | Manchester by the Sea       | Kenneth Lonergan     | 2016 | English                           | USA                              | 7.8  | 96%  | 78%  | Drama                    | 2h 17m   | A depressed uncle is asked to take care of his teenage nephew after the boy's father dies.  |
| 143 | Irreversible                | Gasper Noe           | 2002 | Spanish, French, English, Italian | France                           | 7.4  | 57%  | 80%  | Drama/Mystery            | 1h 37min | Events over the course of one traumatic night in Paris unfold in reverse-chronological order as the beautiful Alex is brutally raped and beaten by a stranger in the underpass  |
| 144 | Michael Clayton             | saw                  | 2007 | English                           | USA                              | 7.2  | 91%  | 69%  | Drama/Thriller           | 2h       | A law firm brings in its "fixer" to remedy the situation after a lawyer has a breakdown while representing a chemical company that he knows is guilty in a multibillion-dollar class action suit.                           |
| 145 | More American Graffiti      | Bill L. Norton       | 1979 | English                           | USA                              | 5.3  | 44%  | 33%  | Drama/Comedy             | 1h 51m   | College graduates deal with Vietnam and other issues of the late 1960s.   |
| 146 | Mr. Nobody                  | Jaco Van Dormael     | 2009 | English                           | Belgium, Canada, France, Germany | 7.8  | 68%  | 76%  | Sci-fi/Drama             | 2h 21m   | A boy stands on a station platform as a train is about to leave. Should he go with his mother or stay with his father? Infinite possibilities arise from this decision. As long as he doesn't choose, anything is possible. |
| 147 | Mulholland Dr.              | David Lynch          | 2001 | English                           | USA, France                      | 7.9  | 84%  | 87%  | Mystery/Thriller         | 2h 27m   | After a car wreck on the winding Mulholland Drive renders a woman amnesiac, she and a perky Hollywood-hopeful search for clues and answers across Los Angeles in a twisting venture beyond dreams and reality.              |
| 148 | Muriel                      | Alain Resnais        | 1963 | French                            | France, Italy                    | 7.3  | 85%  | 79%  | Psychological Drama      | 1h 55m   | In the seaside town of Boulogne, no one seems to be able to cope with their past, least of all Hélène, an antique furniture saleswoman, her stepson Bernard, and her former lover Alphonse.                                 |

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|-----|-----------------------------|-----------------------|------|--------------------------------|--------------------|------|-----|------|------------------------------|----------|--|
| 149 | Mystery Train               | Jim Jarmusch          | 1989 | English, Japanese, Italian     | USA, Japan         | 7.6  | 88% | 87%  | Drama/Crime film             | 1h 53m   | Three stories are connected by a Memphis hotel and the spirit of Elvis Presley.  |
| 150 | Napoléon                    | Abel Gance            | 1927 | Silent with French intertitles | France             | 8.2  | 88% | 92%  | War/Drama                    | 5h 30m   | A film about the French general's youth and early military career.   |
| 151 | Natural Born Killers        | Oliver Stone          | 1994 | English                        | USA                | 7.3  | 49% | 81%  | Crime/Drama                  | 1h 58m   | Two victims of traumatized childhoods become lovers and psychopathic serial murderers irresponsibly glorified by the mass media.   |
| 152 | New Rose Hotel              | Abel Ferrara          | 1998 | English                        | USA                | 5.2  | 19% | 38%  | Sci-fi/Drama                 | 1h 33m   | Two businessmen are hired to steal secrets from a rival, and decide to use a beautiful call girl to do so.   |
| 153 | Nixon                       | Oliver Stone          | 1995 | English                        | USA                | 7.1  | 75% | 74%  | Political Drama              | 3h 12m   | A biographical story of former U.S. President Richard Nixon, from his days as a young boy, to his eventual Presidency, which ended in shame.   |
| 154 | No Country for Old Men      | Joel Coen, Ethan Coen | 2007 | English                        | USA                | 8.1  | 93% | 86%  | Crime/Western                | 2h 02m   | Violence and mayhem ensue after a hunter stumbles upon a drug deal gone wrong and more than two million dollars in cash near the Rio Grande.   |
| 155 | Nuts                        | Martin Ritt           | 1987 | English                        | USA                | 6.6  | 36% | 71%  | Drama/Crime                  | 1h 56m   | A high-class call girl accused of murder fights for the right to stand trial rather than be declared mentally incompetent.   |
| 156 | O Lucky Man!                | Lindsay Anderson      | 1973 | English                        | UK                 | 7.7  | 78% | 87%  | Comedy/Musical               | 2h 58m   | An ambitious coffee salesman has a series of improbable and ironic adventures that seem designed to challenge his naive idealism.  |
| 157 | Oculus                      | Mike Flanagan         | 2013 | English                        | USA                | 6.5  | 74% | 53%  | Horror/Thriller              | 1h 44m   | A woman tries to exonerate her brother, who was convicted of murder, by proving that the crime was committed by a supernatural phenomenon.   |
| 158 | Odiyan                      | V. A. Shrikumar Menon | 2018 | Malayalam                      | India              | 5.4  | NA  | 50%  | Drama/Thriller               | 2h 47m   | The story of the Odiyan clan, one of the most dreaded, shape-shifting black magicians in the world which ruled the darkness of night through during the pre-electrification era in Kerala.                   |
| 159 | Oldboy                      | Park Chan-wook        | 2003 | Korean                         | South Korea        | 8.4  | 81% | 94%  | Mystery/Thriller             | 2h       | After being kidnapped and imprisoned for fifteen years, Oh Dae-Su is released, only to find that he must find his captor in five days.   |
| 160 | Om-Dar-B-Dar                | Kamal Swaroop         | 1988 | Hindi                          | India              | 7.1  | NA  | NA   | Postmodernist Drama          | 1h 41m   | A carefully constructed nonsense about a teenage boy named Om in a small Indian village.   |
| 161 | Once Upon a Time in America | Sergio Leone          | 1984 | English                        | USA, Italy         | 8.3  | 87% | 93%  | Crime/Drama                  | 3h 49m   | A former Prohibition-era Jewish gangster returns to the Lower East Side of Manhattan 35 years later, where he must once again confront the ghosts and regrets of his old life.                               |
| 162 | Oozham                      | Jeethu Joseph         | 2016 | Malayalam                      | India              | 6    | NA  | NA   | Thriller/Action              | 2h 20m   | After witnessing a tragic demise over a video call, Surya, a demolition expert decides to avenge their deaths. He finds support in his fiancé, Gayathri, who is mourning her brother's death.                |
| 163 | Out of Sight                | Steven Soderbergh     | 1998 | English                        | USA                | 7    | 93% | 74%  | Crime/Romance                | 2h 03m   | A career bank robber breaks out of jail, and shares a moment of mutual attraction with a U.S. Marshal he has kidnapped.  |
| 164 | Out of the Past             | Jacques Tourneur      | 1947 | English                        | USA                | 8    | 95% | 92%  | Noir/Crime                   | 1h 37m   | A private eye escapes his past to run a gas station in a small town, but his past catches up with him. Now he must return to the big city world of danger, corruption, double crosses and duplicitous dames. |
| 165 | Pan's Labyrinth             | Guillermo del Toro    | 2006 | Spanish                        | Spain, Mexico      | 8.2  | 95% | 91%  | Fantasy/War                  | 1h 58m   | In the Falangist Spain of 1944, the bookish young stepdaughter of a sadistic army officer escapes into an eerie but captivating fantasy world.   |
| 166 | Paranoid Park               | Gus Van Sant          | 2007 | English                        | USA, France        | 6.7  | 77% | 65%  | Psychological Drama/Thriller | 1h 25m   | A teenage skateboarder's life begins to fray after he is involved in the accidental death of a security guard.   |
| 167 | Patti Smith: Dream of Life  | Steven Sebring        | 2008 | English                        | USA                | 7.1  | 67% | 75%  | Documentary/Music            | 1h 49m   | An intimate portrait of poet, painter, musician and singer Patti Smith that mirrors the essence of the artist herself.   |
| 168 | Pay It Forward              | Mimi Leder            | 2000 | English                        | USA                | 7.2  | 39% | 77%  | Drama/Romance                | 2h 03m   | A young boy attempts to make the world a better place after his teacher gives him that chance.   |
| 169 | Peppermint Candy            | Lee Chang-dong        | 1999 | Korean                         | South Korea, Japan | 7.8  | 86% | 82%  | Drama                        | 2h 09m   | Following a man's suicide, time traverses back to reveal six chapters of his life on why he committed suicide.   |
| 170 | Persona                     | Ingmar Bergman        | 1966 | Swedish                        | Sweden             | 8.1  | 91% | 94%  | Drama/Mystery                | 1h 25m   | A nurse is put in charge of a mute actress and finds that their personae are melding together.   |
| 171 | Petulia                     | Richard Lester        | 1968 | English                        | USA, UK            | 7.1  | 86% | 80%  | Romance/Drama                | 1h 45m   | An unhappily married socialite finds solace in the company of a recently divorced doctor.  |

| No. | Film                               | Director                       | Year | Language                   | Country  | IMDB | TM*  | AS** | Genre                | Duration | Synopsis (3 Liner)   |
|-----|------------------------------------|--------------------------------|------|----------------------------|--|------|------|------|----------------------|----------|--|
| 172 | Pink Floyd – The Wall              | Alan Parker                    | 1982 | English                    | UK   | 8    | 70%  | 89%  | Musical/Drama        | 1h 35m   | A confined but troubled rock star descends into madness in the midst of his physical and social isolation from everyone.   |
| 173 | Point Blank                        | John Boorman                   | 1967 | English                    | USA  | 7.3  | 92%  | 84%  | Crime/Drama          | 1h 32m   | After being double-crossed and left for dead, a mysterious man named Walker single-mindedly tries to retrieve the money that was stolen from him.  |
| 174 | Possession                         | Andrzej Żuławski               | 1981 | English                    | France, Germany                                  | 7.4  | 91%  | 78%  | Horror/Drama         | 2h 04m   | A woman starts exhibiting increasingly disturbing behavior after asking her husband for a divorce. Suspicions of infidelity soon give way to something much more sinister.   |
| 175 | Predestination                     | Peter Spierig, Michael Spierig | 2014 | English                    | Australia  | 7.5  | 84%  | 75%  | Drama/Mystery/Sci-Fi | 1h 37m   | For his final assignment, a top temporal agent must pursue the one criminal that has eluded him throughout time. The chase turns into a unique, surprising and mind-bending exploration of love, fate, identity and time travel taboos.  |
| 176 | Premonition                        | Mennan Yapo                    | 2007 | English                    | USA  | 5.9  | 8%   | 50%  | Thriller/Mystery     | 1h 36m   | A depressed woman learns that her husband was killed in a car accident the previous day, then awakens the next morning to find him alive and well at home; then awakens the day after that to find that he's dead.   |
| 177 | Pretty Village, Pretty Flame       | Srdan Dragojević               | 1996 | Serbian, English           | Yugoslavia                                       | 8.7  | n/a  | 95%  | War/Drama            | 2h 07m   | During the war in Bosnia, two childhood friends eventually become enemies, as the tragic and devastating circumstances of the war put them on the opposite sides and expose the most gruesome and cruel aspects of the human nature.   |
| 178 | Primer                             | Shane Carruth                  | 2004 | English                    | USA  | 6.9  | 72%  | 79%  | Sci-fi/Drama         | 1h 17m   | Four friends/fledgling entrepreneurs, knowing that there's something bigger and more innovative than the different error-checking devices they've built, wrestle over their new invention.   |
| 179 | Pulp Fiction                       | Quentin Tarantino              | 1994 | English                    | USA  | 8.9  | 94%  | 96%  | Drama/Crime film     | 2h 34m   | The lives of two mob hitmen, a boxer, a gangster and his wife, and a pair of diner bandits intertwine in four tales of violence and redemption.  |
| 180 | Rashomon                           | Akira Kurosawa                 | 1950 | Japanese                   | Japan  | 8.2  | 98%  | 93%  | Drama/Crime          | 1h 28m   | The rape of a bride and the murder of her samurai husband are recalled from the perspectives of a bandit, the bride, the samurai's ghost and a woodcutter.   |
| 181 | Rendition                          | Gavin Hood                     | 2007 | English                    | USA  | 6.8  | 47%  | 62%  | Thriller/Drama       | 2h 02m   | When a terrorist bombing in North Africa kills 19 incl. an American, an Egyptian chemical engineer flying from South Africa to his wife in USA, is arrested upon arriving USA. He disappears. His wife asks senator for help.  |
| 182 | Reprise                            | Joachim Trier                  | 2006 | Norwegian                  | Norway   | 7.3  | 88%  | 84%  | Drama                | 1h 45m   | Two competitive friends, fuelled by literary aspirations and youthful exuberance, endure the pangs of love, depression and burgeoning careers.   |
| 183 | Requiem For A Dream Director's Cut | Darren Aronofsky               | 2000 | English                    | USA  | 8.3  | 79%  | 93%  | Drama                | 1h 42min | The drug-induced utopias of four Coney Island people are shattered when their addictions run deep.   |
| 184 | Reservoir Dogs                     | Quentin Tarantino              | 1992 | English                    | USA  | 8.3  | 92%  | 94%  | Crime/Drama/Thriller | 1h 39min | When a simple jewellery heist goes horribly wrong, the surviving criminals begin to suspect that one of them is a police informant.  |
| 185 | Return to Waterloo                 | Ray Davies                     | 1985 | English                    | UK   | 6.8  | n/a  | 29%  | Musical/Drama        | 1h       | An unnamed Traveller boards the Guildford-Waterloo train and proceeds to daydream about his life and of having interactions with his fellow passengers.<br>An unnamed Traveller boards the Guildford-Waterloo train and proceeds to daydream about his life and of having interactions with his fellow passengers. |
| 186 | Run Lola Run                       | Tom Tykwer                     | 1998 | German                     | Germany  | 7.7  | 93%  | 90%  | Drama/Crime film     | 1h 22min | After a botched money delivery, Lola has 20 minutes to come up with 100,000 Deutschmarks.  |
| 187 | Russian Ark                        | Alexander Sokurov              | 2002 | Russian, Persian           | Russia, Germany, Japan, Canada, Finland, Denmark | 7.4  | 89%  | 80%  | Drama/Fantasy        | 1h 39min | A 19th century French aristocrat, notorious for his scathing memoirs about life in Russia, travels through the Russian State Hermitage Museum and encounters historical figures from the last 200+ years.  |
| 188 | Salvatore Giuliano                 | Francesco Rosi                 | 1962 | Italian, Sicilian language | Italy  | 7.4  | 100% | 68%  | Crime/Drama/History  | 2h 5min  | The unclear and complicated twists between govenal powers, independentist party and Mafia in the Sicily of the '40s culminate with the death of Salvatore Giuliano.<br>The unclear and complicated twists between govenal powers,  |

| No. | Film                        | Director                      | Year | Language             | Country                      | IMDB | TM*  | AS** | Genre                      | Duration | Synopsis (3 Liner)  |
|-----|-----------------------------|-------------------------------|------|----------------------|------------------------------|------|------|------|----------------------------|----------|---|
|     |                             |                               |      |                      |                              |      |      |      |                            |          | independentist party and Mafia in the Sicily of the '40s culminate with the death of Salvatore Giuliano.  |
| 189 | Sans Soleil                 | Chris Marker                  | 1983 | French               | France                       | 8    | 86%  | 86%  | Documentary/Drama          | 1h 40min | A woman narrates the contemplative writings of a seasoned world traveller, focusing on contemporary Japan.  |
| 190 | Satantango                  | Béla Tarr                     | 1994 | Hungarian            | Hungary,Germany ,Switzerland | 8.4  | 100% | 93%  | Drama/Narrative            | 7h 19min | On the eve of a large payment, residents of a collapsing collective farm see their plans turn into desolation when they discover that Irimiás, a former co-worker who they thought was dead, is returning to the community.       |
| 191 | Schizopolis                 | Steven Soderbergh             | 1996 | English              | UK,USA                       | 6.8  | 63%  | 80%  | Comedy/Fantasy/Mystery     | 1h 36min | Fletcher Munson, the lethargic employee of a pseudo-religious self-help company, and his doppelganger, the friendly but dull dentist Dr. Jeffrey Korchek.   |
| 192 | Scorpio Rising              | Kenneth Anger                 | 1963 | English              | USA                          | 6.9  | N/A  | 76%  | Short/Music                | 28min    | A gang of Nazi bikers prepares for a race as sexual, sadistic, and occult images are cut together.  |
| 193 | Scott Pilgrim vs. the World | Edgar Wright                  | 2010 | English              | USA, UK, Canada, Japan       | 7.5  | 82%  | n/a  | Action, Comedy, Romance    | 1h 52min | In a magically realistic version of Toronto, a young man must defeat his new girlfriend's seven evil exes one by one in order to win her heart.   |
| 194 | Sex and Lucia               | Julio Médem                   | 2001 | English, Spanish     | Spain,France                 | 7.1  | 71%  | 86%  | Drama/Romance              | 2h 8min  | Various lives converge on an isolated island, all connected by an author whose novel has become inextricably entwined with his own life.  |
| 195 | Sherlock, Jr.               | Buster Keaton                 | 1924 | English              | USA                          | 8.2  | 92   | 95%  | Romance/Action             | 45min    | A film projectionist longs to be a detective, and puts his meagre skills to work when he is framed by a rival for stealing his girlfriend's father's pocket watch.  |
| 196 | Short Cuts                  | Robert Altman                 | 1993 | English              | USA                          | 7.7  | 95%  | 88%  | Comedy, Drama              | 3h 8min  | The day-to-day lives of several suburban Los Angeles residents.   |
| 197 | Shorts                      | Robert Rodriguez              | 2009 | English              | USA,UAE                      | 4.7  | 47%  | 32%  | Fantasy/Adventure          | 1h 29min | A young boy stumbles upon a magic rock that has the power to grant wishes. When the news of the rock gets out, children and adults alike try to get their hands on it.  |
| 198 | Show Boat                   | James Whale                   | 1936 | English              | USA                          | 7.4  | 100% | 73%  | Comedy/Drama/Music/Romance | 1h 53min | Despite her mother's objections, the naive young daughter of a show boat captain is thrust into the limelight as the company's new leading lady.  |
| 199 | Siesta                      | Mary Lambert                  | 1987 | English              | USA                          | 5.6  | 17%  | 64%  | Drama/Mystery/Romance      | 1h 37min | An American skydiver wakes up in the middle of nowhere in Spain and must recount the last five agonizing days to figure out how she got there.  |
| 200 | Sin City                    | Frank Miller,Robert Rodriguez | 2005 | English              | USA                          | 8    | 77%  | 78%  | Crime/Thriller             | 2h 4min  | An exploration of the dark and miserable Basin City and three of its residents, all of whom are caught up in violent corruption.  |
| 201 | Singapore Sling             | Nikos Nikolaidis              | 1990 | English,Greek,French | Greece                       | 6.6  | NA   | NA   | Comedy/Drama/Horror        | 1h 51min | A man searching for his long-lost lover is kidnapped by her killers, an insane, mother-daughter duo, and they force him to commit various sexual atrocities with them.  |
| 202 | Slaughterhouse-Five         | George Roy Hill               | 1972 | English,German       | USA                          | 6.9  | 82%  | 68%  | War/Comedy/Drama/Sci-fi    | 1h 44min | Billy Pilgrim has mysteriously become unstuck in time. He goes on an uncontrollable trip back and forth from his birth in New York to life on a distant planet and back again to the horrors of the 1945 fire-bombing of Dresden. |
| 203 | The Burning Plain           | Guillermo Arriaga             | 2008 | English, Spanish     | USA, Mexico, Argentina       | 6.8  | 38%  | 56%  | Drama                      | 1h 47min | When Mariana learns of her mother's affair with Nick, she unintentionally sets them on fire while trying to expose them. Later, her life changes when she starts a relationship with Nick's son.                                  |
| 204 | Slumdog Millionaire         | Danny Boyle                   | 2008 | English              | UK, India                    | 8    | 91%  | 90%  | Drama                      | 2h 0m    | A teenager from the slums of Mumbai becomes a contestant on the show 'Kaun Banega Crorepati?' When interrogated under suspicion of cheating, he revisits his past, revealing how he had all the answers.                          |
| 205 | Smoking/No Smoking          | Alain Resnais                 | 1993 | French               | France                       | 7.4  | NA   | 100% | Comedy                     | 4h 58m   | Nine people (Sabine Azéma, Pierre Arditi) theorize about their lives, based on whether they made or failed to make certain choices.   |

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|-----|---------------------------|--|------|---------------------------|--------------------------------|------|-----|------|--------------------------------|----------|---|
| 206 | Snow Falling on Cedars    | Scott Hicks  | 1999 | English, German, Japanese | USA                            | 6.8  | 39% | 67%  | Legal Drama                    | 2h 7m    | A fisherman is suspected of having killed another fisherman, who also happens to be his neighbour, at sea. A local news reporter might be able to prove his innocence, but has an agenda of his own.  |
| 207 | Snuff-Movie               | Bernard Rose   | 2005 | English                   | USA, Romania, UK               | 3.9  | 12% | 12%  | Gothic Horror                  | 1h 32m   | When a horror director's pregnant wife is murdered by a Manson-like gang of psychopaths, he becomes a recluse. After years of directing his own snuff-inspired movies, he invites actors to audition at his country manor, blurring reality and fiction.  |
| 208 | Solaris                   | Andrei Tarkovsky   | 1972 | Russian, German           | Soviet Union                   | 8    | 92% | 90%  | Science fiction/art            | 2h 47m   | The Solaris mission has established a base on a planet that appears to host some kind of intelligence, but the details are hazy and very secret. After the mysterious demise of one of the three scientists on the base, the main character is sent out to replace him. He finds the station run-down and the two remaining scientists cold and secretive. When he also encounters his wife who has been dead for ten years, he begins to appreciate the baffling nature of the alien intelligence. |
| 209 | Solaris                   | Steven Soderbergh  | 2002 | English                   | USA                            | 6.2  | 66% | 59%  | Science Fiction, Drama         | 1h 39m   | A psychologist arrives on space station Solaris that is investigating a spatial phenomenon whereby people from the memories of the crew appear and interact with them.  |
| 210 | Speed Racer               | The Wachowskis   | 2008 | English, German           | USA, Australia, Germany, Japan | 6    | 41% | 60%  | Sports Action-Comedy           | 2h 15m   | Speed Racer wants to save his family business and be a racing champion. His biggest hurdles are the nefarious owner of Royalton Industries, cheaters, a race-fixing racket and the mysterious Racer X.  |
| 211 | Stardust Memories         | Woody Allen  | 1980 | English, French, Persian  | USA                            | 7.3  | 69% | 78%  | Comedy, Drama                  | 1h 29m   | A successful director, while attending a film festival honouring his work, thinks back upon his work and past relationships.  |
| 212 | Street of Crocodiles      | Quay brothers  | 1986 | Polish, English           | UK                             | 7.7  | NA  | 92%  | Animation-Short                | 0h 20m   | Adapted from Polish writer Bruno Schulz's book, Stephen Quay and Timothy Quay's cornucopia of eerie enchantment portrays a dark underworld that envelops an emaciated puppet. More and more, a stringless marionette wanders deeper and deeper into this desolate realm of strange mechanical rituals, only to find itself devoured by carceral isolation. Now, a triplet of sinister female figures watches its every move from afar. Is there an escape from the horrible street of crocodiles?   |
| 213 | Super Deluxe (film)       | Thiagarajan Kumararaja   | 2019 | Tamil                     | India                          | 8.4  | 80% | NA   | Comedy, Drama, Crime, Thriller | 2h 56m   | An unfaithful wife, an angry boy, and a transgender woman must all face their demons on one fateful day in a city of contradictions.  |
| 214 | Sweet & Sour              | Lee Gye-byeok  | 2021 | Korean                    | South Korea                    | 6.7  | 20% | 31%  | Romantic Comedy                | 1h 41m   | Faced with real-world opportunities and challenges, a couple endures the highs and lows of trying to make a long-distance relationship survive.   |
| 215 | Synecdoche New York       | Charlie Kaufman  | 2008 | English, German           | USA                            | 7.5  | 69% | 71%  | Comedy, Drama                  | 2h 4m    | Life is looking pretty bleak for theatre director Caden Cotard (Philip Seymour Hoffman). His wife and daughter have left him, his therapist is more interested in plugging her new book than helping him with his problems, and a strange disease is causing his body to shut down. Caden leaves his home in Schenectady, New York, and heads to New York City, where he gathers a cast of actors and tells them to live their lives within the constructs of a mock-up of the city.                |
| 216 | Tales from the golden age | Cristian Mungiu, Hanno Höfer, Ioana Uricaru, Razvan Marculescu, Constantin Popescu | 2009 | Romanian                  | Romania, France                | 7.9  | 91% | 78%  | History/Comedy                 | 2h 35m   | Romanian urban legends from the chaotic rule of Nicolae Ceausescu are examined in several vignettes. A Communist Party activist (Calin Chirila) blindly follows the rules despite not really knowing them. An inspector (Emanuel Parvu) travels to a small town to make sure it is ready to receive Ceausescu, despite not knowing if he's actually coming. Grigore (Vlad Ivanov), a truck driver, is confused when Camelia (Tania Popa) offers to buy eggs that were laid in the back of his van.  |
| 217 | The Air I Breathe         | Lee Ji-ho  | 2008 | English, Spanish          | USA, Mexico                    | 6.8  | 10% | 61%  | Crime Drama-Thriller           | 1h 35m   | A gangster possesses psychic abilities; a businessman bets on horse racing and risks his life; a doctor struggles to save his lover's life; a crime lord threatens a pop star.  |

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|-----|---------------------------------------|----------------------|------|---|--|------|------|------|------------------------------|----------|---|
| 218 | The Bad and the Beautiful             | Vincente Minnelli    | 1952 | English                                   | USA  | 7.8  | 79%  | 86%  | Melodrama/ Romance           | 1h 58m   | Unscrupulous movie producer Jonathan Shields (Kirk Douglas) is a child of Hollywood who ruthlessly toils his way to the top of the studio system, discarding movie star Georgia (Lana Turner), director Fred Amiel (Barry Sullivan) and writer James Lee Bartlow (Dick Powell) along the way. Although Shields manipulates them and leaves each in despair, they find success in Hollywood, thanks in part to Shields, and must decide whether or not to repay him when he offers them a collaborative project. |
| 219 | The Battle of Algiers                 | Gillo Pontecorvo,    | 1966 | Arabic, French, English                   | Italy, Algiers                               | 8.1  | 99%  | 95%  | War-Drama                    | 2h 1m    | True-to-life chronicle of the Algerian people's struggle to overthrow the French Colonial Government in the mid-1950s. The focus is on the leaders of the Liberation Movement.  |
| 220 | The Beyond                            | Lucio Fulci          | 1981 | Italian                                   | Italy  | 6.8  | 67%  | 76%  | Gothic Super-natural, Horror | 1h 27m   | A young woman inherits an old hotel only to find it sits atop a gateway to Hell and all manner of creatures lurk in the darkness.   |
| 221 | Sliding Doors                         | Peter Howitt         | 1998 | English                                   | USA  | 6.7  | 65%  | 77%  | Romantic Comedy/Drama        | 1h 39m   | A London woman's love life and career both hinge, unknown to her, on whether or not she catches a train. We see it both ways, in parallel.  |
| 222 | The Call                              | Lee Chung-hyun       | 2020 | Korean                                    | South Korea                                  | 7.1  | 100% | 78%  | Thriller/Fantasy             | 1h 52m   | Connected by phone in the same home but 20 years apart, a serial killer puts another woman's past -- and life -- on the line to change her own fate.  |
| 223 | The Call of Cthulhu                   | Andrew Leman         | 2005 | English, French, Spanish, Italian, German | USA  | 7.2  | 100% | 85%  | Silent, Fantasy-Horror       | 0h 47m   | A man (Matt Foyer) tells his psychiatrist of the struggles that led to his downfall, beginning at his great-uncle's bedside, where he receives a key to a locked collection of his papers. The papers reveal a lifelong obsession with an underwater deity, Cthulhu, around which a cult has formed. Using the style of a 1920s silent film, director Andrew Leman retells H.P. Lovecraft's short story, in which the documents reveal individuals who had contact with Cthulhu.                                |
| 224 | The Color of Pomegranates             | Sergei Parajanov     | 1968 | Armenian, Azerbaijani, Georgian           | Soviet Union                                 | 7.7  | 94%  | 83%  | Art, Drama, History          | 1h 19m   | This avant-garde film by Russian director Sergei Parajanov depicts the life of revered the 18th-century Armenian poet and musician Sayat-Nova (Vilen Galstyan). Portraying events in the life of the artist from childhood up to his death, the movie addresses in particular his relationships with women, ...   |
| 225 | The Conformist                        | Bernardo Bertolucci  | 1970 | Italian, French, Latin, Chinese           | Italy, France, West Germany                  | 8    | 98%  | 90%  | Political drama              | 1h 53m   | Marcello Clerici (Jean-Louis Trintignant) is a member of the secret police in Mussolini's Fascist Italy. He and his new bride, Giulia (Stefania Sandrelli), travel to Paris for their honeymoon, where Marcello also plans to assassinate his former college professor Luca Quadri (Enzo Tarascio), an outspoken anti-Fascist living in exile. But when Marcello meets the professor's young wife, Anna (Dominique Sanda), both his romantic and his political loyalties are tested.                            |
| 226 | The Constant Gardener                 | Fernando Meirelles   | 2005 | English, Italian, Swahili, German         | UK, Germany, Kenya, France, USA, Switzerland | 7.4  | 84%  | 82%  | Drama-Thriller               | 2h 9m    | Justin Quayle is crushed when his wife is found murdered. He is determined to find the killer no matter how dangerous his investigation may prove.  |
| 227 | The day a pig fell into a well        | Hong Sangsoo         | 1996 | Korean                                    | South Korea                                  | 6.7  | NA   | 67%  | Comedy                       | 1hr 55m  | The plot focuses on the desires and lives of four characters in diverse circumstances: a poor novelist, a cheating wife, her germophobic husband, and a ticket girl.  |
| 228 | The Discreet Charm of the Bourgeoisie | Luis Buñuel          | 1972 | French, Spanish, Latin                    | France, Italy, Spain                         | 7.9  | 98%  | 89%  | Surrealist                   | 1h 41m   | The dinner plan of a group of friends fails repeatedly as they are either interrupted by unusual events or by symbolic dreams.  |
| 229 | The Double Life of Veronique          | Krzysztof Kieslowski | 1991 | French, Polish, Italian                   | France, Poland, Norway                       | 7.8  | 83%  | 92%  | Drama, Fantasy, Music        | 1h 38min | Veronique (Irène Jacob) is a beautiful young French woman who aspires to be a renowned singer; Weronika (also Jacob) lives in Poland, has a similar career goal and looks identical to Veronique, though the two are not related. The film follows both women as they contend with the ups and downs of their individual lives, with Veronique embarking on an unusual romance with Alexandre Fabbri (Philippe Volter), a puppeteer who may be able to help her with her existential issues.                    |

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| 230 | The English Patient      | Anthony Minghella  | 1996 | English, German, Italian, Arabic           | USA, UK                          | 7.4  | 85%  | 83%  | Epic Romantic-War-Drama                         | 2h 42m   | Hana, a nurse, tends to a plane crash victim who is on his deathbed. While doing so, she discovers a way to heal herself.  |
| 231 | The Fountain             | Darren Aronofsky   | 2006 | English, Maya                              | USA, Canada                      | 7.2  | 52%  | 74%  | Epic, Magical, Realism, Romantic, Drama         | 1h 37m   | Three people living in different centuries embark on a search for the tree of life in order to protect their loved ones and receive the gift of immortality.   |
| 232 | The Ghost Story          | David Lowery       | 2017 | English                                    | USA                              | 6.9  | 91%  | 66%  | Drama, Fantasy, Romance                         | 1h 32min | A dead man returns to his home to console his wife but finds himself stuck in a spectral state. He embarks on a cosmic journey after he is forced to watch his wife leave.   |
| 233 | The Good Shepherd        | Robert De Niro     | 2006 | English, Spanish, Russian, German, Lingala | USA                              | 6.7  | 55%  | 51%  | Spy, Drama, Thriller                            | 2h 47m   | Edward Wilson, a spy, lays the foundation for the CIA as he works in the OSS. However, as the Cold War begins, he realises that he has to pay a price for his dedication to duty over family.  |
| 234 | The Great Moment         | Preston Sturges    | 1944 | English                                    | USA                              | 6.3  | 71%  | 27%  | Biography, Comedy, Drama                        | 1h 23m   | This movie features the life of Dr. W. T. Morgan, a dentist, who invented the first truly effective anesthesia.  |
| 235 | The Grudge               | Takashi Shimizu    | 2004 | English, Japanese                          | USA, Japan                       | 5.9  | 40%  | 46%  | Supernatural Horror                             | 1h 31m   | Karen Davis moves to Tokyo, where she encounters a supernatural spirit that possesses its victims. After a series of horrifying and mysterious deaths, Karen makes a vow to stop any further deaths.   |
| 236 | The Hanging Garden       | Thom Fitzgerald    | 1997 | English                                    | Canada, UK                       | 6.9  | 94%  | 72%  | Romance, Drama                                  | 1h 31m   | Growing up as a gay teen in Nova Scotia was so hard for young William (Chris Leavins) that he ran away at the age of 15 and cut off nearly all contact with his dysfunctional family. With his sister (Kerry Fox) getting married, he returns home for the first time and is saddened to see that little has changed. The abusive nature of his family triggers old self-destructive tendencies in William as he starts to compulsively overeat to deal with the overwhelming pressure surrounding him.          |
| 237 | The Hourglass Sanatorium | Wojciech Jerzy Has | 1973 | Polish, Yiddish, Hebrew, Latin             | Poland                           | 7.7  | N/A  | 85%  | Drama, Fantasy, Horror                          | 2h 4min  | Traveling by train to visit his dying father, a young man (Jan Nowicki) reminisces about the past and has strange visions.   |
| 238 | The Hours                | Stephen Daldry     | 2002 | English                                    | USA, UK, France, Canada, Germany | 7.5  | 79%  | 84%  | Romantic-Drama                                  | 1h 50m   | As Virginia Woolf begins writing her novel 'Mrs Dalloway', in the future, Laura Brown and Clarissa Vaughan find solace in the novel and read to escape their monotonous life.  |
| 239 | The Ice Storm            | Ang Lee            | 1997 | English                                    | USA                              | 7.4  | 84%  | 82%  | Drama   | 1h 52m   | In the 1970s, an outwardly wholesome family begins cracking at the seams over the course of a tumultuous Thanksgiving break. Frustrated with his job, the father, Ben (Kevin Kline), seeks fulfilment by cheating on his wife, Elena (Joan Allen), with neighborhood seductress Janey (Sigourney Weaver). Their teenage daughter, Wendy (Christina Ricci), dabbles in sexual affairs too -- with Janey's son Mikey (Elijah Wood). The family's strained relations continue to tauten until an ice storm strikes. |
| 240 | The Jacket               | John Maybury       | 2005 | English                                    | USA, Germany                     | 7.1  | 44%  | 73%  | Science, Fantasy, Psychological Thriller/Horror | 1h 43m   | Amnesiac Gulf War veteran Jack Starks (Adrien Brody) can't explain why he's been found at the scene of a murder. Ordered to a mental hospital, Jack is subjected to Dr. Thomas Becker's (Kris Kristofferson) unusual treatment plan, which involves mysterious injections, sensory deprivation and confinement in a straitjacket. Locked away on his own, Jack discovers he can travel to the future, where he's compelled to help a onetime acquaintance (Keira Knightley) and investigate his own odd fate.    |
| 241 | The Killers              | Robert Siodmak     | 1946 | English                                    | USA                              | 7.8  | 100% | 89%  | Noir, Crime, Drama                              | 1h 43m   | An insurance investigator uncovers a string of crimes when he tries to find a murdered boxer's beneficiary   |
| 242 | The Killing              | Stanley Kubrick    | 1956 | English                                    | USA                              | 8    | 95%  | 92%  | Noir, Crime, Drama, Thriller                    | 1h 24m   | Career criminal Johnny Clay (Sterling Hayden) recruits a sharpshooter (Timothy Carey), a crooked police officer (Ted de Corsia), a bartender (Joe Sawyer) and a betting teller named George (Elisha Cook Jr.), among others, for one last job before he goes straight and marries his fiancée, Fay (Coleen Gray). But when George tells his restless wife, Sherry (Marie Windsor), about the scheme to steal millions from the racetrack where he works, she hatches a plot of her own.                          |

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|-----|---------------------------------|---------------------|------|---------------------------------|-----------------------------|------|------|------|--------------------------------|----------|---|
| 243 | The Last Five Years             | Richard LaGravenese | 2014 | English                         | USA                         | 5.9  | 60%  | 57%  | Musical Romantic Comedy-Drama  | 1h 34m   | Cathy, a struggling actress, and Jamie, a Jewish up-and-coming novelist, struggle to make their marriage work while introspecting on their failures.  |
| 244 | The Limey                       | Steven Soderbergh   | 1999 | English                         | USA                         | 7    | 92%  | 78%  | Crime-Drama, Mystery, Thriller | 1h 29m   | The Limey follows Wilson (Terence Stamp), a tough English ex-con who travels to Los Angeles to avenge his daughter's death. Upon arrival, Wilson goes to task battling Valentine (Peter Fonda) and an army of L.A.'s toughest criminals, hoping to find clues and piece together what happened. After surviving a near-death beating, getting thrown from a building and being chased down a dangerous mountain road, the Englishman decides to dole out some bodily harm of his own.                       |
| 245 | The Locket                      | John Brahm          | 1946 | English                         | USA                         | 7.2  | N/A  | N/A  | Noir, Crime, Drama             | 1h 25m   | When John Willis waits for his fiance, Nancy, to walk down the aisle, Harry Blair cautions him that she is a kleptomaniac and a liar. Will John believe Harry?  |
| 246 | The Loss of Sexual Innocence    | Mike Figgis         | 1999 | English                         | UK                          | 5.4  | 47%  | 60%  | Drama                          | 1h 46m   | A series of loosely connected vignettes and flashbacks explores the life of a filmmaker named Nic (Julian Sands). In one, a pair of identical twins (Saffron Burrows) who were separated at birth discover each other at an airport, purely by chance. In another, 16-year-old Nic (Jonathan Rhys-Meyers) discovers his girlfriend is having sex with someone else. Meanwhile, a creative retelling of the story of Adam (Femi Ogumbanjo) and Eve (Hanne Klinto) frames the separate narratives.            |
| 247 | The Milky Way                   | Luis Buñuel         | 1969 | French, Italian, Latin, Spanish | France, Italy, West Germany | 7.5  | 94%  | 84%  | Surrealist                     | 1h 45m   | Jean (Laurent Terzieff) and Pierre (Paul Frankeur) are drifters who travel from Paris to Spain on the Way of St. James pilgrimage route. On the journey, the two men encounter many strangers who debate aspects of Catholic faith as well as heresies that have been rejected by the religion. Their trek defies time as they meet historical figures such as Jesus and the Marquis de Sade. At the end of their trip, Jean and Pierre are left with more questions than answers.                          |
| 248 | The Mirror                      | Andrei Tarkovsky    | 1975 | Russian, Spanish                | Soviet Union                | 8.1  | 100% | 92%  | Biography, Drama               | 1h 47m   | Using a nonlinear structure interlaced with dreams and flashbacks, director Andrei Tarkovsky creates a stream-of-consciousness meditation on war, memory and time that draws heavily on events from his own life. Tarkovsky's film alter ego is Alexei (Ignat Danilteev), a dying man in his 40s whose commonplace interactions with his wife (Margarita Terekhova) and children summon up a host of memories, ranging from his parents' divorce to his time on the battlefields of World War II.           |
| 249 | The Night of the Shooting Stars | Taviani brothers    | 1982 | Italian, German                 | Italy                       | 7.4  | 77%  | 58%  | Fantasy, War-Drama             | 1h 47m   | During World War II, an Italian village finds itself caught in the bloody struggle between retreating Nazi forces, stubborn fascists, local partisans and the incoming U.S. forces. A group of villagers, including love-struck Galvano (Omero Antonutti) and his dream girl, Concetta (Margarita Lozano), opt to leave their village and search for American troops. The story, set in part during a Tuscan celebration, is told from the point of view of 6-year-old Cecilia                              |
| 250 | The Outrage                     | Martin Ritt         | 1964 | English, Spanish                | USA                         | 6.3  | N/A  | 41%  | Western Crime-Drama            | 1h 36m   | At a disused railway station, three men -- a con artist (Edward G. Robinson), a preacher (William Shatner) and a prospector (Howard Da Silva) -- discuss the recent trial and sentencing of the outlaw Juan Carrasco (Paul Newman) for the murder of a man (Laurence Harvey) and the rape of his wife (Claire Bloom). In their recounting, the three explore the conflicting testimonies of the parties involved in the crimes. Disconcerting new questions arise with each different version of the event. |
| 251 | The Phantom Carriage            | Victor Sjöström     | 1921 | Swedish                         | Sweden                      | 8.1  | 100% | 89%  | Drama, Fantasy, Horror         | 1h 47m   | On New Year's Eve, the driver of a ghostly carriage forces a drunken man (Victor Sjöström) to look back at his wasted life.   |
| 252 | The Phantom of Liberty          | Luis Buñuel         | 1974 | French, Dutch                   | France, Italy               | 7.9  | 87%  | 91%  | Surrealist Comedy              | 1h 44m   | As unusual, eccentric, and bizarre vignettes of mundane and seemingly innocuous conventions of our social and private lives success one another, somehow, Napoléon Bonaparte's troops, earthly monks, dangerous   |

| No. | Film                    | Director          | Year | Language                            | Country      | IMDB | TM* | AS** | Genre                            | Duration | Synopsis (3 Liner)  |
|-----|-------------------------|-------------------|------|-------------------------------------|--------------|------|-----|------|----------------------------------|----------|---|
|     |                         |                   |      |                                     |              |      |     |      |                                  |          | snipers, and the peculiar disappearance of a beloved one metamorphose into banal instances of our daily existence.  |
| 253 | The Power and the Glory | William K. Howard | 1933 | English                             | USA          | 6.7  | 86% | 56%  | Drama                            | 1h 16m   | A man's life is retold just after his funeral. Beginning as a track walker, Tom Garner rose through all sorts of railroad jobs to head the company. In the meantime he lost touch with his family. When he saw what was happening it was already too late.  |
| 254 | The Prestige            | Christopher Nolan | 2006 | English                             | UK, USA      | 8.5  | 76% | 92%  | Mystery, Drama, Thriller         | 2h 10m   | Two friends and fellow magicians become bitter enemies after a sudden tragedy. As they devote themselves to this rivalry, they make sacrifices that bring them fame but with terrible consequences.   |
| 255 | The Rich Man's Wife     | Amy Holden Jones  | 1996 | English                             | USA          | 5.2  | 13% | 38%  | Thriller                         | 1h 35m   | Josie (Halle Berry) is unhappy in her marriage to wealthy film producer Tony Potenza (Christopher McDonald), who tends to be preoccupied with work, drinking or other women. Though Josie also cheats on Tony, she holds out hope that they can reconcile. When she meets the rugged but dangerous Cole Wilson (Peter Greene), he sets in motion a tense series of events, leading to murder and deception. Also roped into the intrigue is Josie's lover, Jake Golden (Clive Owen), who is far from innocent.                |
| 256 | The Rules of Attraction | Roger Avary       | 2002 | English, German                     | USA, Germany | 6.6  | 43% | 71%  | Comedy, Drama, Romance           | 1h 50m   | Sean Bateman is a freshman at Camden College, who's in love with Lauren Hyde. She's waiting for her wastrel boyfriend Victor Johnson to come back from a trip around Europe, while Paul Denton, who used to date Lauren, is exploring his bisexual side with a crush on Sean.   |
| 257 | The Shining             | Mick Garris       | 1997 | English                             | USA          | 6.1  | 95% | 93%  | Drama, Fantasy, Horror, Thriller | 4h 33m   | Jack and his family move into an isolated hotel with a violent past. Living in isolation, Jack begins to lose his sanity, which affects his family members.   |
| 258 | The Social Network      | David Fincher     | 2010 | English, French                     | USA          | 7.7  | 96% | 86%  | Biographical-Drama               | 2h 0m    | Mark Zuckerberg creates a social networking site, Facebook, with his friend Eduardo's help. Though it turns out to be a successful venture, he severs ties with several people along the way.   |
| 259 | The Sweet Hereafter     | Atom Egoyan       | 1997 | English                             | Canada       | 7.5  | 98% | 86%  | Drama                            | 1h 52m   | A small mountain community in Canada is devastated when a school bus accident leaves more than a dozen of its children dead. A big-city lawyer (Ian Holm) arrives to help the survivors' and victims' families prepare a class-action suit, but his efforts only seem to push the townspeople further apart. At the same time, one teenage survivor of the accident (Sarah Polley) has to reckon with the loss of innocence brought about by a different kind of damage.  |
| 260 | The Thin Red Line       | Terrence Malick   | 1998 | English, Tok Pisin, Japanese, Greek | USA          | 7.6  | 81% | 80%  | Epic, War, Drama                 | 2h 50m   | A group of soldiers face an unlikely battle at the Guadalcanal, where they fight all odds in order to survive. As the war progresses, they lose out on each other while still hoping to win the war.  |
| 261 | The Tracey Fragments    | Bruce McDonald    | 2007 | English                             | Canada       | 6.1  | 42% | 54%  | Psychological Drama              | 1h 17m   | Tracey Berkowitz, 15, a self-described normal girl, loses her 9-year old brother, Sonny. In flashbacks and fragments, we meet her overbearing parents and the sweet, clueless Sonny. We watch Tracey navigate high school, friendless, picked on and teased. She develops a thing for Billy Zero, a new student, imagining he's her boyfriend. We see the day she loses Sonny and we watch her try to find him. In bits and pieces, we see what leads up to her riding in the back of a city bus wrapped in a shower curtain. |
| 262 | The Tree of Life        | Terrence Malick   | 2011 | English                             | USA          | 6.8  | 84% | 60%  | Fantasy, Drama                   | 2h 19m   | Jack tries to mend the troubled relationship that he shares with his father, Mr O'Brien. He attempts to find the true meaning of life in the modern world and questions the existence of faith.   |
| 263 | The Trip                | Roger Corman      | 1967 | English                             | USA          | 6.1  | 39% | 52%  | Counterculture-era, Psychedelic  | 1h 22m   | Paul's wife has left him and he seeks the help of his friend, John, who is a self-styled guru and an advocate of LSD.   |

| No. | Film                                   | Director             | Year | Language                            | Country                     | IMDB | TM*                 | AS**                | Genre                           | Duration | Synopsis (3 Liner)  |
|-----|--|----------------------|------|-------------------------------------|-----------------------------|------|---------------------|---------------------|---------------------------------|----------|---|
| 264 | The Usual Suspects                     | Bryan Singer         | 1995 | English, Hungarian, Spanish, French | USA, Germany                | 8.5  | 88%                 | 96%                 | Neo-noir Mystery Thriller       | 1h 46m   | Five criminals meet during a routine police line-up. Upon their release, they plan to pull off a dangerous heist involving precious emeralds worth three million dollars.   |
| 265 | The Weight of Water                    | Kathryn Bigelow      | 2000 | English                             | USA, Canada, France         | 5.9  | 35%                 | 38%                 | Crime, Drama, Mystery, Thriller | 1h 54m   | Photojournalist Jean Janes travels by yacht to Smuttynose, off the coast of New Hampshire, to photograph the site of a sensational axe murder that occurred a century earlier in which two women were killed. As the unsolved mystery oddly begins to parallel events playing out in Jean's life, violence erupts against the backdrop of the raging Atlantic Ocean.  |
| 266 | Things We Lost in the Fire             | Susanne Bier         | 2007 | English                             | USA, UK, Canada             | 7.2  | 65%                 | 73%                 | Drama                           | 1h 58m   | After her husband's death, a widow invites a friend of his to live with her and her children. She helps him kick his addiction while he helps the family cope with their loss.  |
| 267 | Thirteen Conversations About One Thing | Jill Sprecher        | 2001 | English, German, Italian            | USA                         | 7    | 83%                 | 71%                 | Drama                           | 1h 44m   | A man approaching middle age decides to change his life. A rising young attorney's plans are thrown into disarray as the result of a single act. A woman faces her husband's infidelity. A businessman seeks revenge on a cheerful coworker and an optimistic young cleaning woman awaits a miracle. Just the ebb and flow of daily New York life: chaotic, isolated, diffuse. Five contemporary stories are woven together into a single tale that examines the dramatic impact people have on one another.        |
| 268 | This Sporting Life                     | Lindsay Anderson     | 1963 | English                             | UK                          | 7.6  | 95%                 | 86%                 | Kitchen-Sink Drama              | 2h41m    | Yorkshire coal miner Frank Machin (Richard Harris) picks a fight in a club and subsequently finds himself being recruited for a rugby team. He's an unpolished player, but his aggressiveness, brutality and indifference to the rules of fair play impress the team owners. Suddenly a rising star, Frank despairs that his success on the playing field isn't equalled in his personal life. He loves a widowed, emotionally challenged landlady (Rachel Roberts) who's too damaged to return his feelings.       |
| 269 | Three Colors: Red                      | Krzysztof Kieslowski | 1994 | French                              | Switzerland, France, Poland | 8.1  | 100%                | 94%                 | Romantic, Mystery               | 1h 39m   | Part-time model Valentine (Irène Jacob) meets a retired judge (Jean-Louis Trintignant) who lives in her neighborhood after she runs over his dog. At first the judge gifts Valentine with the dog, but her possessive boyfriend won't allow her to keep it. When she returns with the dog to the judge's house, she discovers him listening in on his neighbors' phone conversations. At first Valentine is outraged, but her debates with the judge over his behavior soon leads them to form a strange bond.      |
| 270 | Three Lives and Only One Death         | Raúl Ruiz            | 1996 | French                              | France, Portugal            | 6.9  | 70%                 | 58%                 | Comedy, Crime                   | 2h 3m    | Take a walk into the dreamlike world of filmmaker Raul Ruiz as he takes us to Paris for a twisting ride. Four strangely symmetrical stories unfold involving love, lust, crime, and time.   |
| 271 | Time Regained                          | Raúl Ruiz            | 1999 | French                              | France, Italy, Portugal     | 6.8  | 72%                 | 72%                 | Drama                           | 2h 49m   | The film begins in 1922; Marcel Proust is on his deathbed. Looking through photographs, he reflects on his past, recalling his life and the people he has known and loved. Gradually, the memories of his life are supplanted by the memories of the characters in his novels, and soon, fiction overwhelms reality. The happy days and lost paradise of his childhood alternate with more recent memories of his social and literary life.   |
| 272 | Timecode                               | Mike Figgis          | 2000 | English                             | USA                         | 6.2  | 68%                 | 48%                 | Drama/Comedy-drama              | 1h 38m   | A production company begins casting for its next feature, and an up-and-coming actress named Rose (Salma Hayek) tries to manipulate her filmmaker boyfriend, Alex, into giving her a screen test. Alex's wife, Emma (Saffron Burrows), knows about the affair and is considering divorce, while Rose's girlfriend secretly spies on her and attempts to sabotage the relationship. The four storylines in the film were each shot in one take and are shown simultaneously, each taking up a quarter of the screen. |
| 273 | Too Late                               | Dennis Hauck         | 2015 | English                             | USA                         | 6.7  | <a href="#">70%</a> | <a href="#">62%</a> | Drama Mystery Thriller          | 1h 47m   | Two friends are unhappy with their fiancées who are dreadful homemakers and lousy cooks. When one of the girl's demands a maid, she is completely unaware of the contention that the maid will bring.   |

| No. | Film                                   | Director            | Year | Language                 | Country         | IMDB | TM* | AS**     | Genre                           | Duration | Synopsis (3 Liner)  |
|-----|--|---------------------|------|--------------------------|-----------------|------|-----|----------|---------------------------------|----------|---|
| 274 | Trance                                 | Danny Boyle         | 2013 | English                  | USA             | 6.9  | 68% | 62%<br>% | Crime Drama Mystery             | 1h 39m   | While trying to recover a lost painting, a fine art auctioneer ends up seeking help from a hypnotherapist. The stakes rise higher as his mind swings between reality, desire and fantasy.   |
| 275 | Trans-Europ-Express                    | Alain Robbe-Grillet | 1966 | French, Dutch            | France, Belgium | 7.1  | 83% | 83%      | Experimental Comedy-Drama       | 1h 45m   | Elias (Jean-Louis Trintignant) stumbles through train compartments, while a director, his assistant and a producer hash out a drug deal and the plot to a film.   |
| 276 | Tree of Life                           | Terrance Mallick    | 2011 | English                  | USA             | 6.7  | 84% | 60%      | Fantasy, Drama                  | 2h 19m   | Jack tries to mend the troubled relationship that he shares with his father, Mr O'Brien. He attempts to find the true meaning of life in the modern world and questions the existence of faith.   |
| 277 | Two for the Road                       | Stanley Donen       | 1967 | English, French, Italian | UK              | 7.5  | 81% | 84%      | Romantic Comedy-Drama           | 1h 51m   | Architect Mark Wallace (Albert Finney) and his wife, Joanna (Audrey Hepburn), travel to France to meet with an affluent client (Claude Dauphin). While there, they reflect on their first decade of marriage -- memories of when they first met, of courtship and of road trips through the French countryside. As flirtation and playful quarrelling turn to boredom with the banality of married life, the Wallaces struggle to rekindle their passion, while mutual infidelity threatens to tear them apart. |
| 278 | Unknown                                | Simon Brand         | 2006 | English                  | USA             | 6.5  | 38% | 54%      | Mystery-Thriller                | 1h 25m   | Five men open their eyes to find themselves in a locked-down warehouse with no memory of their own identity. In order to survive, they must determine who else deserves to stay alive or not.   |
| 279 | Urbana                                 | Jon Shear           | 2000 | English                  | USA             | 6.9  | 72% | 71%      | Independent Drama               | 1h 43m   | An enigmatic and engaging young man named Charlie has experienced a trauma, but he's doing his best to regain control of his life. When he notices a mysterious stranger at a distance, Charlie comes to believe he's found the key to his recovery. As he travels the city in an effort to encounter the stranger again, he meets old intimates and new acquaintances.   |
| 280 | Vada Chennai                           | Vetrimaran          | 2018 | Tamil, Hindi             | India           | 8.5  | 90% | 90%      | Crime                           | 2h 44m   | A proficient carrom player sets foot in the world of crime and joins forces with local gangsters to settle their feuds. However, he decides to take them down when they plan to wipe out his locality.  |
| 281 | Vanilla Sky                            | Cameron Crowe       | 2001 | English, Spanish         | USA, Spain      | 6.9  | 42% | 72%      | Erotic Science-Fiction Thriller | 2h 16m   | David Aames, a publishing magnate, becomes the victim of a car crash, which scars his face. The incident changes him and compels him to question the existing reality of his life.  |
| 282 | Virgin Stripped Bare by Her Bachelors. | Hong Sang-soo       | 2000 | Korean                   | South Korea     | 7    | N/A | 70%      | Erotic Comedy-Drama             | 2h 6m    | Wealthy Jae-hoon (Jeong Bo-seok) meets attractive writer Soo-jung (Lee Eun-ju) through their mutual friend, filmmaker Young-soo (Moon Seong-geun). While Jae-hoon tries to pursue a romance with Soo-jung, things get complicated when it becomes apparent that Young-soo also has feelings for the young woman. Jae-hoon grows jealous, but eventually convinces Soo-jung to meet him at a lavish hotel for a tryst; however, when she mysteriously phones to cancel, the love triangle takes a bitter turn.   |
| 283 | Watchmen                               | Zack Snyder         | 2009 | English                  | USA             | 7.6  | 65% | 71%      | Superhero/ Drama                | 2h 42m   | Rorschach, a vigilante, sets out to investigate the mysterious circumstances under which one of his colleagues died. In the process of doing so, he discovers some disturbing secrets.  |
| 284 | Week End                               | Jean-Luc Godard     | 1967 | French                   | France          | 7.1  | 93% | 78%      | Black Comedy                    | 1h 45m   | Roland Durand (Jean Yanne) and his wife Corinne (Mireille Darc) embark on a weekend getaway to the French countryside. Each is contemplating adultery as they head for the coast, but end up ensnared in a traffic jam along the way. Hilarity ensues in this absurdist romp as it devolves into all manners of human folly and destruction, and the fated couple encounters such colorful characters as the leader of the FLSO (Jean-Pierre Kalfon) and Saint-Just (Jean-Pierre Léaud).                        |
| 285 | Where the Truth Lies                   | Atom Egoyan         | 2005 | English                  | UK, Canada      | 6.5  | 41% | 46%      | Erotic Thriller                 | 1h 47m   | In the 1950s, two men are the most beloved entertainers in America. They are at the top of their game - wealthy, powerful and enormously popular. Then something terrible happens. Inexplicably, a dead beauty turns up in their hotel suite. It is the end of their careers. It is up to   |

| No. | Film                       | Director             | Year | Language | Country   | IMDB | TM* | AS** | Genre                   | Duration | Synopsis (3 Liner)   |
|-----|----------------------------|----------------------|------|----------|---|------|-----|------|-------------------------|----------|--|
|     |                            |                      |      |          |   |      |     |      |                         |          | celebrity-obsessed journalist Karen O'Connor to find out the truth behind a long-forgotten incident.   |
| 286 | Wicker Park                | Paul McGuigan        | 2004 | English  | USA   | 7    | 27% | 79%  | Romantic Thriller/Drama | 1h 54m   | Matthew (Josh Hartnett) and Lisa (Diane Kruger) are madly in love. But one day Lisa vanishes. Simon enters an emotional tailspin and begins an obsessive quest to find her. Years later, Simon's life has stabilized, and he's in a new relationship. Then he thinks he sees Lisa in a restaurant and fixates on her all over again. He snoops around and eventually tracks down the mysterious woman from the restaurant. Her name is Alex (Rose Byrne), but she acts just like Lisa. |
| 287 | Wonderland                 | James Cox            | 2003 | English  | USA   | 6.6  | 34% | NA   | Crime/Mystery           | 1h 44m   | John Holmes was a legend of the porn industry and revered in circles as a stud. But in 1981, years after his successful career and star fading, Holmes was a desperate man with his own internal demons to live up to. He's estranged from his wife, holding onto a relationship with his teenage mistress, and living as a junkie in search of his next fix. But one fateful night left four people dead and John as a key suspect in one of the most grisly murders in Los Angeles.  |
| 288 | You Were Never Really Here | Lynne Ramsay         | 2017 | English  | USA, UK   | 6.8  | 89% | 64%  | Psychological Thriller  | 1h 50m   | When a teenage girl goes missing, a jaded, brutal enforcer attempts a rescue mission. He uncovers corruption and abuse of power along his way and will use any means necessary to save the girl.   |
| 289 | Youth Without Youth        | Francis Ford Coppola | 2007 | English  | United States, Romania, France, Italy and Germany | 6.2  | 33% | 44%  | Drama/Romance           | 2h 5m    | Dominic, an old man, is transformed into his younger self after a cataclysmic event. With the Nazis hot on his trail, he travels the world trying to understand the mysteries of life and love.  |

## Taxonomy of Cinematic Transitions for Non-Linear Film Narratives

| How                 |                      | Why    |  |   |                                 |
|---------------------|----------------------|--------|--|---|---------------------------------|
| Type                | Technique            | Mode   | Semantic and Narrative Context   |   | Function                        |
|                     |                      |        | <i>Shot</i>  | <i>Scene</i>  |                                 |
| <b>Straight Cut</b> | Abrupt Cut           | Visual | narrative movement   | narrative movement  | Link/Collide                    |
|                     | Cut away             | Visual | build intrigue, show characters thoughts, Show character POV, slow scene down, give audience space to contemplate, emphasize action/dialogue/situation |   | link, show subject              |
|                     | Rapid Cutting        | Visual | Action sequences   |   |                                 |
|                     | Cross cutting        | Visual | show action on multiple fronts   | Alternate between scenes, create juxtapositions, irony, Keep plot moving forward, create parallels, | comparision, linkage, collision |
|                     | Eye trace            | Visual | for action scenes, keep the viewers eye in one place across shots for low asl  | Linkage   | Linkage                         |
|                     | Intellectual Montage | Visual | make connections, make collisions, create meaning, Emphasize scale, Thematic, style  | make connections, create meaning, Emphasize scale, Thematic, style                                  | kuleshov effect                 |
| <b>Fade</b>         | dip to black         | Visual | for style/ to show character unconscious   | pause for emphasis, space to think, Closure, end of chapter   | ease out                        |

| How              |                 | Why    |   |   |                                    |
|------------------|-----------------|--------|---|---|------------------------------------|
| Type             | Technique       | Mode   | Semantic and Narrative Context  |   | Function                           |
|                  |                 |        | <i>Shot</i>   | <i>Scene</i>  |                                    |
|                  | in from black   | Visual | Style, to show character unconscious  | Opening of film, Passing of time                          | ease in,                           |
|                  | to white        | Visual | entering dream, dying   | losing consciousness, ambiguity in fate,                  | open for interpretation, ambiguity |
|                  | in from white   | Visual | waking up from dream  | poetic,   | open for interpretation, ambiguity |
| <b>Dissolve</b>  |                 | Visual | Passage of time, memory, dream, hybrid third,   | longer passage of time, narrative link, dream,            | passing of time, Linkage           |
|                  | superimposition | Visual | comparision   |   | Linkage                            |
| <b>Match Cut</b> | Eyeline Match   | Visual | POV, show what the character sees, Build intrigue by waiting to reveal, or by not showing it atall, Conversations, Insert prop or information, create and release tension |   | Eyes motivate cut, create linkage  |
|                  | Camera movement | Visual | seamless transition   | Instant linkage, Make connections, , Bridge time & space, | Instant linkage                    |
|                  | Character face  | Visual |   | two points in their lives, Passing of time                | comparision/linkage                |
|                  | Match Dissolve  | Visual |   | Passing of time, Linkage, create meaningful connections   | Smoothes over cut                  |

| How         |                                 | Why    |  |  |                                    |
|-------------|---------------------------------|--------|--|--|------------------------------------|
| Type        | Technique                       | Mode   | Semantic and Narrative Context   |  | Function                           |
|             |                                 |        | <i>Shot</i>  | <i>Scene</i>   |                                    |
|             | Character Action/ Cut on action | Visual | Seamless transition, Fight Scenes, cut on impact, on mid action, strengthen stunts, create style | Seamless transition, moving energy from one scene to next, collision, linkage    | Instant linkage                    |
|             | Shape                           | Visual |  | Instant linkage or collision   | notice similarities or differences |
|             | Composition                     | Visual |  | Instant linkage or collision   | notice similarities or differences |
|             | Colour                          | Visual |  | Instant linkage or collision   | notice similarities or differences |
|             | Element                         | Visual |  | Instant linkage or collision   | notice similarities or differences |
|             | Sound                           | Visual | maintain continuity  | Instant linkage or collision   | notice similarities or differences |
|             | Face to Face                    | Visual |  | link, comparison   |                                    |
| <b>Iris</b> | to black, shapes                | Visual |  | Emphasis, end  | Dated                              |
|             | from black                      | Visual |  | Start, emphasis  | Dated                              |
| <b>Wipe</b> | line, shapes                    | Visual |  | passing of time, linkage, stylistic choice, can be blended with action, thematic | Dated                              |

| How        |                       | Why    |   |   |                                    |
|------------|-----------------------|--------|---|---|------------------------------------|
| Type       | Technique             | Mode   | Semantic and Narrative Context          |   | Function                           |
|            |                       |        | <i>Shot</i>                             | <i>Scene</i>  |                                    |
| Passby     | Character             | Visual | passing of time                         | passing of time, linkage, montage                                 | seamless, hide cut                 |
|            | Camera movement       | Visual | passing of time                         | passing of time, linkage, montage                                 | seamless, hide cut                 |
| Whip Pan   |                       | Visual | Hasten pace, emphasis, sustain momentum | montage, speed, linkage, emphasis,                                | hectic                             |
| Smash cut  | Visual                | Visual |   | High Contrast before/after, Chaotic/Still, wake up from dream     | Shock/ Jolt                        |
|            | Audio                 | Visual |   | High Contrast before/after, Chaotic/Still, wake up from dream     | Shock/ Jolt                        |
| Split Edit | J Cut, Prelap Audio   | Aural  | Dialogue scenes                         | Narrative Movement, Montage with narration, Connection, Flashback | visual interest, style, Connection |
|            | L Cut, Over lap Audio | Aural  | Dialogue scenes                         | Narrative Movement, Montage with narration, Connection, Flashback |                                    |

| How              |                  | Why    |   |  |                                      |
|------------------|------------------|--------|---|--|--------------------------------------|
| Type             | Technique        | Mode   | Semantic and Narrative Context  |  | Function                             |
|                  |                  |        | <i>Shot</i>   | <i>Scene</i>   |                                      |
| Jump Cut         |                  | Visual | Jump in time, heightened Style, discontinuity, Poetic, unrealistic, memories, impressionistic, Add energy, Add meaning w/music, build momentum, add intrigue, emotion-unstable mental state, frantic, manic, break back to reality, add power to action, sense of urgency, Compress time, Dramatic Montage, temporal ellipses, time lapse | Jump in time, heightened Style, discontinuity, Poetic, unrealistic, memories, impressionistic style, temporal ellipses, time lapse | Disruptive effect, time moves faster |
|                  | Axial Cut        | Visual | Punch in or out, Emphasize, Visualize a realization, panic, frantic energy  |  |                                      |
| Screen Direction |                  | Visual | Direction on character or object entering or exiting a shot; creates a visual continuity  | creates visual / movement connections between two scenes   | Connection                           |
| Sound            | Dialogue         | Aural  |   | Semantic or Narrative Connections  | Linkage/ Conflict                    |
|                  | Background Music | Aural  |   | Semantic or Narrative Connections  | Linkage/ Conflict                    |
|                  | Foley            | Aural  |   | Semantic or Narrative Connections  | Linkage/ Conflict                    |

## Appendix 3

### Sequence Breakdown of *21 Grams*

*With Linear Numbering and Narrative Beats*

| Sequence No. | Start Frame | End Frame   | Christina Peck | Paul Rivers | Jack Jordan | Micheal Peck | Mary Rivers | Marianne J. | Linear Rivers | Linear Peck | Linear Jordan | Narrative Beats     | Aronson S. | Description  |
|--------------|-------------|-------------|----------------|-------------|-------------|--------------|-------------|-------------|---------------|-------------|---------------|---------------------|------------|--|
| 1            | 00:00:21:08 | 00:00:44:15 | 1              | 1           |             |              |             |             | 30            | 33          |               | CP_Act2;<br>PR_Act3 |            | P in c's Bedroom, after the first time they have sex.    |
| 2            | 00:00:44:15 | 00:00:49:22 |                |             |             |              |             |             |               |             |               |                     |            | Title  |
| 3            | 00:00:49:22 | 00:01:10:02 | 1              |             |             | 1            |             |             |               | 5           |               | CP_Act1             |            | M & the Children   |
| 4            | 00:01:10:02 | 00:01:38:09 | 1              |             |             |              |             |             |               | 1           |               | CP_Act1             |            | at AA Meeting  |
| 5            | 00:01:38:09 | 00:04:03:07 |                |             | 1           |              |             |             |               |             | 1             | JJ_Act1             |            | JJ & Boy   |
| 6            | 00:04:03:07 | 00:04:20:13 |                |             |             |              |             |             |               |             |               |                     |            | Birds Filler   |
| 7            | 00:04:20:13 | 00:05:22:12 |                | 1           |             |              |             |             | 46            |             |               | PR_Act3             |            | Paul in hospital After Being Shot                        |
| 8            | 00:05:22:12 | 00:05:57:14 | 1              |             |             |              |             |             |               | 40          |               | CP_Act3             |            | C snorting cocaine                                       |
| 9            | 00:05:57:14 | 00:07:16:16 |                | 1           |             |              | 1           |             | 1             |             |               | PR_Act1             |            | Mary visits doctor before transplant                     |
| 10           | 00:07:16:16 | 00:08:17:10 |                |             | 1           |              |             |             |               |             | 2             | JJ_Act1             |            | JJ at youth centre, loses temper                         |
| 11           | 00:08:17:10 | 00:09:11:03 |                |             | 1           |              | 1           |             |               |             | 3             | JJ_Act1             |            | JJ Comes home with a cooler, kids and marianne           |
| 12           | 00:09:11:03 | 00:09:33:02 |                | 1           |             |              |             |             | 39            |             |               | PR_Act3             |            | P at motel swimming pool with gun, before confronting JJ |

| Sequence No. | Start Frame | End Frame   | Christina Peck | Paul Rivers | Jack Jordan | Micheal Peck | Mary Rivers | Marianne J. | Linear Rivers | Linear Peck | Linear Jordan | Narrative Beats  | Aronson S. | Description  |
|--------------|-------------|-------------|----------------|-------------|-------------|--------------|-------------|-------------|---------------|-------------|---------------|--|------------|--|
| 13           | 00:09:33:02 | 00:09:52:06 |                |             | 1           |              |             |             |               |             | 15            | JJ_Act2  |            | JJ Incarcerated after accident                       |
| 14           | 00:09:52:06 | 00:10:36:04 | 1              |             |             |              |             |             |               | 3           |               | CP_Act1  |            | Christina & sister at pool before accident           |
| 15           | 00:10:36:04 | 00:11:20:07 |                |             | 1           |              |             | 1           |               |             | 4             | JJ_Act1  |            | JJ at church with family                             |
| 16           | 00:11:20:07 | 00:13:55:22 |                | 1           |             |              | 1           |             | 2             |             |               | PR_Act1  |            | Paul Before transplant sneaks a smoke                |
| 17           | 00:13:55:22 | 00:14:29:21 | 1              | 1           | 1           |              |             |             | 42            | 43          | 34            | JJ_Act3_Cli<br>max;<br>CP_Act3_Cl<br>imax;<br>PR_Act3_Cl<br>imax |            | Paul is shot at motel, JJ & C                        |
| 18           | 00:14:29:21 | 00:14:55:03 |                | 1           |             |              |             |             | 14            |             |               | PR_Act2  |            | After Transplant P Comes to Meet C                   |
| 19           | 00:14:55:03 | 00:16:16:02 |                |             | 1           |              |             |             |               |             | 5             | JJ_Act1  |            | JJ at Golf Course talking to boss, loses job         |
| 20           | 00:16:16:02 | 00:16:50:13 | 1              |             |             |              |             |             |               | 18          |               | CP_Act2  |            | C after accident washing clothes, smoking & drinking |
| 21           | 00:16:50:13 | 00:17:23:22 |                | 1           |             |              |             |             | 6             |             |               | PR_Act1  |            | P after Transplant                                   |
| 22           | 00:17:23:22 | 00:18:31:00 | 1              | 1           | 1           |              |             |             | 34            | 37          | 26            | JJ_Act3;<br>CP_Act3;<br>PR_Act3                                  |            | C&P go looking for JJ                                |
| 23           | 00:18:31:00 | 00:20:10:18 |                |             | 1           |              |             | 1           |               |             | 6             | JJ_Act1  |            | JJ with family, lost job, mean to children           |
| 24           | 00:20:10:18 | 00:20:37:17 | 1              |             |             |              |             |             |               | 2           |               | CP_Act1  |            | C with Kids, Very Beginning                          |

| Sequence No. | Start Frame | End Frame   | Christina Peck | Paul Rivers | Jack Jordan | Micheal Peck | Mary Rivers | Marianne J. | Linear Rivers | Linear Peck | Linear Jordan | Narrative Beats            | Aronson S. | Description  |
|--------------|-------------|-------------|----------------|-------------|-------------|--------------|-------------|-------------|---------------|-------------|---------------|----------------------------|------------|--|
| 25           | 00:20:37:17 | 00:22:10:03 |                | 1           |             |              | 1           |             | 3             |             |               | PR_Act1                    |            | P & M before Transplant, she tells about doctors visit   |
| 26           | 00:22:10:03 | 00:23:34:11 | 1              | 1           |             |              |             |             | 15            | 19          |               | CP_Act2;PR_Act2            |            | P stalking C, follows her to liquour shop                |
| 27           | 00:23:34:11 | 00:24:26:04 |                |             | 1           |              |             | 1           |               |             | 9             | JJ_Act1                    |            | Birthday Party at JJ's, M takes a drink                  |
| 28           | 00:24:26:04 | 00:25:53:09 | 1              |             |             |              |             |             |               | 9           |               | CP_Act1                    |            | C comes home, accident, Voicemail, gets call from police |
| 29           | 00:25:53:09 | 00:26:50:08 |                |             | 1           |              |             | 1           |               |             | 12            | JJ_Act1                    |            | Marianne goes to check accident site with pastor         |
| 30           | 00:26:50:08 | 00:28:17:19 |                | 1           |             |              | 1           |             | 4             |             |               | PR_Act1                    |            | Sperm Donation, P & M at Clinic                          |
| 31           | 00:28:17:19 | 00:29:05:10 | 1              |             |             |              |             |             |               | 10          |               | CP_Act1                    |            | Christina goes to hospital                               |
| 32           | 00:29:05:10 | 00:31:06:10 |                |             | 1           |              |             | 1           |               |             | 10            | JJ_Act1_Inciting Incidence |            | JJ comes home after accident                             |
| 33           | 00:31:06:10 | 00:31:28:22 | 1              | 1           | 1           |              |             |             | 44            | 45          | 36            | JJ_Act3; CP_Act3; PR_Act3  |            | JJ drives C&P to the hospital                            |
| 34           | 00:31:28:22 | 00:32:14:23 |                | 1           |             |              | 1           |             | 7             |             |               | PR_Act1                    |            | After Transplant   |
| 35           | 00:32:14:23 | 00:34:21:11 | 1              |             |             |              |             |             |               | 11          |               | CP_Act1                    |            | Christina at hospital, is told of the deaths             |
| 36           | 00:34:21:11 | 00:34:50:12 |                |             | 1           |              |             | 1           |               |             | 11            | JJ_Act1_Inciting Incidence |            | JJ at home after accident, party is still going on       |
| 37           | 00:34:50:12 | 00:35:18:17 | 1              | 1           |             |              |             |             | 16            | 20          |               | CP_Act2;PR_Act2            |            | P stalking C, at the pool                                |

| Sequence No. | Start Frame | End Frame   | Christina Peck | Paul Rivers | Jack Jordan | Micheal Peck | Mary Rivers | Marianne J. | Linear Rivers | Linear Peck | Linear Jordan | Narrative Beats             | Aronson S. | Description  |
|--------------|-------------|-------------|----------------|-------------|-------------|--------------|-------------|-------------|---------------|-------------|---------------|-----------------------------|------------|--|
| 38           | 00:35:18:17 | 00:36:10:22 |                |             | 1           |              |             |             |               |             | 7             | JJ_Act1                     |            | JJ & boss at golf Course, boss offers to buy him a drink and job offer |
| 39           | 00:36:10:22 | 00:36:44:02 | 1              |             |             |              |             |             |               | 12          |               | CP_Act1                     |            | C is told about Organ Donation   |
| 40           | 00:36:44:02 | 00:37:18:00 | 1              | 1           |             |              | 1           |             | 5             | 13          |               | CP_Act1;<br>PR_Act1_PP<br>1 |            | P & M are paged about the heart, ges ready for transplat               |
| 41           | 00:37:18:00 | 00:38:53:18 | 1              | 1           |             |              |             |             | 17            | 21          |               |                             |            | P tries to talk to C at sports centre                                  |
| 42           | 00:38:53:18 | 00:39:53:06 | 1              |             |             |              |             |             |               | 17          |               |                             |            | C calls her dealer for cocaine   |
| 43           | 00:39:53:06 | 00:40:08:07 | 1              |             |             | 1            |             |             |               | 7           |               |                             |            | Micheal leaves C a voicemail just before accident                      |
| 44           | 00:40:08:07 | 00:42:01:11 |                |             | 1           |              | 1           |             |               | 14          |               | CP_Act2;<br>PR_Act2         |            | M comes back and JJ decides to turn himself in                         |
| 45           | 00:42:01:11 | 00:42:46:19 | 1              |             |             |              |             |             |               | 14          |               | CP_Act2                     |            | Christina cleaning house after accident, cannot enter kids room.       |
| 46           | 00:42:46:19 | 00:44:14:22 |                | 1           |             |              | 1           |             | 8             |             |               | PR_Act1                     |            | After Transplant, Party, M tells everyone about having a baby          |
| 47           | 00:44:14:22 | 00:44:42:23 |                | 1           |             |              |             |             | 10            |             |               | PR_Act2                     |            | Meets Detective  |
| 48           | 00:44:42:23 | 00:45:15:01 |                |             | 1           |              | 1           |             |               | 13          |               | JJ_Act1                     |            | Washes car after accident  |
| 49           | 00:45:15:01 | 00:46:33:15 | 1              |             |             |              |             |             |               | 15          |               | CP_Act2                     |            | Funeral  |
| 50           | 00:46:33:15 | 00:47:24:11 |                | 1           |             |              | 1           |             | 9             |             |               | PR_Act1                     |            | After Party, P & M have an argument about having a child               |

| Sequence No. | Start Frame | End Frame   | Christina Peck | Paul Rivers | Jack Jordan | Micheal Peck | Mary Rivers | Marianne J. | Linear Rivers | Linear Peck | Linear Jordan | Narrative Beats     | Aronson S. | Description   |
|--------------|-------------|-------------|----------------|-------------|-------------|--------------|-------------|-------------|---------------|-------------|---------------|---------------------|------------|---|
| 51           | 00:47:24:11 | 00:48:35:03 | 1              |             |             |              |             |             |               | 16          |               | CP_Act2             |            | C drinks for the first time at funeral, sister tells her to press charges |
| 52           | 00:48:35:03 | 00:49:53:14 |                | 1           |             |              |             |             | 11            |             |               | PR_Act2             |            | Detective gives report to P, P is smoking again                           |
| 53           | 00:49:53:14 | 00:50:33:17 |                | 1           |             |              | 1           |             | 12            |             |               | PR_Act2             |            | P Tells M about Donor   |
| 54           | 00:50:33:17 | 00:51:10:00 |                |             | 1           |              |             |             |               |             | 8             | JJ_Act1             |            | JJ & boss have a drink, JJ does not drink                                 |
| 55           | 00:51:10:00 | 00:51:30:09 |                | 1           |             |              |             |             | 39.5          |             |               | CP_Act3             |            | P After Sparing JJ's Life   |
| 56           | 00:51:30:09 | 00:53:33:07 |                | 1           |             |              | 1           |             | 13            |             |               | PR_Act2_PP<br>2     |            | P & M go to the doctor, P finds out about the abortion, They break up     |
| 57           | 00:53:33:07 | 00:55:42:11 |                |             | 1           |              |             |             |               |             | 16            | JJ_Act2             |            | Pastor Meets JJ, JJ has lost faith  |
| 58           | 00:55:42:11 | 00:57:48:18 | 1              | 1           |             |              |             |             | 18            | 22          |               | CP_Act2;<br>PR_Act2 |            | Christina goes to meet her drug dealer, and gets drunk. P follows         |
| 59           | 00:57:48:18 | 00:58:28:23 |                |             | 1           |              |             |             |               |             | 17            | JJ_Act2             |            | JJ tries to kill himself and fails  |
| 60           | 00:58:28:23 | 01:02:07:20 | 1              | 1           |             |              |             |             | 19            | 23          |               | CP_Act2;<br>PR_Act2 |            | Christina is too drunk, Paul drives her home                              |
| 61           | 01:02:07:20 | 01:02:57:15 |                |             | 1           |              | 1           |             |               |             | 18            | JJ_Act2             |            | M comes to meet JJ  |
| 62           | 01:02:57:15 | 01:03:10:02 |                |             | 1           |              |             |             |               |             | 24            | JJ_Act3             |            | JJ works at Coal place  |
| 63           | 01:03:10:02 | 01:03:31:15 | 1              | 1           |             |              |             |             | 36            | 38          |               | CP_Act3;<br>PR_Act3 |            | C & P in a motel Room   |
| 64           | 01:03:31:15 | 01:04:48:00 |                | 1           |             |              |             |             |               |             |               |                     |            | P Gets info about jj from detective                                       |

| Sequence No. | Start Frame | End Frame   | Christina Peck | Paul Rivers | Jack Jordan | Micheal Peck | Mary Rivers | Marianne J. | Linear Rivers | Linear Peck | Linear Jordan | Narrative Beats                 | Aronson S.                    | Description   |
|--------------|-------------|-------------|----------------|-------------|-------------|--------------|-------------|-------------|---------------|-------------|---------------|---------------------------------|-------------------------------|---|
| 65           | 01:04:48:00 | 01:06:16:14 | 1              | 1           |             |              |             |             | 20            | 24          |               | CP_Act2;<br>PR_Act2             |                               | P gives C a ride, after bar   |
| 66           | 01:06:16:14 | 01:06:48:22 |                | 1           | 1           |              |             |             | 35            |             | 27            | JJ_Act3;<br>PR_Act3             |                               | JJ & P cross each other in the motel corridor                                   |
| 67           | 01:06:48:22 | 01:08:18:06 | 1              | 1           |             |              |             |             | 21            | 25          |               | CP_Act2;<br>PR_Act2             |                               | P gives C a ride, after bar, asks her out for lunch, later he vomits in the car |
| 68           | 01:08:18:06 | 01:09:25:19 | 1              |             |             | 1            |             |             |               | 8           |               | CP_Act1                         |                               | Accident  |
| 69           | 01:09:25:19 | 01:10:17:14 |                |             | 1           |              |             | 1           |               |             | 19            | JJ_Act2                         | First Act<br>Turning<br>Point | JJ gets released, walks away from Marianne                                      |
| 70           | 01:10:17:14 | 01:11:58:14 |                | 1           |             |              |             |             | 33            |             |               | PR_Act3                         |                               | P finds out that his new heart is failing and refuses help                      |
| 71           | 01:11:58:14 | 01:13:34:06 |                |             | 1           |              |             | 1           |               |             | 20            | JJ_Act2                         |                               | JJ goes home with marianne  |
| 72           | 01:13:34:06 | 01:14:43:01 | 1              | 1           |             |              |             |             | 22            | 26          |               | CP_Act2;<br>PR_Act2             |                               | P & C have dinner   |
| 73           | 01:14:43:01 | 01:15:13:14 | 1              | 1           |             |              |             |             | 23            | 27          |               | CP_Act2;<br>PR_Act2             |                               | P walks C home  |
| 74           | 01:15:13:14 | 01:15:15:22 |                |             |             |              |             |             |               |             |               | JJ_Act3;<br>CP_Act3;<br>PR_Act3 |                               | Motel Shot  |

| Sequence No. | Start Frame | End Frame   | Christina Peck | Paul Rivers | Jack Jordan | Micheal Peck | Mary Rivers | Marianne J. | Linear Rivers | Linear Peck | Linear Jordan | Narrative Beats                 | Aronson S.                    | Description   |
|--------------|-------------|-------------|----------------|-------------|-------------|--------------|-------------|-------------|---------------|-------------|---------------|---------------------------------|-------------------------------|---|
| 75           | 01:15:15:22 | 01:17:15:12 | 1              | 1           |             |              |             |             | 37            | 39          | 30            | JJ_Act3;<br>CP_Act3;<br>PR_Act3 |                               | P smokes while C sleeps in motel room. P confronts JJ with a gun and takes him into the brush                   |
| 76           | 01:17:15:12 | 01:18:53:18 |                |             | 1           |              |             | 1           |               |             | 22            | JJ_Act2                         |                               | JJ tries to have sex with marriane but breaks down instead  |
| 77           | 01:18:53:18 | 01:21:00:13 | 1              | 1           |             |              |             |             | 24            | 28          |               | CP_Act2;<br>PR_Act2             |                               | P Visits C's Home after the dinner  |
| 78           | 01:21:00:13 | 01:22:34:08 |                |             | 1           |              |             | 1           |               |             | 21            | JJ_Act2                         |                               | At the Church, JJ does not participate, later at home his children confront him, back at church he prays        |
| 79           | 01:22:34:08 | 01:24:13:17 |                | 1           |             |              | 1           |             | 25            |             |               | PR_Act2                         |                               | C calls P to her house at night.  |
| 80           | 01:24:13:17 | 01:24:51:23 |                |             | 1           |              |             | 1           |               |             | 23            | JJ_Act2_PP2                     |                               | JJ leaves the house in the middle of the night, gives his son the hamster he wanted.                            |
| 81           | 01:24:51:23 | 01:25:33:03 | 1              | 1           | 1           |              |             |             | 45            | 46          | 37            | JJ_Act3;<br>CP_Act3;<br>PR_Act3 |                               | JJ Brings C & P to the hospital, confesses to shooting P  |
| 82           | 01:25:33:03 | 01:28:48:12 | 1              | 1           |             |              |             |             | 26            | 29          |               | CP_Act2;<br>PR_Act2             | First Act<br>Turning<br>Point | P comes to C's house. C kisses Paul, P Confesses that he has Michaels Heart and C gets Angry and throws him out |

| Sequence No. | Start Frame | End Frame   | Christina Peck | Paul Rivers | Jack Jordan | Micheal Peck | Mary Rivers | Marianne J. | Linear Rivers | Linear Peck | Linear Jordan | Narrative Beats     | Aronson S. | Description   |
|--------------|-------------|-------------|----------------|-------------|-------------|--------------|-------------|-------------|---------------|-------------|---------------|---------------------|------------|---|
| 83           | 01:28:48:12 | 01:28:59:00 |                |             | 1           |              |             |             |               |             | 32            | JJ_Act3             |            | JJ comes Back from his confrontation with P, he looks for someone in the motel                                    |
| 84           | 01:28:59:00 | 01:32:35:11 | 1              | 1           |             |              |             |             | 27            | 30          |               | CP_Act2;<br>PR_Act2 |            | C wakes up and sees that Paul spent the night in his car outside her house. They talk in the car.                 |
| 85           | 01:32:35:11 | 01:32:46:05 |                | 1           |             |              | 1           |             |               | 30.5        |               | CP_Act2             |            | Mary waits for Paul in his office   |
| 86           | 01:32:46:05 | 01:34:07:12 | 1              | 1           |             |              |             |             | 28            | 31          |               | CP_Act2;<br>PR_Act2 |            | C & P Have sex  |
| 87           | 01:34:07:12 | 01:34:45:10 |                |             | 1           |              |             |             |               |             | 28            | JJ_Act3             |            | JJ talks to Marianne on the phone, she begs him to come home  |
| 88           | 01:34:45:10 | 01:35:07:17 | 1              |             |             |              |             |             |               | 47          |               | CP_Act3             |            | C donates Blood for Paul  |
| 89           | 01:35:07:17 | 01:36:44:12 | 1              | 1           |             |              |             |             | 29            | 32          |               | CP_Act2;<br>PR_Act2 |            | P finda Photos of MP and C's Drugs  |
| 90           | 01:36:44:12 | 01:37:16:16 |                |             | 1           |              |             |             |               |             | 38            | JJ_Act3             |            | JJ is let go by the police  |
| 91           | 01:37:16:16 | 01:37:55:12 |                | 1           |             |              | 1           |             | 31            | 34          |               | CP_Act3;<br>PR_Act3 |            | Mary leaves Paul, says she will have his child by artificial insemination   |
| 92           | 01:37:55:12 | 01:40:15:17 | 1              |             |             |              |             |             |               | 35          |               | CP_Act3             |            | C talks to the gardner,walks to the restaurant where her family ate last, finally visits the site of the accident |

| Sequence No. | Start Frame | End Frame   | Christina Peck | Paul Rivers | Jack Jordan | Micheal Peck | Mary Rivers | Marianne J. | Linear Rivers | Linear Peck | Linear Jordan | Narrative Beats  | Aronson S. | Description  |
|--------------|-------------|-------------|----------------|-------------|-------------|--------------|-------------|-------------|---------------|-------------|---------------|--|------------|--|
| 93           | 01:40:15:17 | 01:41:42:18 |                |             | 1           |              |             |             |               |             | 29            | JJ_Act3  |            | JJ in the Motel, Tries to remove his tattoos by burning  |
| 94           | 01:41:42:18 | 01:45:12:07 | 1              | 1           |             |              |             |             | 32            | 36          |               | CP_Act3;<br>PR_Act3  |            | P stops C from shooting up/ drinking, C tells P that they have to kill JJ  |
| 95           | 01:45:12:07 | 01:46:24:05 |                | 1           | 1           |              |             |             | 38            |             | 31            | JJ_Act3;<br>PR_Act3  |            | P lets JJ go, P is in a very bad shape   |
| 96           | 01:46:24:05 | 01:47:20:14 | 1              |             |             |              |             |             |               | 48          |               | CP_Act3  |            | Christina is told that she is pregnant   |
| 97           | 01:47:20:14 | 01:49:36:05 | 1              | 1           |             |              |             |             | 40            | 41          |               | CP_Act3;<br>PR_Act3  |            | P tells C that he killed JJ, C tells P that they can go home now, P is very sick.  |
| 98           | 01:49:36:05 | 01:52:26:11 | 1              | 1           | 1           |              |             |             | 41            | 42          | 33            | JJ_Act3_Cli<br>max;<br>CP_Act3_Cl<br>imax;<br>PR_Act3_Cl<br>imax | Climax     | JJ comes looking for P at the Motel, asks P to kill him, there is a physical altercation, C tries to kill JJ, P shoots himself |
| 99           | 01:52:26:11 | 01:52:51:08 | 1              | 1           |             |              |             |             | 43            | 44          | 35            | JJ_Act3_Cli<br>max;<br>CP_Act3_Cl<br>imax;<br>PR_Act3            | Climax     | Birds Filler Evening, in Car after shot, P VO  |
| 100          | 01:52:51:08 | 01:52:53:14 |                |             |             |              |             |             |               | 46.5        |               | CP_Act3  |            | Hospital Ceiling   |
| 101          | 01:52:53:14 | 01:53:07:14 |                | 1           |             |              |             |             | 47            |             |               | PR_Act3  |            | P in hospital Bed talking about death,   |

| Sequence No. | Start Frame | End Frame   | Christina Peck | Paul Rivers | Jack Jordan | Micheal Peck | Mary Rivers | Marianne J. | Linear Rivers | Linear Peck | Linear Jordan | Narrative Beats | Aronson S.           | Description                                   |
|--------------|-------------|-------------|----------------|-------------|-------------|--------------|-------------|-------------|---------------|-------------|---------------|-----------------|----------------------|---|
| 102          | 01:53:07:14 | 01:53:11:21 | 1              |             |             | 1            |             |             |               | 6           |               | CP_Act1         | Just Before Accident | Michael and his daughters, P VO               |
| 103          | 01:53:11:21 | 01:53:22:12 |                |             | 1           |              |             |             |               |             | 8.5           | JJ_Act1         | Just Before Accident | JJ Jokes with Pastor as he gets into car P VO |
| 104          | 01:53:22:12 | 01:53:34:05 | 1              |             |             |              |             |             |               | 4           |               | CP_Act1         | Just Before Accident | Christina at the pool with her sister P VO    |
| 105          | 01:53:34:05 | 01:53:57:14 | 1              |             | 1           |              |             |             |               | 49          | 39            | JJ_Act3;CP_Act3 |                      | C and Jjin hospital waiting room P VO         |
| 106          | 01:53:57:14 | 01:54:13:07 |                |             | 1           |              |             |             |               |             | 40            | JJ_Act3         |                      | JJ goes home P VO                             |
| 107          | 01:54:13:07 | 01:54:30:09 | 1              |             |             |              |             |             |               | 50          |               | CP_Act3         |                      | Christina enters her daughters room P VO      |
| 108          | 01:54:30:09 | 01:54:56:11 |                | 1           |             |              |             |             | 48            |             |               | PR_Act3         |                      | Paul flatlines P VO                           |
| 109          | 01:54:56:11 | 01:55:05:22 |                |             |             |              |             |             |               |             |               |                 |                      | Motel Swimming pool, snowing.                 |
|              |             |             | 49             | 51          | 38          |              |             |             |               |             |               |                 |                      |   |

## Appendix 4

### Sequence Analysis of *21 Grams* (2003)

#### *Close Readings from Film*

This document is meant to be a rigorous reading of the film's transitions and narrative continuity.



Seq. No.1. The very first image we see in this film are that of a naked couple, Christina and Paul, with Paul smoking while Christina sleeps on her stomach, her bare breast clearly visible in profile. We see only the bare upper torso of Paul behind Christina, as he looks at her pensively. The composition of the actors also directs the viewers gaze awake from the overexposed window to Paul's face/eyes to Christina's head/breast. To begin the film with a shot like this is nothing less than an attempt to make the viewer sit up and take notice, to jolt them in their seats, and to make the opening shot memorable. We don't know yet who the characters are, but here they are in front of us-naked. Nudity in cinema is widely touted to help sell a film, and to that end, producers and distributors will advertise the film as such. While that may be for films of a certain time and kind, for 21 grams, the nudity of the actress in the very first scene, is not built up to arouse the audience. It comes out of nowhere when it is least expected. To add to this the camera work is handheld, shaky, conveying a sense of voyeurism, of someone else present in the room. While frontal nudity constitutes a small percentage in the films released, 25.4% of women shown are nude as compared to 9.6% of men (Smith et al. 2018). Even if Laura Mulvey's essay on the "male gaze" in film is outdated according to her own interview in 2014, the issues raised still hold for a majority of film narratives. ..the female nude is still a rarity in popular films. Nudity also limited to a certain genre of films and that narrows down the audience. This shot is obviously meant to stun the viewer, provoke, and titillate their imaginations, especially when in the next 15 minutes we see the setup that positions this couple as possibly illicit lovers. Non-Linear Narratives (NLN) have a strong primacy effect, in the sense we are presented with glimpses of the characters out of order and therefore don't know what to make of the information we are handed. For e.g., questions such as 'are they having an affair? Why does Paul look so melancholy, and (going further) but their partners are completely different people! etc. may arise if one is to stop the film to think and ask. The shots preceding and succeeding this one is black, with this opening shot having the main characters brightly back lit. We consider this transition as having the function of visual collision.

Type: Straight Cut; Technique: Abrupt Cut; Mode: Visual ;Context: in medias res; Function: Collision



Seq. 3,4 and 5 in the NLN are setup sequences, which give us a glimpse of the lives of our main characters before the inciting incident happens. This is an introduction to the world of these characters. We see Michael with the girls- an attentive father, Christina at the AA meeting, talking about her children and her husband, and Jack at the church lecturing a wayward young boy. Here Jack comes across as a bit full of himself, believing blindly in God while the kid scoffs at his faith. A cinematic device; that of color weaves through these 3 sequences i.e the dark red colour of Katie's sweater, Christina's jacket, and the hat on the young man's head. This is subtle, but the colour repetition serves as a continuity or a visual linkage type of transition. All the compositions and the cuts are smooth and constitute a whole when it comes to introduction of the story worlds. Of note is the verbal exposition in all 3 scenes.



Seq. 6,7,8 in the NLE are flashforwards about the characters. We begin Paul's sequence with the overhead light fixture on top of his hospital bed and end at his face looking up (presumably at the same light fixture) to the bare bulb in the motel bathroom of the next sequence- Visual and Contextual Linkage. Earlier, we've seen Christina at the AA meeting, swearing by her sobriety, and in 7 we see her snorting cocaine, looking ill and unkempt in a dirty dimly lit bathroom. Interesting cinematic device; This is an example of the eyeline match transition (match cut) that makes it seem like Paul is looking at the bulb in the motel's bathroom, tying together the two sequences. It could be read like an iconic relationship, based on similarity of the signifiers, in this case, sources of light that help us transition from one space/time into another space/time. This sequence shows us what the characters have in store for themselves ahead in the story. Many transitions in this film are iconically or symbolically motivated. We transition next from a distressed, high on illegal substances- Christina in a dimly lit, dark, tight space to the brightly lit Mary (her face) as she lies on the doctors table open to examination in a sterile environment in Seq. 9. Contrasting

imagery like this is sometimes used to shock, disturb, or incite the viewer into thinking about the relationship between the characters separated by time and circumstance, but placed together by editing.



Seq. 9,10,11 are yet another chunk of time from the setup of the story. Mary, Paul's wife visits a fertility doctor where she is told conceiving is difficult for her and Paul. We also learn here that Paul has got one month left due to his heart failure. Jack loses his temper and gets physically violent at the young boy from the earlier sequence (and we see his excessively fanatic behavior) and then drives home (while listening to Christian radio) to his wife and children. We then get a glimpse of his wife and children and their dynamics. This is straightforward parallel cutting, both stories are from a similar timeframe, i.e before the accident.



Then there are sequences where there is no overt connection of the sequence before, like Seq. 12 where Paul sits meditating at the pool with a gun. (We don't know its 'Paul' yet and we don't know why he has a gun). The sequence immediately after (no.13) is one with Jack being escorted to his holding cell. Something happened between Jack as he is with his family and this man and Jack in the prison. But again, we are not told what this is about, - we hear an inmate say "back so soon?.." these two sequences aren't quite related and there isn't much to grab hold of, except the fact that we saw jack talk fanatically about god and now he is in prison. With very little information, we are left with the conflicting states of Jack and the man with the gun in the middle, and linking these together, we see a kind of before and after. This could be considered as a flashforward. The correlation established here is Jack+Family-to-man with gun-to-Jack in prison. This tells us that either something happened to change Jack's life drastically and maybe the man with a gun is involved in whatever transpired, or that him in prison is a flashback. The nature of the medium doesn't allow the viewer time to pause and contemplate options. So before one can made any deductions about what or what, the narrative has progressed, and we are presented with more information. Of course, we don't know that the gun sequence comes much later after the sequence of Jack waiting incarceration. Another way to look at it is a contrast between Jack's sermonizing and then displaying excessive force with the young kid and his own prison time. Of note is the fact that there is no easily discernable marker like a plate insert of the date to indicate what is past or what is present. What is visible is the states of the characters, which go from well groomed, stable, to disheveled and haggard. According to the filmmakers, the change in the grain of the film is supposed to aid this transition. (see pg. Chap 2 conclusion)

From Jack behind bars, we cut abruptly to Christina and her sister at the swimming pool. Again, a stark contrast from the earlier sequence, the blue of the water, the graceful strokes of the swimmers are in a vibrant opposition to the squalor of Jack's situation.



This segment of sequences (nos. 14,15,16) is yet another temporally related section which is a part of the setup, and happens before the accident. Christina and her sister engaged in playful banter at the swimming pool when she misses a call on her cellphone. As she leaves, she says 'Michael and the girls will be waiting for me at home'. Next, we see Jack in his element, at church with his family, enthusiastically repeating after the pastor while his wife looks at him with discomfort and derision. It is clear she is not the fanatic that Jack is about church. And lastly, we see Paul, hooked up to an oxygen tank, passing time playing chess, then unsuccessfully trying to sneak a smoke when he gets caught by Mary. Now we know they are a couple and Paul is on a transplant list for his heart. This kind of a cluster of scenes from the lives of the three characters, which are all around the same timeline, comes often in the film, in this last seq, a shot of Paul as he looks at his pale feet, almost blue with the lack of circulation comes early on.



We end this sequence with a cut to seq. 17 on Paul's now bleeding feet as he lays shot on the motel room floor, and Christina crouches over him crying, begging a completely different looking Jack, to help. This shot is so incongruous to what has been shown so far that, it behaves more like an extreme flashforward, saying- here are all three of our characters having digressed so much that it's impossible to imagine what could have happened to bring them to this state. One of the contrast or emotional ellipses that Arriaga calls it.



We then cut to sequence 18, where, in contrast to the earlier scene (where Paul is incapacitated), we see a completely healthy Paul, looking fit, well turned out, confident and in his senses- another contrasting scene. We then cut to Jack struggling at his job in seq.19 and getting fired. In the screenplay, he is shown to behave more violently, but the director choses to end this scene much more calmly. Sequences 17, 18 and 19 are not related on the surface, but maybe set up to again show the contrasting situations of the characters across the span of the narrative.



Seq. 20 and 21 are closer on the linear timeline, Christine is trying to wash her daughters' bloodied clothes and Paul recovers from the transplant. We also see the red motif repeated, blood on the clothes, red shoelaces, Paul's heart in red liquid. Interesting transition from 21 to 22, Paul calls his heart a culprit and in the next shot, as he drives with Christina, she asks 'which one is he?' referring to Jack loading a truck with bags. The answer to the question is in the earlier scene as well as this scene. Scene ends with Christine declaring that they must kill Jack.

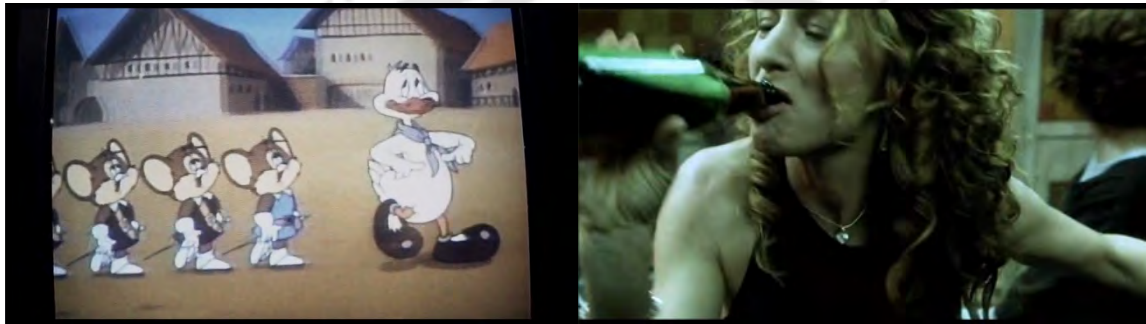


Next in 23, 24, 25, we transition to yet another extreme, Jack with his family at dinner, looking freshly bathed and clean in contrast to a barely recognizable Jack in the earlier seq. Jack announces that he's lost his job and, we are given a glimpse of his 'bible quoting' heavy hand at parenting when he tries to resolve a fight between his children. His wife clearly doesn't agree with his style. Jack is also portrayed as a hypocrite when he hits his son while saying 'no hitting in this house'. In contrast to this, we see the next sequence at Christina's house; she is preparing to bake a cake with her daughters and even when one of them misbehaves, Christina laughs it off. The two sequences are again a part of the setup and present us with a contrasting view of both families. An interesting thing of note is that Jack's family is predominantly dark haired while Christina and her daughters are blond, a visual contrast between the two-family units. Another thing of note is that this scene is brought forward from the script, possibly at the edit table, where the director wanted to create a stronger setup and to highlight the contrast between the families. From Christina's children, we jump to a night sequence, again a part of the setup, where Mary is talking to an exhausted looking Paul hooked up to oxygen. She gets angry when he tells her that he fired the help because the nurse made him feel like a cripple. At her exasperation, Paul tries to initiate sex, but is shut down when Mary tells him that she went to a fertility clinic, as if taking advantage of having the upper hand, she confesses to Paul about her doctor's

visit. Paul is reluctant to discuss fertility treatments when Mary tries to persuade him.



In Seq. 26, we cut to Christina leaving the house we had seen Paul at before. Paul follows her discreetly on foot to a supermarket, where he sees Christina buying liquor. When she leaves having completed her purchase, Paul declines to buy anything and follows her out in a hurry.

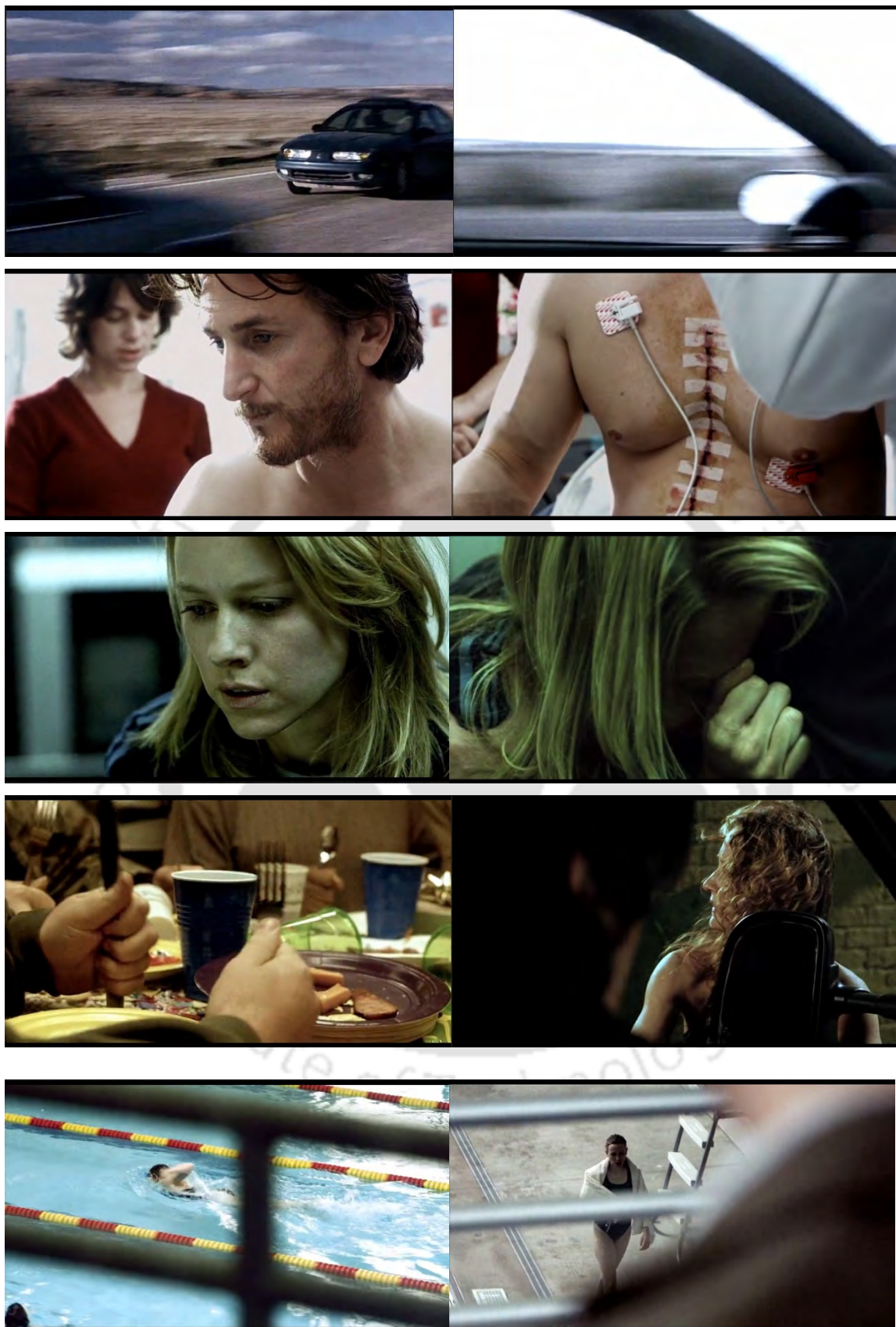


Cut to a TV screen showing a cartoon in which little mice follow a duck, interesting transition, of movement of characters, of following. We open in the next Seq. (no27) at Jack's birthday party. The house is full of people and children, talking over loud music while Marianne refills snacks and is visibly uncomfortable amongst Jack's friends from church whom she doesn't seem to be close to. She escapes to the kitchen when Jack's sister offers her some illicit beer. It is then clear that the party does not have alcohol (as everyone is from church, along with the pastor) and Marianne is dying for a drink. Between seq. 26 and 27, we see the contrast, Christina at a liquor shop clearly buying liquor to drink by herself and Marianna unable to freely enjoy alcohol at a party in her own house.



Sequence 27, 28, 29, 30, 31, and 32 are again a temporally related segment around the inciting incident. We don't actually see the accident, but we see the scenes leading up to and following it. In 28, Christina comes home from the

swimming pool and find the house empty. Contrast Transition from Jack's FULL house to Christina's EMPTY house. She walks around calling for her family and on finding them absent, she proceeds to clean up while listening to voicemails on the phone. We see her reaction to Michael's voicemail with the girls audible in the background, telling her they are on their way home. As she continues to set the table, she gets a call, and we realize that something has happened to someone. The melancholy music over this Seq. and the next one (no.29) – ties both together dramatically: an upset Marianne drives across the scene of an accident with the pastor. White covered bodies and a red laced shoe are visible on the road surrounded by emergency vehicles. The pastor goes to check the site while Marianne quietly cries in the car. The next Seq. (no.30) we see that Mary has convinced Paul to donate sperm for the IVF treatment. At the doctor's office a slightly resigned Paul agrees to donate sperm and is shown to a room by the doctor used for collecting a sample. The doctor asks Paul if he's sure he wants to go ahead with the IVF, since he might not be alive when the baby is born. Paul replies, 'life must go on'. In the view of the whole temporal segment, this statement from Paul is almost a foreboding, bracketed by a horrible incident that destroys two families to Mary and Paul trying to conceive. In the next shot we see Christina at the hospital trying to find out about her family. Her father and sister arrive to support her. In sequence 32, we cut back to the party at Jack's house, his friends cracking crass jokes and Marianne disgusted. She sees Jack's car pull up and throwing away her cigarette, she steps out to meet him. Jack is late to his own party and Marianne asks him what his excuse is. She notices Jack shaking and almost in shock, he confesses to having run over a man and two girls. Marianne then walks to the front of the car and finds blood on the fender. Almost in reverse, we now have seen the accident that is the crux of this film, with the sequences shuffled, but grouped temporally, thematically. It's almost as if the writer/director wants to underline the other connections within the happenings around the same events making sure, we don't miss anything as one would in a linear telling. In a linear telling, the audience is so caught up in the movement of the narrative that it sometimes takes repeated viewings or some time has to pass after watching the film to pick up the nuances that filmmakers weave into their narratives by the use of mis-en-scene, or metaphoric transitions. The audience is almost forced to find connections between the disparate sequences and then perform the difficult task of juggling the pieces of the puzzle.





We jump to seq. 33, the transition highlighting the contrast with Jack's state between the sequences to him driving manically down a highway with a profusely bleeding Paul and a bloodied Christina in the back. This is another contrast type of transition, where having killed Michael and his girls earlier, Jack is given another chance at saving a life. Action of note is seeing Jack in the rear-view mirror in 32 and him looking at Christina through the mirror in 33. From a profusely bleeding Paul we cut to his post-surgery scar from the heart transplant in Seq. 34. The doctor gives him an all-clear and then Paul asks him whose heart he received. Mary, and the doctor try to dissuade him from finding out while the nurse suggests he write an anonymous letter to the family. Next is a match cut from Paul's unconvinced face to Christina's tensed one. She is waiting with her family to hear from the doctors. The doctors tell her that Michael is in a critical condition and both her daughters have died and that if Katie had been brought to the hospital earlier there might have been a chance. Christina breaks down and demands to see the bodies, but the doctors advise against it. We cut away from her to see her sister quietly breaking down too. This is where we make the connections that the people Jack ran over are Christina's husband and her daughters and the exposition is finally on the table. Cut to Seq. 36, where the party is still going on at Jack's house while he's still outside in his truck. Marianne arranges to send everyone home and then asks Jack to bring the truck inside. The sound match cuts to the loud ambient noise of the swimming pool with Christina swimming laps rapidly while Paul watches her from the viewing gallery. This is one of the fragments that connects to Paul's desire to know who the heart donor was in Seq. 34. The arrangement of the segments appears to come in sets, like 3 stories being told at the same time. But of course, if we are to take the accident theme into serious consideration as we must then the fragmentation, with very few tangible connections makes sense. Next, we come to Seq. 38, the first sequence in the accident segment as it would have come in a linear timeline. Jack is carrying out his stuff from the golf club to his truck when his ex-boss offers to buy him a drink. Jack reminds him that he doesn't drink. Seeing his hesitation, the ex-boss tells Jack that he might have a lead about a possible job and that he feels bad about firing Jack at which Jack agrees to go with him. This sequence can be considered as the header of the whole inciting incidence segment.

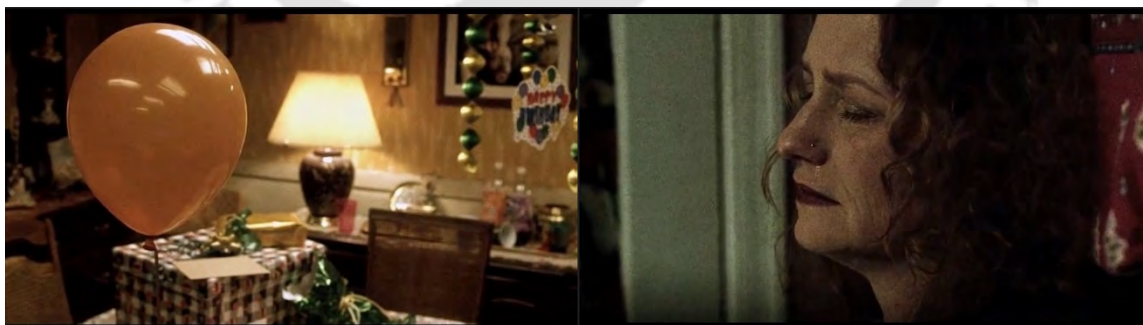


We cut to Seq. 39, Christina is still trying to digest the news that the doctors are also unable to save Micheal when a hospital worker is trying to explain to them that Micheal's organs can be donated to someone else in need. Before we know her decision, we cut to sequence 40 where Paul and Mary are paged from the hospital about the heart. This is a kind of an Ellipse type of cutting, where the exposition is hidden and the consequence of the decision results in an action. It is also known as 'enter late, exit early' in screenwriting parlance where the scene need not follow the entire dramatic arc, and the audience is left to make the connections that are not revealed. This creates dynamism and shortens the narrative time required present the event. Seq. 40 is a fast-paced sequence where we see them go from home to the hospital where the doctors get Paul ready for surgery and wheel him in. We end with Mary walking back to the waiting room alone and noticing Christina and her family pass by with a plastic bag full of Michael and the girls' things. The music goes from fast paced to melancholy to suit the mood change- while it's a life-saving boon

for Paul and Mary and requires some urgency, for Christina she's just been handed the last effects of her own family and life has almost stopped for her. We cut to 41, Paul looking quite healthy, watching a squash match at the sports-centre, then upon noticing Christina he tries to engage with her. Christina rebuffs him quietly while lying, but Paul catches her in the lie. Paul leaves after cracking a joke and making Christina smile.



We cut next to Seq. 42, where Christina calls a woman at a very loud bar but hangs up unable to speak. She's drinking whiskey while crying and sitting at the edge of her king size unmade bed with a framed photo of Michael on the nightstand. It's clear that this is some time after the accident when she is unravelling. The next scene- 43, we see Michael and the girls as he is leaving the voicemail for Christina, the girls are chasing pigeons and close by someone is clearing leaves with a blower.





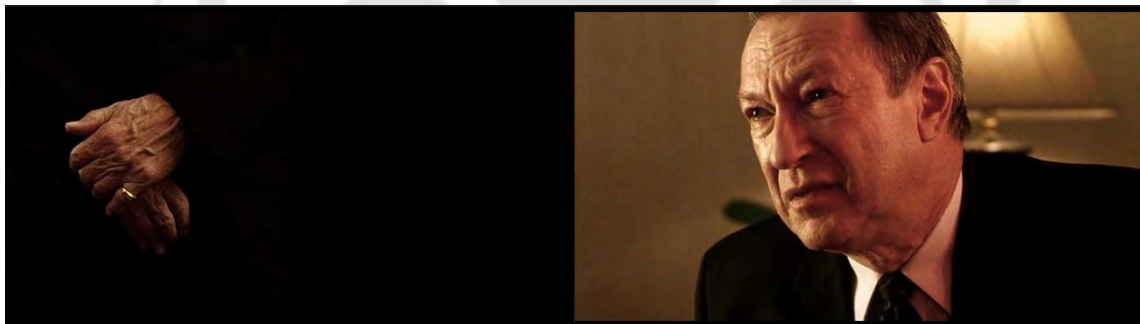
Seq. 44, Jack is in the children's bedroom, when Marianne comes back. There are remnants of the party everywhere, the children already asleep. She has a frightened look on her face, when Jack asks her if she went and checked if the family is dead. When she confirms, Jack declares that he's going to turn himself in. Marianne tries to reason with him, saying that nobody saw him and there is no way anyone can connect him to the accident. But Jack is determined and does not relent. He removes all his jewelry and watch and then, coldly rebuffing Marianne he leaves. We cut from a crying Marianne's face to Christina's back in 45 as she is trying to pack up the girls' things in boxes. She tries to open the girls room door but cannot bring herself to go inside.



Sequence 45 ends with Christina closing the door again and we cut to another celebration in 46. This time at Paul's house, having made a complete recovery, Paul and Mary are entertaining friends. Sequence 46 opens with a cake and a large group of their friends sitting around a dining table joking about Paul's health. Mary- much to Paul's discomfort, announces to the group that they are trying to conceive via artificial insemination to which one of Paul's friends insinuates that Paul's students will be very disappointed to know that he cannot perform anymore. There is a sense after this that Mary is uncomfortable and slightly angry at the joke. The two sequences 45 and 46 are contrasts from around the same timeframe, where Christina is devastated, Paul and Mary are celebrating a new lease on life.



We cut from the party to a bowling alley in 47, where Paul comes to meet a someone for the first time. Melancholy music plays over this scene to the next where Marianne is washing the blood off Jacks truck. While the use of music is spare in the film, it comes at moments of poignancy, we don't know who the man is at first (Paul is meeting the detective) but there is a connection to the accident and the next seq- 48 where Marianne breaks down as she tries to get rid of the evidence of the accident.



We cut to Seq. 49 the Funeral at Christina's house. The place is packed with black clad people, talking amongst themselves. Christina's father tries to get her to eat something, sharing his experience of losing Christina's mother, but she is inconsolable. When her father tells her life goes on and she must move on from this tragedy, Christina gets angry and tells him that she never understood how he moved on after their mother's death. She thinks it's impossible to do that (one might remember, Arriaga's recounting of his own daughter unable to understand how people move on after the death of a loved one).



Christina leaves the room and we cut to Paul's house in Seq. 50 after the party. Paul is contemplating a box of pills while Mary washes the dishes after the guests. He is angry that she told everyone and says things have changed and he might not want to have children. Mary is adamant and replies that she's already made up her mind. We cut from Mary asking Paul to help her with the glasses to Christina filling a whiskey glass with ice in 51. Her sister who has followed her to the kitchen, tells Christina that she needs to press charges against the ex-con, otherwise he will walk the streets. Christina declines firmly.



In 52, we cut to Paul meeting with the same man as before, who gives him a report of the donor and his family. Paul is smoking again, while he looks at the newspaper clippings. The detective gives a run-down on Jack and we find out that he used to be involved in a lot of bad things and was in jail often and not too long ago. Paul starts to cough, and

the detective expresses concern. Paul is moved by the whole story. We cut to him at home with Mary in 53, showing the same newspaper clipping, a cigarette in one hand. Mary tries to dissuade him from following this line of inquiry again, but Paul seems unconvinced.



We cut to a busy road in Seq. 54 and see Jack and Mr. Brown leaving from the pub. Brown admonishes him for not having a single drink and Jack invites him to his birthday party at home. Brown declines and Jack gets into the truck to drive off. This is just before the accident. In the next sequence -55, A gravely ill, disheveled Paul, holding a cocked gun is stumbling in the brush. He limps to a stop and stashes the gun in his pocket while struggling to breathe. Immediately after in Seq. 56, we see a healthy Paul sitting with Mary at the doctor's office. The doctor is scheduling the surgery when Paul asks what the probability of them conceiving a child. While explaining the complications the doctor invariably tells Paul about Mary's abortion, that she had kept a secret. We cut on Mary's face as Paul asks her 'what abortion'. Cut to the hallway, where an angry Paul is walking away while Mary follows behind, trying to explain. Paul is understandably angry, but so is Mary about his past transgressions. The scene ends with Mary leaving first, accusing Paul about being selfish.



In 57 we cut to the pastor entering Jack's prison cell. This is an entry exit type of a transition which links the earlier scene to this one, albeit the editor gives the next sequence some breathing space showing the pastor walking down the hallway. Seq. 56,57,58,59,60 and 61 seem to be around the same timeframe. They read like parallel cutting and are almost linear in setup. In 56, Jack is depressed, he's been refusing to eat, or meet the Pastor. In their conversation, it becomes increasingly clear that Jack has lost faith, and the pastor is unable to bring him back to the flock. One interesting thing to note here is that continuity-based filmmakers rarely break the 180-degree rule in staging of a conversation, and here we see this happen often as the conversation gets more and more intense. There could be two factors to this: one, the space is constrained and the changing of axes while making the scene go from passive to dynamic, is almost unnoticeable given the heated argument between Jack and the Pastor. Another reason could be to highlight the clashing opinions of the two characters. One could argue there are different ways to achieve the same effect. David Bordwell observes that when dealing with constrained physical spaces, the axes can be violated, since the space is very well established (pg. 239 film art). We know the prison cell is small and there isn't any room for ambiguity as there would be in a larger space with more characters. We cut from Jack and the Pastor to 58, Christina arriving at a bar with Paul following closely.



He keeps a close eye on Christina at the bar as she meets up with the woman she had tried to call earlier. Anna, who seems to be Christina's drug dealer is happy to see her back. She offers Christina her old usual combination, plus something new, which after some hesitation, Christina downs with some water from the sink faucet. Immediately we cut to a dripping tap in the prison bathroom and Jack with a noose around his neck in 59.



Before he can decide, his foot slips off the bucket he's standing on and he starts to choke on the noose. The pipe holding the noose breaks under his weight, and he falls to the floor. Another inmate hears the sound and runs to help him. Jack hugs the man, crying with relief. We cut from Jack's failed attempt at taking his own life to Christina's self-destructive behavior in 60 as she waits, high and belligerent, for her car with a glass of whiskey and a cigarette in her hand. She gets into an argument with the Valet when Paul intervenes and convinces her to let him drive her home. Melancholy music on this sequence, while Paul deposits Christina and the car safely in her garage. Realizing that he cannot wake her up, he tries to make her more comfortable in the car and notices the baby seats still strapped in the back. Tenderly pulling a strand of hair off her face, he covers her with his jacket and leaves while closing the garage door behind him.





We cut from the garage to Seq. 61, when Marianne comes to meet Jack in the prison. She tells him she's sold their truck to pay for the lawyer. Jack is angry and says he didn't ask for it and that it was gods will. Marianne reminds him that till two years ago, he didn't believe in God, and now everything is about god. Jack asks her if she preferred him a 'fucking pig'. She retorts that he was at least himself before and that life has to go on. We cut from Jack sitting at the visitors table in the prison to a temporally different sequence (no.62)- Jack working at the humus factory. This transition is a cause/effect type of transition (or question answer). Jack's response to Marianne's attempt at trying to save him from a prison sentence leads him to reject any attempt at rehabilitation or rejoining his family and seek the most menial of work to get by.



We cut from his jobsite to a drunk Christina in 63 contemplating at the balcony of the motel. She returns to the room to rejoin a sleeping Paul in bed. Seq. 62 and 63 appear to be from the same timeframe.



Immediately we cut to Seq. 64, where Paul is yet again with the detective, albeit looking sicker than the time we saw them together. The detective furnishes information about Jack, with the address of the motel and his photo. He also

gives Paul a gun that he asked for, showing him how to use it. (From gun to Christina floating like the dead)



We cut to Seq. 65, Christina floating head down in the pool, holding her breath. Paul is yet again at the sports Centre. He walks up to Christina on her way out and introduces himself as the one who gave her a lift from the bar. Christina, a little embarrassed, she apologizes and accepts a lift. As they run to the car in heavy rain, we cut to Seq. 66, where a truck drops Jack to the motel after work. (running towards car to getting off car). Jack passes Paul who is entering his own room with supplies.



We cut to Seq. 67 Paul's car as they drive to her home after the sports center. As he drops her, he gives her his number and asks her to have lunch with him; she hesitates but eventually acquiesces. As he drives back, Paul starts feeling ill and vomits in the car. This is the moment his heart is starting to give out.



The next sequence 68, is the closest we get to seeing the accident. It is the tail end of the voicemail that we saw Micheal leave for Christina. Micheal pauses to chat with Lucio, reminding him to wash the car, while the girl's wave at him. We stay with Lucio as he uses the blower, cutting to a wide shot, to see Jack's truck whiz by. A moment later Lucio reacts to the sound of a harsh braking, and then he runs in the direction of Michael and the girls, leaving the blower running on the ground. End of the scene, we also hear the truck accelerate away, cutting straight to a shot of prison barbwire.



Seq. 69, Marianne (smoking nervously) and the Pastor wait for Jack to get released from prison. Jack, upon seeing them, starts to walk off in the opposite direction. Seeing this, Marianne gets angry, and the Pastor tell her that he will talk to Jack.



We cut to seq70, the cardiac surgeon, telling Paul that his body is rejecting his heart, and the only option is to wait in the hospital for another heart. Paul refuses, saying he would rather die outside than locked up in a hospital.



We cut to Seq. 71, where Jack, in the back seat of the Pastors car, asks Marianne how much the lawyer charged. An angry Marianne refuses to tell him. Back home, Jack hugs his daughter, who thinks he had gone on a trip. His son is hesitant, but eventually hugs Jack. It's an emotional moment for the family (melancholy music) with Marianne joining in the family hug.



We cut to sequence 72, where Christina and Paul are having lunch at a restaurant. They seem to be having an engaging conversation and Christina is charmed. Paul walks her back home after the lunch, when Christina asks Paul if he wants to come in. Just as they are entering the house, we cut to 74 - a sleeping Christina, in the motel, with Paul looking at her as he wheezes while smoking. (Continuation from Seq. 63)





He coughs as he gets up, putting the gun in his pocket and leaves the room. 75- Outside in the car, he waits for Jack to exit. As Jack passes Paul, Paul confronts him with the gun, forcing him to walk into brush behind the motel. Paul is inexperienced in such matters, and he fumbles while directing Jack onto his knees. Paul tells Jack that he shouldn't have done it. When a confused Jack asks him what, Paul throws dirt in his eyes while asking him to close his eyes. He then fires off rapid shots towards the camera (we don't know if he's fired at Jack or not) We cut to Seq. 76, where Jack is trying to have sex with Marianne. He stops abruptly and says 'she looked me in the eyes. At Marianne's questioning, he tells her that one of the girls looked him in the eyes as she was dying. He breaks down, saying that he left her in the middle of the road to die. Marianne comforts him. Seq. 75 to 76 again have a symbolic transition, 'don't look me in the eyes' to 'she looked at me in the eyes'.



Seq. 76 to 80 are another temporal cluster with alternating storylines. From Marianne comforting Jack, we cut to 77- Paul in Christina's house, looking around while she asks him if he will have wine. Paul sees pictures of the Micheal and the girls and is overwhelmed. When Christina comes back, she sees a disquieted Paul who tells her that he is feeling ill and should just go home. At the door, he tells her that he likes her a lot and asks if he can see her again. She says she's a married woman. He says that he figured as much, leaving Christina looking uncomfortable.



We cut to Seq. 78, in the middle of a church song, with all the participants singing and clapping along. Jack and Marianne stand with the congregation, not following along with everyone. Jack notices the boy from the earlier seq, smirking at him. Jack looks away guiltily. Back at home, Jack's daughter shows him her drawings while he sits with Marianne watching tv. Marianne reminds him about signing some papers when his daughter interrupts asking him if he really killed two girls and their daddy. While Jack says yes, Marianne simultaneously says no, still trying to keep up with the illusion. Jacks' son confirms that it really happened with their mother trying to explain that it was an accident. Jack is unresponsive. At the church later, he holds the pulpit and begs for forgiveness. (if we have to categorise this whole sequence, it would be the contrasting events happening in the character's lives, Jack withdraws from his family, and Christina and Paul come closer together)



We cut to Seq. 79; Paul gets a call from Christina in the middle of the night while she sleeps with Mary. He walks out to take the call. Christina asks him to come over if he can, or if he wants to. Paul agrees to go. He refuses to answer Mary's questions, and both end up accusing each other of not changing their ways when they said they would (the subtext is that Paul has had an affair with a student in the past).



We cut to 80- Jack, packing his bags in the middle of the night, leaving a hamster in the children's room, and leaving. Melancholy music over this last sequence in this cluster. Barring Seq. 81 and 83, this temporal cluster spills over to 82, 84, 85 and 86.



In Seq. 82, Jack reaches the hospital with a bleeding Paul and Christina. While the doctors run to bring help, Jack confesses to shooting Paul, while looking at Christina. The policeman is taken aback and requests for backup. Christina looks on with suspicion. Seq. 80 is the punishment that Jack takes upon himself and Seq. 81, is when he tries to take the first step towards redemption. Taking blame for something that was an accident while the accuser is looking on.



Back to 81, where we cut to a healthy-looking Paul, outside Christina's door. She lets him in and visibly upset, asks him why he said that he liked her. That she didn't like it and that he doesn't know what she's going through. He hugs her and Christina, in the heat of the moment starts to kiss him. Paul tries to stop her, and finally tells her that he has Micheal's heart. And that he tried to tell her but just didn't know how. At this Christina gets violent and angry and throws him out of her house. Paul walks off dejected while Christina is left behind in tears.



We cut to 83, where Jack is back from his confrontation with Paul and looking for his motel room. (movement transition, Paul walks away, Jack walks towards camera).



Cut to 84, Morning, Christina wakes up to see Paul's car still Parked outside the house. She goes to wake him up and they talk in the car. He tells her that he doesn't pity her, but it was just something he needed to do after getting Michael's heart that saved his life. And once he knew the circumstances behind the gift, he needed to help Christina someway. She breaks down and hugs him. He admits that he's scared, and they kiss in the car. Seq. 84 to 86 are again a part of the same cluster.



We see Mary going to Paul's office to look for him in 85, while Christina and Paul have sex in her house in 86. This is the scene before the very first scene we saw in the film. Christina touches Paul's surgical scar almost reverently.



We cut to Jack talking to Marianne on a payphone in 87. Jack's separation from his family is obvious in the fact that there is a complete breakdown of communication between them. Jack is almost talking to himself as Marianne implores him to come home. He seems to be in some sort of a state of delirium, drowning in his own guilt. Jack hangs up on Marianne and we see his decline up close, his head seems shorn haphazardly, he's drinking again and smoking.



We cut to 88, where Christina volunteers to donate blood to Paul from after the shooting in the end. She looks unkempt too. This is a linkage type of transition, similarity in the states of Jack and Christina.



Cut to 89, Paul is rifling through a book on Christina's nightstand and comes across polaroid's of her and Micheal. In her drawer he finds the cocaine and pills. He smokes while sitting naked besides her on the bed, tenderly running his hands through her hair and on her back. This Seq. is again a continuation from 86 and Seq. 1 is repeated here. Now we know where the 1<sup>st</sup> scene is from. It's comes like a bookmark that jogs the memory of the viewer.



Seq. 90, Jack is let go by the police for the lack of evidence and the fact that the other two wont press charges He protests but is told this is how it is.



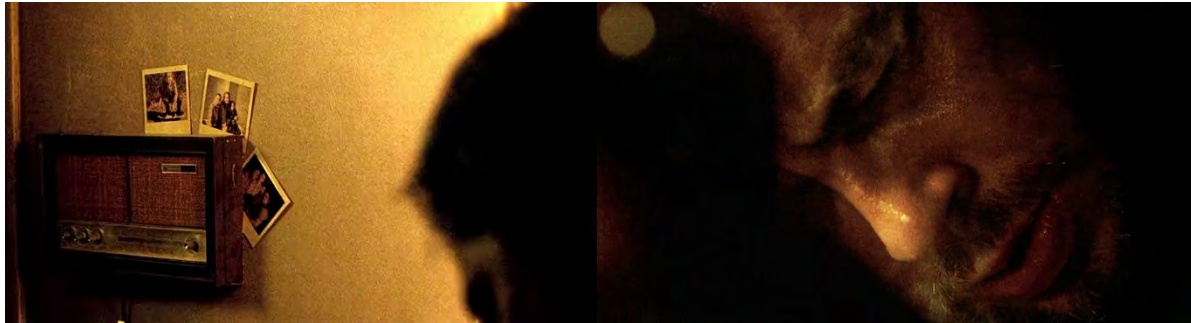
Seq. 91 is opposite of Seq. 86, this time, Paul is asleep naked on the bed while Christina is sitting at the edge looking at Micheal's clothes hanging in the closet and her wedding ring. She gets dressed and looks back at the sleeping figure of Paul.



Cut to Seq. 92, Paul goes home to find Mary packing up to leave. They have an argument and accusing him of being lost for too many days and waiting to dump her when he got better, Mary leaves, insisting that she will get IVF and have his child. Paul tries to talk her out of it in vain.



Seq. 89 to 95 are again a part of the same temporal cluster. Sometime after she's been with Paul, Christina drives to the accident site and speaks to Lucio the gardener. Music over this sequence, we don't hear what they say, but Lucio is overwhelmed as he recounts the day. She then visits the café and the corner on which the accident happened. She sits on the curb. Michael's recorded voicemail plays over this sequence and the next scene where she lays in the unmade bed crying, listening to the recording on repeat.



We cut to Jack at his motel room, in Seq. 94. The transition here is again, of linkage, the perpetrator of the crime paying for his mistake. . Melancholy music continues from the earlier sequences to this one, where Jack sits in his motel room, drinking straight from the bottle. After a while, he heats up a knife and tries to burn off the tattoo of a cross from his arm. We end on Jack's face bent over his arm, and cut to Christina in 95, bent over a table smoking and snorting coke. A twinning or semantically linking type of transition, Jack and Christina are both on self-destructive paths.



Paul stops Christina, who is now angry about the accident. She has found out that the driver fled without helping her daughters, one of whom could have survived if she had just received medical attention. Paul is sympathetic and tries to convince her otherwise when she proclaims that she wants to kill Jack Jordan. Christina is inconsolable. We cut abruptly from Paul and Christina hugging in the kitchen of her house, to 96- Paul throwing dirt in Jack's eyes, while screaming that he shouldn't have done it. The transition from Christina telling Paul to kill Jack and to Jack cowering in the brush while Paul shoots at him is an intention/action type of Linkage transition. Paul shoots into

the ground while Jack covers his ears. He then accuses Jack of being a murderer, leaving the girls in the street and that he should have killed Jack. He then tells Jack to just leave, and not come back to the motel to get his things. As Paul leaves, he gets violently sick.



We cut to Seq. 97, where Christina is told by the doctor that while her blood was not useful for Paul since there very illegal substances, and that she is pregnant. Christina is taken aback. A dying Paul has accidentally conceived a child with Christina (when Mary couldn't even after trying very hard). In the screenplay, this scene (SP176) is preceded by Seq. 95 (SP175) which ends with Christina accusingly asking Paul 'how the fuck do you know what I need'. In response to the scene in the screenplay, the finding out of the pregnancy seems like the answer to that question. In the film, it is a bit discordant, and the connection is not entirely apparent. We cut from her sitting in the hospital waiting room back to the Motel bathroom sometime after Paul has attempted to kill Jack. Seq. 96,98,99,100 and 101 are a part of the same temporal cluster and linked together by the narrative flow. In 98, She leaves the motel room and notices Paul sitting at the empty swimming pool. Paul has the discharged gun in his hand. Upon her asking, Paul lies and says he killed Jack. Christina is agitated that she didn't get to see Jack's body. Paul walks back to the room, he is sick, and lays in bed. Christina apologizes and both profess love for each other. We cut to 99- a

repeat of Jack walking down the motel corridor outside their room. Christina wakes Paul up and Paul, grabbing the gun goes to check. As soon as he opens the door, Jack barges in and tells Paul to shoot him. Christina is angry and the three get into an altercation. A rushing sound fills the soundscape, drowning the noises of a glass breaking under Paul's foot, Christina shouting and hitting Jack with a lampshade. She seems determined to kill Jack and Paul is too weak to stop her. As a last resort, Paul shoots himself.



We are back to the ambient sound over the rumbling in the background, Christina snaps out of her murderous rage and rushes to Paul. She asks Jack to call an ambulance as the sound reaches a crescendo. It abruptly cuts (Contrast/conflict) with the change in shot- Seq. 100, birds fly in the sky at dusk, Christina cradles a bleeding Paul while shouting at Jack in the car, while Paul's voice can be heard as a VO commenting on life and death. Cut to the hospital ceiling in 101, Paul hooked to the monitors and intubated looking around at other patients, V.O and melancholy Music continues over, and we cut to the next cluster of temporally related sequences.

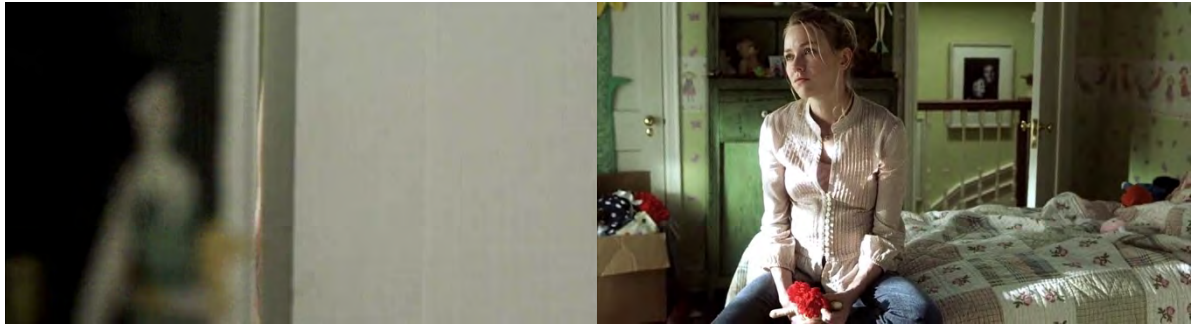




102- Micheal and the girls at the café, 103- Jack happy on his b'day getting into the truck, waving goodbye to his ex-boss, 104- Christina's sister showing her the middle finger in the pool, Christina laughing as she looks back, the 'happy before' for everyone- thematically linked, from the same timeframe.



Cut to the hospital waiting room in 105, Christina looks out the window at snow falling outside the hospital, while Jack comes to stand next to her. She looks at Jack and we cut to Seq. 106 in an ellipse, Jack smoking on the stoop of his home before entering the house to see his wife on the couch with the children. A temporal jump, we don't know what Christina said but jack is now able to go back to his family. In the screenplay, Christina is angrier and more dismissive, but in the film, the resolution is ambiguous. We don't know whether Christina has forgiven Jack or not, but he is now able to go back to his family.



Cut to 107, Christina is finally able to enter her daughter's room, she is visibly pregnant, looks healthier and more at peace with herself. We cut back to the past, in 108, the hospital and watch Paul flatline as his VO plays over the seq. Last scene of the film is the delapidated swimming pool of the motel, lightly dusted with snow.



## Appendix 5

Screenplay Analysis of *21 Grams*

|    | Description  | Screenplay  | Technique in               | Technique Out   | Mode                                    | Function   | Context   | Reading   | Music  | Time of Day                | Type of Transition        | Transition Out | Camera Movement                         | Angle/Height  | Framing   |
|----|--|---|----------------------------|---|---|--|---|---|--|----------------------------|---------------------------|----------------|---|---|---|
| 0  | Black Plate + Title + Black                                      |   | <b>Fade in from black</b>  | <b>Out to Bright light</b>  | <b>Visual, Light, Composition</b>       | Conflict, Shock, Jolt, In medias res   | <b>None</b>   | Pure shock value, naked actor   | None   | Day                        |                           | Cut            | Handheld, no movement,                  | Eyelevel  | Triangle, looking left  |
| 1  | Paul in Christina's bedroom, after the first time they have sex. | same  | Abrupt Cut to bright light | Abrupt Cut to black title   | Visual, Black                           | Conflict, contrast   | in Medias res, no context yet                                     |   |  |                            |                           |                |   |   |   |
| 2  | Title  |   | Black title plate          | Cut to shot   | <b>Visual, Light, Noise</b>             | Contrast   | <b>Setup, Intro to characters</b>                                 | Thematic/ Symbolic of Blood, colour red, setup.   | Ambient  | Interior, artificial light |                           | Cut            | Handheld, following/cutting to movement | Eyelevel  | triangle  |
| 3  | M & the Children in the soda shop                                | Dialogues are Different   | Cut                        | Cut, camera movement fast to right  | Visual, Colour, Match Sweater to Jacket | Movement conflict, Visual continuity   | <b>Setup, Intro to characters</b>                                 | Thematic/ Symbolic of Blood, colour red, setup.   | None   | Interior, artificial light |                           | cut            | Handheld                                | Eyelevel, OTS   |   |
| 4  | at AA Meeting  | Dialogues are Different   |                            | Cut, camera movement fast to right  | Visual, Light, Similar Composition      | Movement, continuity, Linkage, Contrast  | <b>Setup, Intro to characters</b>                                 | Also interesting void around Christians head filled by the two lit windows in the church. Cut red jacket to hat. This chunk is like a part of the setup, telling us about the characters and their normal routine, plus a bit about their past. Thematic/ Symbolic of Blood, colour red, setup. | None   |                            |                           |                | Handheld                                |   |   |
| 5  | JJ & Boy   | Dialogues are Different   | Cut to Jack and Boy        | Cut to birds at dusk  | Visual                                  | Disrupt, Contrast  | None  | Dusk, Hospital, end of life.  | Guitar Melancholy  | Dusk                       |                           | Cut to         |   |   |   |
| 6  | Birds Filler   |   | Cut                        | Cut to Ceiling Light  | Visual                                  | Continuity   | Exterior-Interior, Paul talking about                             | Dusk, Hospital, end of life. Only character with a VO, speaking about his death, with the Melancholy Music.   | Guitar Melancholy Continues over, Paul's VO talking about death, | Interior, artificial light |                           |                | Handheld                                | Eyelevel  | Close   |
| 7  | Paul in hospital After Being Shot                                | Some dialogues changed or omitted   | Cut to Ceiling Light       | Cut to Bare Bulb  | Visual, Light to Light, Iconic?         | Continuity, Contrast, Bright Light to Dim light  | Connecting two characters by a prop/symbol, Clean to Grimy/dirty, | Christina abusing drugs at either a point in the past or the future, ambiguous, after we've heard that she's gone clean, Closed framing, Claustrophobic, Trapped, Voyeuristic camera, with many objects in the FG, BG reflection, C half hidden behind a door.                                  | None   | Interior, artificial light |                           |                | Handheld,                               | Looking down on Christina, outside bathroom, almost like a voyeur | Claustrophobic, many things in FG, BG, reflection, C hidden behind a door |
| 8  | C snorting cocaine   | Reused in the film(very rare) 182   | Cut to Bare Bulb           | Cut to Mary's Face  | Visual, Dark to Light                   | Contrast, Dim light to Bright, Conflict, Link woman to woman                                   | good-bad, clean-dirty, open-closed, Bright-Dark                   | cut from Christina small and shadowed to Mary, bright and open, literally   | foley of doctor performing examination                           | Day                        |                           | cut            | handheld                                | Top Shot  | close   |
| 9  | Mary visits doctor before transplant                             | Scene 7 & 8, Some changes in dialogue   |                            | From Mary's face looking to right of screen to Pastor walking in from right of the frame. | Visual Movement                         | Movement, continuity, Linkage  | Continuation of earlier church scene                              | to show Jack's fanaticism, and heavy hand with punishment, for exposition about the birthday party.   | none   | Day                        |                           | cut            | handheld jerky                          | Eyelevel  | wide  |
| 10 | JJ at youth centre, loses temper                                 | Added action, jack loses his temper at the same boy from earlier, gets violent, pastor has to intervene, Full sequence flows on to the next |                            | From Mary's face looking to right of screen to Pastor walking in from right of the frame. | Visual Movement                         | still to movement, contrast, projecting the energy to next scene with movement of car, linkage | Continuation of earlier church scene                              | Exposition about Jack's Family  |  | Day                        | Ellipse, normal home life | cut            | handheld jerky                          | Eyelevel  | wide  |
| 11 | JJ Comes home with a cooler, kids and Marianne                   | Some dialogues changed or omitted   |                            |   |   |  |   | cut   |  | Day                        | to cause (possibly)       | cut            | handheld jerky                          | Eyelevel  | mid close   |

|    | Description   | Screenplay  | Technique in | Technique Out | Mode | Function | Context | Reading                         | Music            | Time of Day        | Type of Transition   | Transition Out   | Camera Movement                       | Angle/Height              | Framing   |
|----|---|---|--------------|---------------|------|----------|---------|---------------------------------|------------------|--------------------|--|--|---------------------------------------|---------------------------|-----------|
| 12 | Paul meditating on his action at motel swimming pool with gun, after confronting JJ | Scene split in edit   |              |               |      |          |         | cut                             |                  | Artificial indoor  | to effect, Ellipse from imprisoned   |  | handheld jerky                        | Eye level                 | Close OTS |
| 13 | JJ Incarcerated after accident  | Some dialogue changes   |              |               |      |          |         | Cut to swimming pool underwater | Phone rings      | Day                | to free, blue water  | Cut  | handheld jerky                        | slightly high angle       |           |
| 14 | Christina & sister at pool before accident  |   |              |               |      |          |         | Cut                             |                  | Day                | Church congregation  |  | handheld jerky                        | Eye level                 |           |
| 15 | JJ at church with family  | Some dialogue changes   |              |               |      |          |         | Cut                             |                  | Day                | to chessboard, from foot   | Cut to Pauls bleeding foot   | Handheld                              | Below eye level, Eyelevel |           |
| 16 | Paul Before transplant sneaks a smoke   | 16 & 17   |              |               |      |          |         | Cut                             |                  | Dusk               | to bleeding foot   | Cut  | Handheld                              |                           |           |
| 17 | Paul is shot at motel, JJ & C   | Scene is truncated in film as compared to script                      |              |               |      |          |         | Cut                             |                  | Day                | from completely incapacitated to looking healthy, fit and in control of his actions. |  | Handheld                              |                           |           |
| 18 | After Transplant P Comes to Meet C, but Christina doesn't open the door.            | 22  |              |               |      |          |         | cut                             |                  | Day                |  | Cut to whirling washing machine  | Handheld                              |                           | Tight     |
| 19 | JJ at Golf Course talking to boss, loses job  | 23, 24 Some change in action and staging, cut before the end reaction |              |               |      |          |         |                                 |                  |                    |  |  |                                       |                           |           |
| 20 | C after accident washing clothes, smoking & drinking                                | 25 Phone is not ringing in the film                                   |              |               |      |          |         | Cut                             |                  |                    | Paul calling his heart the culprit to  | Cut to sky   |                                       |                           |           |
| 21 | P after Transplant  |   |              |               |      |          |         | Cut                             | Melancholy Music |                    | to Christina asking which one is Jack. Symbolic transition. From dishevelled Jack to | Cut  | Not Handheld, still and following car |                           |           |
| 22 | C&P go looking for JJ   | 28,29,30  |              |               |      |          |         | Cut to Jack's Dining room       |                  | Day                | Jack with family, freshly bathed and in his element at home with family.             | Cut from jacks son punished to Christina's daughters   | Handheld                              |                           |           |
| 23 | JJ with family, lost job, mean to children  |   |              |               |      |          |         | Cut to Christina's kitchen      |                  | Day                | Cut from jacks son punished to Christina being loving to her daughters               | Cut to Mary at Vanity  | kids eye level                        |                           |           |
| 24 | C with Kids, Very Beginning   | Scene 76, brought forward from script                                 |              |               |      |          |         | Cut                             |                  | Night              |  | Cut  |                                       |                           |           |
| 25 | Paul & Mary before Transplant, she tells about doctors visit                        |   |              |               |      |          |         | Cut from Paul to Christina      | Music            | Day                |  | thematic transition drink-drink  | Handheld                              |                           |           |
| 26 | P stalking C, follows her to liquor shop  | 33,34, 35 (36 skipped)  |              |               |      |          |         |                                 |                  | night              |  |  | Handheld                              |                           |           |
| 27 | Birthday Party at JJ's, M takes a drink   |   |              |               |      |          |         |                                 | Music starts     | night              |  |  |                                       |                           |           |
| 28 | C comes home, accident, Voicemail, gets call from police                            |   |              |               |      |          |         |                                 | Music continues  | night              |  |  |                                       |                           |           |
| 29 | Marianne goes to check accident site with pastor                                    |   |              |               |      |          |         |                                 |                  | late evening/night |  |  |                                       |                           |           |
| 30 | Sperm Donation, P & M at Clinic   |   |              |               |      |          |         |                                 |                  | night              |  |  |                                       |                           |           |
| 31 | Christina goes to hospital  | 46 truncated in film  |              |               |      |          |         |                                 |                  | night              |  | thematic transition from having just run over m & girls to Christina asking him to drive faster to save Pauls life |                                       |                           |           |
| 32 | JJ comes home after accident  |   |              |               |      |          |         |                                 |                  | dusk               |  | bleeding Paul to a post surgery Paul   |                                       |                           |           |

|    | Description  | Screenplay   | Technique in | Technique Out | Mode | Function | Context | Reading                                | Music   | Time of Day   | Type of Transition | Transition Out                           | Camera Movement | Angle/ Height | Framing  |
|----|--|--|--------------|---------------|------|----------|---------|--|---|---------------|--------------------|--|-----------------|---------------|--|
| 33 | JJ drives C&P to the hospital  |  |              |               |      |          |         | transition to Paul's post surgery scar |   | day           |                    | transition to Christina's face from Paul |                 |               |  |
| 34 | After Transplant   | Transition is in script                                |              |               |      |          |         |  |   |               |                    |  |                 |               |  |
| 35 | Christina at hospital, is told of the deaths   |  |              |               |      |          |         |  |   | night         |                    |  |                 |               |  |
| 36 | JJ at home after accident, party is still going on                                     | 53,54  |              |               |      |          |         |  |   | day           |                    |  |                 |               |  |
| 37 | P stalking C, at the pool  | 55,56,57   |              |               |      |          |         |  | 58 omitted,   | day           |                    |  |                 |               |  |
| 38 | JJ & boss at golf Course, boss offers to buy him a drink and job offer                 | 59   |              |               |      |          |         |  | some minor changes in dialogue / characters                             |               |                    | from back of Christina's head to Black   |                 |               |  |
| 39 | C is told about Organ Donation   |  |              |               |      |          |         | dark, with sound of pager              | Music at the end  | night         |                    | to squash game                           |                 |               |  |
| 40 | P & M are paged about the heart, gets ready for transplant, Christina & Family Walk by | 61,62  |              |               |      |          |         |  |   | day           |                    | from Christina's face to glass in hand   |                 |               |  |
| 41 | P tries to talk to C at sports centre  | 64   |              |               |      |          |         |  |   | night         |                    |  |                 |               | end frame is interesting, she's shown small and alone at the bottom of the frame with the vast bed undone behind her |
| 42 | C calls her dealer for cocaine   | not in script progression, scene 68-70                 |              |               |      |          |         |  |   | dusk          |                    | Michaels face                            |                 |               |  |
| 43 | Michael leaves C a voicemail just before accident                                      | cat changed to pigeon, car wash changed to leaf blower |              |               |      |          |         | balloon                                |   | night         |                    | Marianne's face                          |                 |               |  |
| 44 | M comes back and JJ decides to turn himself in   | 72   |              |               |      |          |         | Christina removing bike                |   | afternoon     |                    | from door                                |                 |               |  |
| 45 | Christina cleaning house after accident, cannot enter kids room.                       | not in progression                                     |              |               |      |          |         | to cake                                |   | afternoon     |                    | from Mary's face                         |                 |               |  |
| 46 | After Transplant, Party, M tells everyone about having a baby                          | 77   |              |               |      |          |         | bowling ball                           | music   |               |                    |  |                 |               |  |
| 47 | Meets Detective  | not in progression 79 scene truncated                  |              |               |      |          |         |  | Music continues over, but the scenes are not happening at the same time | night         |                    |  |                 |               |  |
| 48 | Marianne Washes car after accident   | Not in progression 80                                  |              |               |      |          |         |  |   | Evening/night |                    |  |                 |               |  |
| 49 | Funeral  | 77   |              |               |      |          |         |  |   |               |                    | Mary says help me with glasses           |                 |               |  |
| 50 | After Party, P & M have an argument about having a child                               | 81   |              |               |      |          |         | C takes ice in a whiskey glass         |   | night         |                    |  |                 |               |  |
| 51 | C drinks for the first time at funeral, sister tells her to press charges              | 82,83  |              |               |      |          |         |  |   | afternoon     |                    | newspaper clipping                       |                 |               |  |
| 52 | Detective gives report to P, P is smoking again  | 84   |              |               |      |          |         | newspaper clipping                     |   | night         |                    |  |                 |               |  |
| 53 | P Tells M about Donor  | not in progression, truncated sc.88                    |              |               |      |          |         |  |   | dusk          |                    |  |                 |               |  |
| 54 | JJ & boss have a drink, JJ does not drink  | not in progression, 89                                 |              |               |      |          |         |  |   | afternoon     |                    |  |                 |               |  |
| 55 | P After Sparing JJ's Life  | 90   |              |               |      |          |         |  |   | afternoon     |                    |  |                 |               |  |

|    | Description   | Screenplay   | Technique in | Technique Out | Mode | Function                   | Context                                      | Reading                    | Music                           | Time of Day | Type of Transition                                  | Transition Out      | Camera Movement | Angle/Height | Framing |
|----|---|--|--------------|---------------|------|----------------------------|--|----------------------------|---------------------------------|-------------|---|---------------------|-----------------|--------------|---------|
| 56 | P & M go to the doctor, P finds out about the abortion, They break up   |  |              |               |      |                            |  |                            |                                 |             |   |                     |                 |              |         |
| 57 | Pastor Meets JJ, JJ has lost faith  | 94,95  |              |               |      |                            |  |                            |                                 | night       |   | tap                 |                 |              |         |
| 58 | Christina goes to meet her drug dealer, and gets drunk. P follows   | 96   |              |               |      |                            |  | tap                        |                                 |             |   |                     |                 |              |         |
| 59 | JJ tries to kill himself and fails  | 100  |              |               |      |                            |  |                            | music                           |             |   |                     |                 |              |         |
| 60 | Christina is too drunk, Paul drives her home  | 101-104  |              |               |      |                            |  |                            | Music starts and continues over |             |   |                     |                 |              |         |
| 61 | M comes to meet JJ  | 105  |              |               |      |                            |  |                            | Continues                       | dusk        |   |                     |                 |              |         |
| 62 | JJ works at Coal place  | not in progression   |              |               |      |                            |  |                            | continues                       | dusk        |   |                     |                 |              |         |
| 63 | C & P in a motel Room   | 106  |              |               |      |                            |  |                            |                                 |             | Sometime after Christina asks him to help kill Jack |                     |                 |              |         |
| 64 | P Gets info about Jack from detective, gets gun   | 1,08,109   |              |               |      |                            |  |                            |                                 |             |   |                     |                 |              |         |
| 65 | P gives C a ride after swimming   | 113  |              |               |      |                            |  |                            |                                 |             |   |                     |                 |              |         |
| 66 | JJ & P cross each other in the motel corridor   | 1,15,116   |              |               |      |                            |  |                            |                                 |             |   |                     |                 |              |         |
| 67 | P gives C a ride home, asks her out to lunch, vomits in car   | 117-119  |              |               |      |                            |  |                            |                                 |             |   |                     |                 |              |         |
| 68 | Accident  | 120  |              |               |      |                            |  |                            |                                 |             |   |                     |                 |              |         |
| 69 | JJ gets released, walks away from Marianne  |  |              |               |      |                            |  |                            |                                 |             |   |                     |                 |              |         |
| 70 | P finds out that his new heart is failing and refuses help  | 123  |              |               |      |                            |  |                            |                                 |             |   |                     |                 |              |         |
| 71 | JJ goes home with Marianne  | 125  |              |               |      |                            |  |                            |                                 |             |   |                     |                 |              |         |
| 72 | P & C have lunch  | truncated, slight change   |              |               |      |                            |  |                            |                                 |             |   |                     |                 |              |         |
| 73 | P walks C home  |  |              |               |      |                            |  |                            |                                 | afternoon   |   |                     |                 |              |         |
| 74 | Motel shot  | 129  |              |               |      |                            |  |                            |                                 | afternoon   |   | gun shooting        |                 |              |         |
| 75 | P smokes while C sleeps in motel room. P confronts JJ with a gun and takes him into the brush                   | Change in dialogue, ends with close your goddamned eyes said to jack |              |               |      |                            |  | close on Marianne's thighs |                                 | afternoon   |   |                     |                 |              |         |
| 76 | JJ tries to have sex with Marianne but breaks down instead  | begins with jack breaking down and saying she looked me in the eyes  |              |               |      |                            |  |                            |                                 |             |   |                     |                 |              |         |
| 77 | P Visits C's Home after the Lunch   | 135  | Cut          |               |      | From Black to bright light | collision, surprise/shock, set up questions, |                            |                                 |             |   |                     |                 |              |         |
| 78 | At the Church, JJ does not participate, later at home his children confront him, back at church he prays        | added other scenes, 140  |              |               |      |                            |  |                            |                                 |             |   |                     |                 |              |         |
| 79 | C calls P to her house at night.  | 141, 142, 143  |              |               |      |                            |  |                            | Melancholy Music                |             |   |                     |                 |              |         |
| 80 | JJ leaves the house in the middle of the night, gives his son the hamster he wanted.                            | 144, 145,146,147, 148  |              |               |      |                            |  | Cut to Pauls Face          |                                 |             |   |                     |                 |              |         |
| 81 | P comes to C's house. C kisses Paul, P Confesses that he has Michaels Heart and C gets Angry and throws him out | 150  |              |               |      |                            |  |                            |                                 |             |   | cut from Jacks Face |                 |              |         |
| 82 | JJ Brings C & P to the hospital, confesses to shooting P  | 149  |              |               |      |                            |  |                            |                                 |             |   |                     |                 |              |         |
| 83 | JJ comes Back from his confrontation with P, he looks for Paul in the motel                                     | not in progression   |              |               |      |                            |  |                            |                                 |             |   |                     |                 |              |         |
| 84 | C wakes up and sees that Paul spent the night in his car outside her house. They talk in the car.               | 15,21,53,154   |              |               |      |                            |  |                            |                                 |             |   |                     |                 |              |         |

|     | Description  | Screenplay                     | Technique in | Technique Out | Mode | Function | Context | Reading | Music | Time of Day | Type of Transition | Transition Out  | Camera Movement | Angle/ Height | Framing |
|-----|--|--------------------------------|--------------|---------------|------|----------|---------|---------|-------|-------------|--------------------|-----------------|-----------------|---------------|---------|
| 85  | Mary waits for Paul in his office  | changed from the script 155    |              |               |      |          |         |         |       |             |                    |                 |                 |               |         |
| 86  | C & P Have sex   | 156                            |              |               |      |          |         |         |       |             |                    |                 |                 |               |         |
| 87  | JJ talks to Marianne on the phone, she begs him to come home   | 157, 158 truncated from script |              |               |      |          |         |         |       |             |                    |                 |                 |               |         |
| 88  | C donates Blood for Paul   | 159, 160                       |              |               |      |          |         |         |       |             |                    |                 |                 |               |         |
| 89  | P find Photos of MP and C's Drugs  | 161                            |              |               |      |          |         |         |       |             |                    |                 |                 |               |         |
| 90  | JJ is let go by the police   | 162                            |              |               |      |          |         |         |       |             |                    |                 |                 |               |         |
| 91  | Christina awake while Paul's sleeps, looks at Michael's ties   | 173                            |              |               |      |          |         |         |       |             |                    |                 |                 |               |         |
| 92  | Mary leaves Paul, says she will have his child by artificial insemination  | 164, 165                       |              |               |      |          |         |         |       |             |                    |                 |                 |               |         |
| 93  | C talks to Lucio, walks to the restaurant where her family ate last, finally visits the site of the accident, then listens to the voicemail michael left her | 166-171                        |              |               |      |          |         |         |       |             |                    |                 |                 |               |         |
| 94  | JJ in the Motel, Tries to remove his tattoos by burning  | 172                            |              |               |      |          |         |         |       |             |                    |                 |                 |               |         |
| 95  | P stops C from shooting up/ drinking, C tells P that they have to kill JJ  | 174, 175, 177                  |              |               |      |          |         |         |       |             |                    |                 |                 |               |         |
| 96  | P lets JJ go, P is in a very bad shape   | 178                            |              |               |      |          |         |         |       |             |                    |                 |                 |               |         |
| 97  | Christina is told that she is pregnant   | 176                            |              |               |      |          |         |         |       |             |                    | From C face C&P |                 |               |         |
| 98  | P tells C that he killed JJ, C tells P that they can go home now, P is very sick.  | 183, 184                       |              |               |      |          |         |         |       |             |                    |                 |                 |               |         |
| 99  | JJ comes looking for P at the Motel, asks P to kill him, there is a physical altercation, C tries to kill JJ, P shoots himself                               | 185                            |              |               |      |          |         |         |       |             |                    |                 |                 |               |         |
| 100 | Birds Filler Evening, in Car after shot, P VO  | 186                            |              |               |      |          |         |         |       |             |                    |                 |                 |               |         |
| 101 | Hospital Ceiling, P in hospital Bed talking about death,   | 187                            |              |               |      |          |         |         |       |             |                    |                 |                 |               |         |
| 102 | Michael and his daughters, P VO  | 188,                           |              |               |      |          |         |         |       |             |                    |                 |                 |               |         |
| 103 | JJ Jokes with golf boss as he gets into car P VO   | 190                            |              |               |      |          |         |         |       |             |                    |                 |                 |               |         |
| 104 | Christina at the pool with her sister P VO   | 191                            |              |               |      |          |         |         |       |             |                    |                 |                 |               |         |
| 105 | C and Jack in hospital waiting room P VO   | 181                            |              |               |      |          |         |         |       |             |                    |                 |                 |               |         |
| 106 | JJ goes home P VO  |                                |              |               |      |          |         |         |       |             |                    |                 |                 |               |         |
| 107 | Christina enters her daughters room P VO   | 1,95,196                       |              |               |      |          |         |         |       |             |                    |                 |                 |               |         |
| 108 | Paul flatlines P VO  | 197                            |              |               |      |          |         |         |       |             |                    |                 |                 |               |         |
| 109 | Motel Swimming pool, snowing.  |                                |              |               |      |          |         |         |       |             |                    |                 |                 |               |         |

**Appendix 6**  
*Arrival* Film Breakdown

| Sequence Number | Start TC    | End TC      | Description   | Dialogue               | Type Linear/NonLinear | Linear Progression | Linear Sequences | Audio Cue | Visual Cue   | BGM                    |
|-----------------|-------------|-------------|---|------------------------|-----------------------|--------------------|------------------|-----------|--------------|------------------------|
| 1               | 00:00:00:00 | 00:01:17:22 | Title sequence  |                        |                       | 0                  |                  |           |              |                        |
| 2               | 00:01:17:22 | 00:01:55:19 | The view of the lake, two wine glasses, bottle, Same as shot in the last sequence.                                  | VO: Story begins       | NL                    | 104                | I                |           |              | Instrumental           |
| 3               | 00:01:55:19 | 00:02:30:21 | Louise holding Baby's hand in hers, the nurse comes to take the baby, baby starts crying and Louise takes her back. |                        | NL                    | 113                | J                |           | Wedding ring | Instrumental Continues |
| 4               | 00:02:30:21 | 00:03:03:10 | Hannah Age 6 Playing with Louise  |                        | NL                    | 126                | M                |           | Wedding ring | Instrumental Continues |
| 5               | 00:03:03:10 | 00:03:13:09 | Daughter Age 8 Louise putting her to sleep, Wedding ring visible  | H Says I love you      | NL                    | 130                | N                |           |              | Instrumental Continues |
| 6               | 00:03:13:09 | 00:03:14:19 | Hannah Age 12 saying I hate you to L  | Hannah says I hate you | NL                    | 161                | P                |           |              | Instrumental Continues |
| 7               | 00:03:14:19 | 00:03:18:09 | Hannah Age 12 Reading with Louise   |                        | NL                    | 162                | P                |           |              | Instrumental Continues |
| 8               | 00:03:18:09 | 00:03:22:20 | Hannah Age 12 with doctor   |                        | NL                    | 163                | P                |           |              | Instrumental Continues |
| 9               | 00:03:22:20 | 00:03:28:20 | Louise getting Hannah Diagnosis from doc  |                        | NL                    | 164                | P                |           |              | Instrumental Continues |
| 10              | 00:03:28:20 | 00:03:47:23 | Hannah Age 12 in her deathbed   |                        | NL                    | 165                | P                |           |              | Instrumental Continues |
| 11              | 00:03:47:23 | 00:04:00:13 | Louise Walking alone in hospital corridor   | VO Continues           | NL                    | 169                | P                |           |              |                        |

| Sequence Number | Start TC    | End TC      | Description  | Dialogue     | Type Linear/NonLinear | Linear Progression | Linear Sequences | Audio Cue | Visual Cue       | BGM |
|-----------------|-------------|-------------|--|--------------|-----------------------|--------------------|------------------|-----------|------------------|-----|
| 12              | 00:04:00:13 | 00:04:18:17 | Louise walking to class  | VO Continues |                       | 1                  | A                |           |                  |     |
| 13              | 00:04:18:17 | 00:06:14:02 | Louise Enters Class, Tries to Teach, Is told about Aliens, Watches news on TV, Dismisses Class                                     |              |                       | 2                  | A                |           |                  |     |
| 14              | 00:06:14:02 | 00:07:13:14 | Louise drives home from campus, seeing chaos on the way, listens to radio broadcast  |              |                       | 3                  | A                |           |                  |     |
| 15              | 00:07:13:14 | 00:07:37:22 | Louise reaches home,   |              |                       | 4                  | A                |           |                  |     |
| 16              | 00:07:37:22 | 00:09:49:08 | speaking to her mother.spends the evening and night listening to the TV  |              |                       | 5                  | A                |           | Pregnancy Pillow |     |
| 17              | 00:09:49:08 | 00:10:18:23 | Walks through empty university   |              |                       | 6                  | A                |           |                  |     |
| 18              | 00:10:18:23 | 00:14:13:03 | in her office listening to news, when Colonel Weber comes to meet her. When she is unable to help with the translations he leaves. |              |                       | 7                  | A                |           |                  |     |
| 19              | 00:14:13:03 | 00:15:12:05 | Is sleeping at home when weber comes to pick her up  |              |                       | 8                  | A                |           |                  |     |
| 20              | 00:15:12:05 | 00:18:16:15 | Goes with Weber to Montana, meets Ian.   |              |                       | 9                  | B                |           |                  |     |
| 21              | 00:18:16:15 | 00:20:02:19 | Sees the Spaceship for the first time, enters command centre   |              |                       | 10                 | B                |           |                  |     |
| 22              | 00:20:02:19 | 00:23:01:21 | Meets Team   |              |                       | 11                 | B                |           |                  |     |
| 23              | 00:23:01:21 | 00:23:26:21 | Gets dressed for the first session with aliens   |              |                       | 12                 | B                |           |                  |     |
| 24              | 00:23:26:21 | 00:26:51:06 | Louise & Ian approach the ship and are lifted towards the opening.   |              |                       | 13                 | B                |           |                  |     |
| 25              | 00:26:51:06 | 00:32:56:20 | They enter the ship, experience the changed gravity for the first time and meet the aliens.  |              |                       | 14                 | B                |           |                  |     |
| 26              | 00:32:56:20 | 00:33:52:03 | Back to base, inside decontamination tent.   |              |                       | 15                 | B                |           |                  |     |
| 27              | 00:33:52:03 | 00:34:28:22 | At CC Studies the audio recording  |              |                       | 16                 | B                |           |                  |     |

| Sequence Number | Start TC    | End TC      | Description  | Dialogue | Type Linear/NonLinear | Linear Progression | Linear Sequences | Audio Cue                                       | Visual Cue | BGM |
|-----------------|-------------|-------------|--|----------|-----------------------|--------------------|------------------|---|------------|-----|
| 28              | 00:34:28:22 | 00:35:40:00 | Some soldiers watch the chaos happening around the world. Other team heads interface with the team in Australia.                               |          |                       | 17                 | B                |   |            |     |
| 29              | 00:35:40:00 | 00:36:26:07 | Second Session, Louise takes a whiteboard to show them written language. Outside weber protests but allows her to take it.                     |          |                       | 18                 | B                |   |            |     |
| 30              | 00:36:26:07 | 00:39:13:10 | Louise shows the Aliens the word for Human, the aliens respond with the first semasiograph   |          |                       | 19                 | B                |   |            |     |
| 31              | 00:39:13:10 | 00:40:59:06 | Back in Decon, Louise explains why words.  |          |                       | 20                 | B                |   |            |     |
| 32              | 00:40:59:06 | 00:43:30:15 | Louise explains the objective behind teaching them the language  |          |                       | 21                 | B                |   |            |     |
| 33              | 00:43:30:15 | 00:49:04:01 | Louise takes off suit and ian does the Same. More progress.  |          |                       | 22                 | C                |   |            |     |
| 34              | 00:49:04:01 | 00:49:40:08 | Everyone returns to base, Louise feels uneasy  |          |                       | 23                 | C                |   |            |     |
| 35              | 00:49:40:08 | 00:49:58:08 | First V/M, Hannah 8 yrs old, horse out of focus, Louise keeps a hand on hannah's shoulder and soothes the horse.                               |          | NL                    | 139                | N                | Bass tone Prelap                                |            |     |
| 36              | 00:49:58:08 | 00:50:20:05 | Louise outside the CC tent, no indication that shes seen anything. Next shot, soldiers watching louise suspiciously and then exchanging a look |          |                       | 24                 | C                |   |            |     |
| 37              | 00:50:20:05 | 00:50:51:18 | Base doctors performing check-up on Louise. Doctor goes and briefs colonel. Colonel agrees to let Louise continue.                             |          |                       | 25                 | C                |   |            |     |
| 38              | 00:50:51:18 | 00:51:20:11 | Soldier trying to calm down his hysterical wife on the phone   |          |                       | 26                 | C                |   |            |     |
| 39              | 00:51:20:11 | 00:51:46:04 | Louise analysing the logogram. As she draws a line across the page, she sees another V/M   |          |                       | 27                 | C                | Pencil on Paper sound signals the start of a VM |            |     |
| 40              | 00:51:46:04 | 00:51:50:23 | Hannah Age 8, in the reeds   |          | NL                    | 140                | N                | NS  |            |     |
| 41              | 00:51:50:23 | 00:51:54:23 | Louise pauses while drawing.   |          |                       | 28                 | C                |   |            |     |

| Sequence Number | Start TC    | End TC      | Description   | Dialogue | Type Linear/NonLinear | Linear Progression | Linear Sequences | Audio Cue  | Visual Cue                       | BGM |
|-----------------|-------------|-------------|---|----------|-----------------------|--------------------|------------------|--|----------------------------------|-----|
| 42              | 00:51:54:23 | 00:51:57:14 | Hannah Age 8 looking at a caterpillar in the reeds  |          | NL                    | 141                | N                | NS   |                                  |     |
| 43              | 00:51:57:14 | 00:52:00:21 | Louise at the desk, shot from back  |          |                       | 29                 | C                |  | Camera track in like realisation |     |
| 44              | 00:52:00:21 | 00:52:03:18 | Hannah Age 8, dipping a stick in the water  |          | NL                    | 142                | N                | NS   |                                  |     |
| 45              | 00:52:03:18 | 00:52:07:23 | Louise at the desk, shot from back  |          |                       | 30                 | C                |  | Camera track in like realisation |     |
| 46              | 00:52:07:23 | 00:52:08:15 | Hannah Age 8, dipping a stick in the water, flipping a rock over  |          | NL                    | 143                | N                | Rock in water overlap signals the end                            |                                  |     |
| 47              | 00:52:09:08 | 00:52:22:23 | Louise looks up as if she notices a sound   |          |                       | 31                 | C                |  |                                  |     |
| 48              | 00:52:22:23 | 00:55:47:09 | Montage with Ian V.O and interactions with Heptapods, explanations about the nature of their language   |          |                       | 32                 | C                |  |                                  |     |
| 49              | 00:55:47:09 | 00:57:31:03 | Louise speaks to Ian outside on the back of a truck. Suring the conversation, she insinuates that shes had a failed relationship.   |          |                       | 33                 | C                | Trust me...single'   |                                  |     |
| 50              | 00:57:31:03 | 00:57:57:13 | Montage showing the worsening crisis in the world with Ian watching   |          |                       | 34                 | C                |  |                                  |     |
| 51              | 00:57:57:13 | 00:58:31:02 | Soldiers watching an incendiary broadcast and then looking at each other  |          |                       | 35                 | C                |  |                                  |     |
| 52              | 00:58:31:02 | 00:59:20:02 | Louise working at her desk when she hears a page turn. She looks around and ian is doing his own work. She hears the sound again. Hears a little girls voice, Louise tries to get up and feels dizzy. Her own voice saying Planet |          |                       | 36                 | C                | Hannah's Voice (Prelap)- Whats this word, Louise replying Planet |                                  |     |

| Sequence Number | Start TC    | End TC      | Description   | Dialogue | Type Linear/NonLinear | Linear Progression | Linear Sequences | Audio Cue   | Visual Cue | BGM |
|-----------------|-------------|-------------|---|----------|-----------------------|--------------------|------------------|---|------------|-----|
| 53              | 00:59:20:02 | 00:59:23:01 | Shot of Hannah turning a page in a book.  |          | NL                    | 151                | O                |   |            |     |
| 54              | 00:59:23:01 | 00:59:29:07 | VO on Louise from the V/M   |          |                       | 37                 | C                | That's like.. The earth as a planet' Hannah asking' want to see my project..' |            |     |
| 55              | 00:59:29:07 | 01:00:12:19 | Hannah at 8, showing Louise her drawing of mom & dad talking to animals. Louise look at it and tells Hannah that its ok that she and dad aren't together anymore and that they love her. Hannah says she understands. Ian's V/O- Louise |          | NL                    | 152                | O                |   | No ring    |     |
| 56              | 01:00:12:19 | 01:00:42:20 | Louise is sitting down and Ian asks her if she's alright. She says she's okay, and that she cannot explain what is wrong. Weber asks her when her last check-up was, she says she just needs some air.                                  |          |                       | 38                 | C                |   |            |     |
| 57              | 01:00:42:20 | 01:00:53:11 | Louise looking at the spaceship   |          |                       | 39                 | C                |   |            |     |
| 58              | 01:00:53:11 | 01:00:54:18 | Hannah Age 8, in bed, Louise holding her hand   |          | NL                    | 131                | N                |   |            |     |
| 59              | 01:00:54:18 | 01:00:56:10 | Hannah Age 12 at her deathbed, Hannah lying over her.   |          | NL                    | 167                | P                |   |            |     |
| 60              | 01:00:56:10 | 01:01:02:08 | Louise outside, bends over.   |          |                       | 40                 | C                |   |            |     |
| 61              | 01:01:02:08 | 01:01:06:03 | Louise covering Hannah, 12 with a hospital blanket  |          | NL                    | 166                | P                |   |            |     |
| 62              | 01:01:06:03 | 01:01:08:03 | Louise rubbing noses with Hannah 8 in bed.  |          | NL                    | 132                | N                |   |            |     |
| 63              | 01:01:08:03 | 01:01:20:05 | Louise looks at spaceship   |          |                       | 41                 | C                |   |            |     |
| 64              | 01:01:20:05 | 01:01:23:15 | Louise getting in bed with Hannah 8   |          | NL                    | 133.0              | N                |   |            |     |

| Sequence Number | Start TC    | End TC      | Description   | Dialogue | Type Linear/NonLinear | Linear Progression | Linear Sequences | Audio Cue                                    | Visual Cue             | BGM |
|-----------------|-------------|-------------|---|----------|-----------------------|--------------------|------------------|--|------------------------|-----|
| 65              | 01:01:23:15 | 01:01:31:00 | Louise getting in bed with Hannah 12 in hospital  |          | NL                    | 168                | P                |  |                        |     |
| 66              | 01:01:31:00 | 01:01:42:18 | Heptapod in the mist, Ian and Louise VO from Present  |          | NL                    | 63.0               | E                | Bass tone + prelap from Ian & Louise         |                        |     |
| 67              | 01:01:42:18 | 01:02:41:11 | Louise in her room, talking to Ian. She looks up at someone (weber), When asked by Ian if she's dreaming in their language we hear the sound of the canary. She looks up at (weber) and instead sees the heptapod vocalising in the corner of the room. |          |                       | 42                 | C                | Sound of Canary, Sound of Heptapod bass tone | Heptapod in the corner |     |
| 68              | 01:02:41:11 | 01:03:02:16 | Louise wakes up in her trailer when weber asks her to come and help translate mandarin  |          |                       | 43                 | D                |  |                        |     |
| 69              | 01:03:02:16 | 01:05:18:08 | Louise translates General Shang's phone call. They figure out that the Chinese are using mah-jong to converse to their heptapods. Weber pushes her to ask the heptapods their purpose on earth. Ian and Louise get ready                                |          |                       | 44                 | D                |  |                        |     |
| 70              | 01:05:18:08 | 01:06:55:20 | In the ship, Louise asks the heptapods what their purpose on earth is. Heptapods reply with 'offer Weapon'  |          |                       | 45                 | D                |  |                        |     |
| 71              | 01:06:55:20 | 01:09:25:01 | Back at CC Louise tries to defend the heptapods while arguing with the soldiers and weber. She offers to go back to clear it up but it told it cant happen. The other command centres over the world start to go offline.                               |          |                       | 46                 | D                |  |                        |     |

| Sequence Number | Start TC    | End TC      | Description  | Dialogue | Type Linear/NonLinear | Linear Progression | Linear Sequences | Audio Cue        | Visual Cue | BGM |
|-----------------|-------------|-------------|--|----------|-----------------------|--------------------|------------------|------------------|------------|-----|
| 72              | 01:09:25:01 | 01:14:07:17 | Louise and Ian rush to re-enter a session. Montage of news. AT the spaceship, the renegade soldiers load a bomb into the spaceship while the heptapods look on. Louise and Ian enter the ship against the advise of the soldiers. When they reach the inside, there are 4 mins left on the timer. back at CC they have lost contact with the soldiers who set the bomb. weber asks to send security. Louise tries to ask the heptapod to explain. The heptapod knocks on the screen to grab her attention. Outside the soldiers are having a showdown with the others from the base. with 2 mins to go, louise approaches the barrier and the heptapod releases a cloud of ink. She tries to write with the heptapod when she gets another V/M |          |                       | 47                 | D                | BG Music Overlap |            |     |
| 73              | 01:14:07:17 | 01:14:15:13 | Louise placing Hannah Age 1 into the crib  |          | NL                    | 117                | K                | BG Music Overlap |            |     |
| 74              | 01:14:15:13 | 01:14:18:02 | Louise with her eyes closed at the barrier   |          |                       | 48                 | D                |                  |            |     |
| 75              | 01:14:18:02 | 01:14:20:17 | Louise'e hand holding baby Hannah's hand. She's wearing a wedding ring.  |          |                       | 119                | K                |                  |            |     |
| 76              | 01:14:20:17 | 01:16:04:20 | Louise opens her eyes and writes with the Heptapod. As soon as she finishes both heptapods release a huge cloud of ink with symbols. They hear gunshots outside. One heptapod pushes them outside the chamber just as the bomb exploded and seals it. Ian and Louise float just outside the chamber.   |          |                       | 49                 | D                |                  |            |     |

| Sequence Number | Start TC    | End TC      | Description   | Dialogue | Type Linear/NonLinear | Linear Progression | Linear Sequences | Audio Cue                  | Visual Cue | BGM |
|-----------------|-------------|-------------|---|----------|-----------------------|--------------------|------------------|----------------------------|------------|-----|
| 77              | 01:16:04:20 | 01:18:33:12 | Louise wakes up in the medical tent. She rushes to Ian and the team as they look at the massive amount of data gathered from the last session. Louise tells weber that they cannot leave and they have to go back and explain. Weber says they are evacuating. suddenly they hear the ships manoeuvre up and above the reach of humans. |          |                       | 50                 | E                |                            |            |     |
| 78              | 01:18:33:12 | 01:19:43:07 | Military lead speaks to secretary of defence, asks them to get prepared for retaliation. News montage, China declares war with other countries following their lead.  |          |                       | 51                 | E                |                            |            |     |
| 79              | 01:19:43:07 | 01:20:12:01 | Louise and Ian try to analyse data  |          |                       | 52                 | E                |                            |            |     |
| 80              | 01:20:12:01 | 01:20:19:05 | As Louise looks on, we hear Hannah Age 12 ask Louise 'What's this term here'  |          |                       | 53                 | E                | Hannah's Voice prelap      |            |     |
| 81              | 01:20:19:05 | 01:20:22:06 | Hanna's VO- Mum   |          |                       | 54                 | E                | Hannah's Voice prelap      |            |     |
| 82              | 01:20:22:06 | 01:21:03:20 | Hannah Age 12 approaches Louise and asks her a technical term for a deal. When Louise isn't able to answer, Hannah gets frustrated. Louise in turn asks her to call her father. Hannah clearly doesn't want to do that and starts to leave.   |          | NL                    | 159                | P                |                            |            |     |
| 83              | 01:21:03:20 | 01:22:38:05 | Louise wakes up hearing Ian's Voice. Ian has had a breakthrough. He shows Louise how the message they received is 1 of 12.  |          |                       | 55                 | E                | Hannah's footsteps overlap |            |     |
| 84              | 01:22:38:05 | 01:24:06:16 | Ian and Louise try to convince the military leadership to talk to other sites around the world. But they say its impossible to do so. Military lead asks how can they convince the other countries to co-operate? Ian suggests a trade, like a non-zero sum game. Louise looks up.  |          |                       | 56                 | E                |                            |            |     |

| Sequence Number | Start TC    | End TC      | Description   | Dialogue | Type Linear/NonLinear | Linear Progression | Linear Sequences | Audio Cue                                    | Visual Cue | BGM |
|-----------------|-------------|-------------|---|----------|-----------------------|--------------------|------------------|--|------------|-----|
| 85              | 01:24:06:16 | 01:24:20:05 | Louise tells Hannah Age 12 -non-zero sum game, just as she's climbing stairs. Hannah says that's the term and tells her thanks.   |          | NL                    | 160                | P                | BG Sound prelap                              |            |     |
| 86              | 01:24:20:05 | 01:24:35:17 | Back in the present Louise looks like she's trying to understand something and everyone talks around her.   |          |                       | 57                 | E                | BG sound continues                           |            |     |
| 87              | 01:24:35:17 | 01:24:43:12 | V/M a small space ship detaches from the bigger one and comes towards earth as the audio from the tent continues,   |          | NL                    | 61                 | E                | Conversation from the tent overlaps with BGM |            |     |
| 88              | 01:24:43:12 | 01:24:45:11 | Louise lost in thoughts   |          |                       | 58                 | E                |  |            |     |
| 89              | 01:24:45:11 | 01:24:50:11 | Louise sees the ink cloud on her hands V/M. Audio continues   |          | NL                    | 65                 | E                | Conversation from the tent overlaps with BGM |            |     |
| 90              | 01:24:50:11 | 01:25:16:17 | As they continue to talk about the evacuation, Louise quietly slips outside the tent. Ian notices her gone.   |          |                       | 59                 | E                |  |            |     |
| 91              | 01:25:16:17 | 01:26:07:22 | Ian watches Louise get into the smaller ship.   |          |                       | 60                 | E                |  |            |     |
| 92              | 01:26:07:22 | 01:29:17:01 | Louise enters the smaller ship. She is then transported into the heptapod chamber on the other side of the barrier where she meets one of the aliens- Costello who tells her that Abbott is dying. .  |          |                       | 62                 | E                |  |            |     |
| 93              | 01:29:17:01 | 01:29:22:15 | Louise looks down and sees the ink cloud on her hands   |          |                       | 64                 | E                |  |            |     |
| 94              | 01:29:22:15 | 01:30:51:14 | Louise apologises to Castello. She asks him for help in sending a message to other sites when Castello tells her that she has the weapon and to use it. When she says she doesn't understand, Castello tells her that they are helping humanity now, so that 3000 yrs. later humanity can help the heptapods. When she asks how they know the future, Castello vocalises something and Louise has a V/M |          |                       | 66                 | E                |  |            |     |

| Sequence Number | Start TC    | End TC      | Description  | Dialogue  | Type Linear/NonLinear | Linear Progression | Linear Sequences | Audio Cue                               | Visual Cue | BGM |
|-----------------|-------------|-------------|--|-----------|-----------------------|--------------------|------------------|---|------------|-----|
| 95              | 01:30:51:14 | 01:30:52:05 | Hannah Age 8 looking up at Louise  |           | NL                    | 144                | N                | alien vocalization continues            |            |     |
| 96              | 01:30:52:05 | 01:30:54:08 | Louise in the present reacting to the V/M  |           |                       | 67                 | E                |   |            |     |
| 97              | 01:30:54:09 | 01:30:57:07 | Hannah Age 8 Playing in the reeds  |           | NL                    | 145                | N                |   |            |     |
| 98              | 01:30:57:08 | 01:31:06:11 | Louise says she doesn't understand and asks Castello about the child she sees in her V/M                                   |           |                       | 68.0               | E                |   |            |     |
| 99              | 01:31:06:11 | 01:31:09:09 | Hannah Age 8 shows Louise the drawing of Her and Ian   |           | NL                    | 153.0              | O                | alien vocalization continues            |            |     |
| 100             | 01:31:09:09 | 01:31:12:13 | Hannah's drawing framed on the wall  | Track in  | NL                    | 156                | O                | alien vocalization continues; Hannah VO |            |     |
| 101             | 01:31:12:13 | 01:31:16:23 | Hannah making clay animals including a clay heptapod   |           | NL                    | 154                | O                | alien vocalization continues; Hannah VO |            |     |
| 102             | 01:31:16:23 | 01:31:21:09 | Hannah's drawing framed on the wall with the canary in focus   | Track out | NL                    | 157                | O                | alien vocalization continues; Hannah VO |            |     |
| 103             | 01:31:21:09 | 01:31:29:18 | Louise reacts in the present, Castello tells Louise that she sees the future   |           |                       | 69                 | E                |   |            |     |
| 104             | 01:31:29:18 | 01:31:32:19 | Louise bent over baby Hannah in the hospital   |           | NL                    | 114                | J                | alien vocalization continues            |            |     |
| 105             | 01:31:32:19 | 01:31:52:17 | Louise reacts in the present, Castello tells her the weapon opens time and then he glides away as Louise tells him to stop |           |                       | 70                 | E                |   |            |     |
| 106             | 01:31:52:17 | 01:32:13:07 | Louise in her home, realisation  |           | NL                    | 125                | L                | BGM                                     |            |     |

| Sequence Number | Start TC    | End TC      | Description   | Dialogue                | Type Linear/NonLinear | Linear Progression | Linear Sequences | Audio Cue                                  | Visual Cue | BGM |
|-----------------|-------------|-------------|---|-------------------------|-----------------------|--------------------|------------------|--|------------|-----|
| 107             | 01:32:13:07 | 01:33:04:00 | Spaceship prepares for take-off as Louise is back on the ground and Ian and others rush towards her. Ian helps her. Weber tells her that they have to evacuate. As Ian is helping her inside the car, Louise hears Hannah's Voice. She looks down and ..  | Help me<br>mamma        |                       | 71                 | F                | Hannah VO Prelap                           |            |     |
| 108             | 01:33:04:00 | 01:33:06:12 | Louise sees Hannah Age 8 , standing with one boot off and holding Louise's hand   | Vo From<br>present- Ian | NL                    | 149                | O                |  |            |     |
| 109             | 01:33:06:12 | 01:33:07:19 | As Louise's knees buckle, Ian catches her.  |                         |                       | 72                 | F                |  |            |     |
| 110             | 01:33:07:19 | 01:35:13:20 | Hannah Age 8, calls out to Louise again. Louise looks around and stoops to help Hannah. Hannah asks Louise if she is going to leave her like her daddy did. Louise reminds her that daddy hasn't left her, and that he will see her next Sunday. H says daddy doesn't look at her the same way anymore. Louise confesses that its her fault and that she told him something he wasn't ready to hear and its about something she knows is going to happen and that Hannah's father got angry when he heard it and said she made the wrong choice. and its about a rare disease. etc- Louise tries to placate Hannah. |                         | NL                    | 150                | O                | Helicopter overlap and<br>fade, BGM prelap |            |     |
| 111             | 01:35:13:21 | 01:36:05:08 | Continue from shot before, Ian holds up Louise, In her confusion, she tells him that she knows now why her husband left her. Ian asks her if she was married before. The spaceship is now almost parallel to the ground. Montage footage from all over the world as the ships move in sync and there is widespread panic  |                         |                       | 73.0               | F                | BGM  |            |     |
| 112             | 01:36:05:08 | 01:36:10:23 | Hannah Age 8 in bed, asks Louise why her name is Hannah   |                         | NL                    | 134                | N                | Helicopter overlap and fade                |            |     |
| 113             | 01:36:10:23 | 01:36:15:19 | Louise enters command centre looking for something  |                         |                       | 74                 | F                |  |            |     |

| Sequence Number | Start TC    | End TC      | Description   | Dialogue | Type Linear/NonLinear | Linear Progression | Linear Sequences | Audio Cue  | Visual Cue | BGM |
|-----------------|-------------|-------------|---|----------|-----------------------|--------------------|------------------|------------|------------|-----|
| 114             | 01:36:15:19 | 01:36:24:16 | Louise explains to Hannah Age 8 that her name is very special because it is a palindrome and reads the same forwards and backwards.                   |          | NL                    | 135                | N                |            |            |     |
| 115             | 01:36:24:16 | 01:36:37:19 | Louise and Ian in CC, Louise goes to a computer terminal  |          |                       | 75                 | F                |            |            |     |
| 116             | 01:36:37:19 | 01:36:43:16 | Louise in the future, cutting open a packed box.  |          | NL                    | 120                | L                |            |            |     |
| 117             | 01:36:43:16 | 01:36:48:03 | Louise in the present logging into the terminal while soldiers around her evacuate  |          |                       | 76                 | F                |            |            |     |
| 118             | 01:36:48:03 | 01:36:53:15 | Louise in the future takes out a book called the universal language written by her and looks at the back. Wedding ring visible                        |          | NL                    | 121                | L                |            |            |     |
| 119             | 01:36:53:15 | 01:36:57:21 | Louise in the present looking at the message sent by the heptapods  |          |                       | 77                 | F                |            |            |     |
| 120             | 01:36:57:21 | 01:37:02:08 | Louise in the future opens the book and sees the dedication page made out to Hannah   |          | NL                    | 122                | L                | Ian prelap |            |     |
| 121             | 01:37:02:08 | 01:37:08:23 | Ian in present tells her that they are leaving. Louise asks him to wait. Louise closes her eyes and makes the motion of turning a page with her hands |          |                       | 78.0               | F                |            |            |     |
| 122             | 01:37:08:23 | 01:37:14:22 | Louise in the future turns to the first page of the book  |          | NL                    | 123                | L                | BGM        |            |     |
| 123             | 01:37:14:22 | 01:37:22:19 | Louise in the present swipes quickly through the symbols  |          |                       | 79                 | F                |            |            |     |
| 124             | 01:37:22:19 | 01:37:29:18 | Louise in the future teaching a packed class the heptapod language  |          | NL                    | 124                | L                |            |            |     |
| 125             | 01:37:29:18 | 01:37:42:09 | Louise in the present says she can read the language and that's its not a weapon but it's a gift.   |          |                       | 80                 | F                |            |            |     |

| Sequence Number | Start TC    | End TC      | Description   | Dialogue | Type Linear/NonLinear | Linear Progression | Linear Sequences | Audio Cue       | Visual Cue | BGM |
|-----------------|-------------|-------------|---|----------|-----------------------|--------------------|------------------|-----------------|------------|-----|
| 126             | 01:37:42:09 | 01:38:34:12 | Outside she tries to convince weber that its not a weapon, its their entire language and that if you learn their language you start to experience time the way they do, as non-linear. Weber is not convinced and tells her everyone is asked to evacuate, he wishes them luck and leaves. Ian goes to find out where they are supposed to go.  |          |                       | 81                 | F                |                 |            |     |
| 127             | 01:38:34:12 | 01:38:39:18 | Hannah Age 8 tells a sleeping Louise to wake up.  |          | NL                    | 147                | N                | Helicopter fade |            |     |
| 128             | 01:38:39:18 | 01:38:51:20 | On the field in the present Louise reacts to the Vision/Memory  |          |                       | 82                 | F                |                 |            |     |
| 129             | 01:38:51:20 | 01:40:37:14 | A party seen from the top. Louise is looking down at the guests. She turns around and sees a Chinese man approach her. General Shang tells her that although he's been invited for the celebration , he's actually come to meet her because she changed his mind 18 months ago and that she's the reason of this unification. and that she reached out to him on his private number. When she says she doesn't know his private number, General Shang shows her the number on his phone. He doesn't know why but he knows that it was important for her to see the number. Louise has an epiphany and asks him is she called him. |          | NL                    | 97                 | H                | BGM             |            |     |

| Sequence Number | Start TC    | End TC      | Description   | Dialogue | Type Linear/NonLinear | Linear Progression | Linear Sequences | Audio Cue | Visual Cue | BGM |
|-----------------|-------------|-------------|---|----------|-----------------------|--------------------|------------------|-----------|------------|-----|
| 130             | 01:40:37:14 | 01:42:00:04 | On the field Louise suddenly knows what needs to be done. She rushes back to the tent. Ian looks after her. Louise steals a sat phone from a desk and dials General Shang. At another end of the tent, the teams figures out someone is calling China using the head's phone. He commands the soldiers to find out who is calling from the phone. Louise in the meantime heads to the decontamination area. As she waits for the general to pick up his phone, she wonders what she should say to him. The soldiers in the meantime look for the phone. Ian also comes back to look for Louise. |          |                       | 83                 | F                | BGM       |            |     |
| 131             | 01:42:00:04 | 01:42:06:08 | In the future General Shang tells Louise that he will never forget what she said to him that day 18 months ago.   |          | NL                    | 98.0               | H                | BGM       |            |     |
| 132             | 01:42:06:08 | 01:42:10:04 | In the present General Shang picks up Louise's call   |          |                       | 84                 | F                | BGM       |            |     |
| 133             | 01:42:10:04 | 01:42:18:03 | In the future, General Shang tells Louise that she told him his wife's dying words.   |          | NL                    | 99                 | H                | BGM       |            |     |
| 134             | 01:42:18:03 | 01:42:30:06 | In the present Louise speaks to General Shang in Mandarin just as soldiers come looking for her Louise locks herself up in the decontamination chamber.   |          |                       | 85                 | F                | BGM       |            |     |
| 135             | 01:42:30:06 | 01:42:32:08 | In the future General Shang tells Louise the words of his dying wife  |          | NL                    | 100                | H                | BGM       |            |     |
| 136             | 01:42:32:08 | 01:42:59:11 | In the present Louise repeats the same words to General Shang as the soldiers come in and train guns on her. Ian enters from the other side and Louise asks him to help.  |          |                       | 86                 | F                | BGM       |            |     |
| 137             | 01:42:59:11 | 01:43:01:15 | In the future General Shang continues to tell Louise the words  |          | NL                    | 101                | H                | BGM       |            |     |
| 138             | 01:43:01:15 | 01:43:08:13 | in the present Ian continues to defend her from the soldiers.   |          |                       | 87                 | F                | BGM       |            |     |

| Sequence Number | Start TC    | End TC      | Description  | Dialogue   | Type Linear/NonLinear | Linear Progression | Linear Sequences | Audio Cue | Visual Cue                             | BGM |
|-----------------|-------------|-------------|--|--|-----------------------|--------------------|------------------|-----------|--|-----|
| 139             | 01:43:08:13 | 01:43:13:12 | In the future, general Shang finishes. Louise looks on.  |  | NL                    | 102                | H                | BGM       |  |     |
| 140             | 01:43:13:12 | 01:43:18:12 | In the present Louise finishes the phone call.   |  |                       | 88                 | F                | BGM       |  |     |
| 141             | 01:43:18:12 | 01:43:31:20 | In the future General Shang says something to Louise who now understands.  |  | NL                    | 103                | H                | BGM       | no wedding ring, therefore not married |     |
| 142             | 01:43:31:20 | 01:45:18:08 | News Montage. The worlds armies stand down following General Shang's retreat. The spaceships take off and disappear. |  |                       | 89                 | G                |           |  |     |
| 143             | 01:45:18:08 | 01:45:59:16 | Future- Shot from Louise's house, Louise pours herself a glass of wine. Same as 1st shot                             |  | NL                    | 105                | I                | BGM       |  |     |
| 144             | 01:45:59:16 | 01:46:22:12 | Present- Choppers take off on the base camp in the present. Ian asks Louise if she's okay.                           | Louise's VO continuing the letter to Hannah- this is where your story begins, the day they departed. |                       | 90                 | G                |           |  |     |
| 145             | 01:46:22:12 | 01:46:32:10 | Future- Louise looks out at man standing on the edge of the lake   | Despite knowing where the journey leads, I embrace it  | NL                    | 106                | I                |           |  |     |
| 146             | 01:46:32:10 | 01:46:36:21 | Louise with baby Hannah in the hospital  |  | NL                    | 115                | J                |           |  |     |

| Sequence Number | Start TC    | End TC      | Description   | Dialogue | Type Linear/NonLinear | Linear Progression | Linear Sequences | Audio Cue | Visual Cue | BGM |
|-----------------|-------------|-------------|---|----------|-----------------------|--------------------|------------------|-----------|------------|-----|
| 147             | 01:46:36:21 | 01:46:50:18 | Louise playing with Hannah age 1 with a man (husband) laying next to her  |          | NL                    | 118.0              | K                |           |            |     |
| 148             | 01:46:50:18 | 01:46:55:16 | Louise teaching Hannah age 8 about her palindrome name  |          | NL                    | 136                | N                |           |            |     |
| 149             | 01:46:55:16 | 01:47:10:16 | Louise beckons the man from the lake  |          | NL                    | 107                | I                |           |            |     |
| 150             | 01:47:10:16 | 01:47:30:00 | Louise teaching Hannah age 8 about her palindrome name, Ian's voice, Hannah calls him daddy, Ian is wearing a wedding ring,                                 |          | NL                    | 137                | N                |           |            |     |
| 151             | 01:47:30:00 | 01:47:41:19 | In the present Louise looks at Ian on the field   |          |                       | 91                 | G                |           |            |     |
| 152             | 01:47:41:19 | 01:47:52:04 | In the future, Ian gets ready to read Hannah 8 a book.  |          | NL                    | 138                | N                |           |            |     |
| 153             | 01:47:52:04 | 01:48:19:04 | In the present Louise asks Ian if he saw his whole life laid out start to finish, would he change things. Ian answers maybe he will say what he feels more. |          |                       | 92                 | G                |           |            |     |
| 154             | 01:48:19:04 | 01:48:27:21 | In the future Louise dances   |          | NL                    | 108.0              | I                |           |            |     |
| 155             | 01:48:27:21 | 01:48:57:12 | In the present, Ian tells Louise that he is most surprised to have met her.   |          |                       | 93.0               | G                |           |            |     |
| 156             | 01:48:57:12 | 01:49:04:19 | In the future, Louise dances with Ian at the lake house   |          | NL                    | 109                | I                |           |            |     |
| 157             | 01:49:04:19 | 01:49:22:19 | In the present Louise hugs Ian  |          |                       | 94                 | G                |           |            |     |
| 158             | 01:49:22:19 | 01:49:28:14 | In the future Louise hugs Ian at the lake house   |          | NL                    | 110                | I                |           |            |     |

| Sequence Number | Start TC    | End TC      | Description   | Dialogue | Type Linear/NonLinear | Linear Progression | Linear Sequences | Audio Cue | Visual Cue | BGM |
|-----------------|-------------|-------------|---|----------|-----------------------|--------------------|------------------|-----------|------------|-----|
| 159             | 01:49:28:14 | 01:49:36:18 | In the present Louise tells Ian she forgot what it felt like to be hugged by him                            |          |                       | 95                 | G                |           |            |     |
| 160             | 01:49:36:18 | 01:49:43:16 | A shot of the drawing Hannah made of Louise and Ian and the canary  |          | NL                    | 158                | O                |           |            |     |
| 161             | 01:49:43:16 | 01:49:50:02 | Louise and Ian dancing at the lake house, wedding ring visible, Ian asks Louise if she wants to make a baby |          | NL                    | 111                | I                |           |            |     |
| 162             | 01:49:50:02 | 01:49:55:13 | Hannah Age 6 running in the grass in red dress  |          | NL                    | 127                | M                |           |            |     |
| 163             | 01:49:55:13 | 01:49:58:04 | Hannah Age 8 wearing a blue raincoat looking at something   |          | NL                    | 146                | N                |           |            |     |
| 164             | 01:49:58:04 | 01:50:01:13 | Hannah Age 6 running in the grass in red dress  |          | NL                    | 128                | M                |           |            |     |
| 165             | 01:50:01:13 | 01:50:05:09 | Hannah Age 8 making clay animals  |          | NL                    | 155                | O                |           |            |     |
| 166             | 01:50:05:09 | 01:50:13:23 | Ian holding Hannah Age 1  |          | NL                    | 116                | K                |           |            |     |
| 167             | 01:50:13:23 | 01:50:16:18 | Hannah Age 6 running in the grass in red dress  |          | NL                    | 129                | M                |           |            |     |
| 168             | 01:50:16:18 | 01:50:20:16 | Hannah Age 8 backlit  |          | NL                    | 148                | N                |           |            |     |
| 169             | 01:50:20:16 | 01:50:24:17 | Louise saying yes to Ian at the lake house  |          | NL                    | 112                | I                |           |            |     |
| 170             | 01:50:24:17 | 01:50:33:08 | Louise holding Ian on the field.  |          |                       | 96                 | G                |           |            |     |
| 171             | 01:50:33:08 | 01:56:15:23 | End Credits   |          |                       | 170                |                  |           |            |     |

## Appendix 7

### *Arrival* Sequencing and Analysis

| SEQ. | DESCRIPTION   | DURATION    | SC/SH  |
|------|---|-------------|--------|
| A    | Louise goes to university, Aliens Arrive on Earth, Louise goes home, contacted by military  | 00:12:29:14 | 8Sc    |
| B    | Louise is taken to Montana to join the team, meets Ian, interacts with Aliens   | 00:33:51:20 | 13Sc   |
| C    | Louise has first contact without suit, starts seeing visions/flashbacks-forwards  | 00:11:50:00 | 21Sc   |
| D    | China gives an ultimatum, Louise and Ian find out the aliens want to give weapon, soldiers place Bomb in the spaceship, Louise and Ian are given the Alien Language, Bomb explodes, and L and I are pushed out of Ship  | 00:13:12:22 | 7Sc    |
| E    | Louise and Ian try to Decipher the language, find out that it is 1/12th of the whole, they fail at convincing the others, Louise Enters spaceship alone to understand the nature of the gift. Heptapod shows her more vision and explains their purpose, Louise realizes that she can see the future. | 00:14:46:00 | 21Sc   |
| F    | Louise comes back to the CC and can now read the language fluently. while everyone else is evacuating, she steals a sat phone and calls General Shang in China and tells him his wife's dying words while the soldiers try to stop her.   | 00:05:59:01 | 18Sc   |
| G    | China stands down with other nations when they realize they have to work together. Aliens Leave, Ian shows interest in Louise   | 00:03:52:13 | 8Sc    |
| H    | Meets General Chang at a party to celebrate the coming together of nations and He gives her his private number and tells her his wife's dying words   | 00:02:22:10 | 7Sh    |
| I    | Now Married, Louise and Ian decide to have a baby   | 00:02:16:09 | 9Sh    |
| J    | Baby Hannah is born. Louise in the hospital with the nurse and baby Hannah. We can see the wedding ring in this sequence.   | 00:00:42:14 | 3Sh    |
| K    | Baby Hannah at 1yr and Ian and Louise happy together  | 00:00:32:22 | 4Sh    |
| L    | Louise writes a book on the language and teaches Heptapod to a full classroom. Dedicated to Hannah and wearing a ring   | 00:00:49:08 | 6Sc/Sh |
| M    | Hannah 4 Playing with Louise near the lake in a horse outfit  | 00:00:44:04 | 4Sh    |
| N    | Hannah at 6, Louise and Ian put Hannah to bed. Hannah tells Louise she loves her. Louise explains to Hannah her name  | 00:01:48:06 | 19Sh   |

|   |  |             |         |
|---|--|-------------|---------|
| O | Hannah at 6, Ian has found out about Louise knowing how Hannah will die and has left them, Louise plays with Hannah alone. | 00:03:16:10 | 10Sh    |
| P | Louise with Hannah Age 12, asking about zero sun game, saying I hate you, falling ill, dying.                              | 00:01:55:03 | 11Sc/Sh |

### Transitions, Visual

1. Seq. 3 andSq.10 The composition of Louise bent over Hannah as a baby is repeated in her death shot, with the same staging, except now Hannah is 12-14 and dying/dead on a hospital bed. Louise also repeats the same dialogue – ‘Come back to me’
2. Seq. 5 and6 Hannah at 6 says I Love you, Hannah at 12 says ‘I hate you’
3. Seq. 11 to 12 Louise walks alone along the hospital corridor after Hannah’s death. Camera tracks in with her movement which is slightly Left to right. Cut to Louise walking up the stairs towards her class, Left to right. Match movement Left to write to create continuity. This is a misleading link, designed to make the audience feel that the earlier montage was her Past and the current scene is her Present.
4. Seq. and--. Louise initiates first contact without her protective suit. So far Heptapods have been shrouded in the mist. As she approaches the barrier, everyone in the CC panic. The Heptapod mimics her gesture of a hand raised in a greeting. She then introduces herself and receives a written logogram in return. Ian follows her and doffs his suit and introduces himself while the other soldiers and the people back at the command center look on with suspicion. Next Sequence is when Louise has her first Vision/ Memory as she returns to the base after the first contact; introducing Hannah to a horse. The framing of this shot is similar to that of the heptapods in the spaceship, the imposing figure of the horse is out of focus, and as it steps closer to Hannah, she backs away in fear. Louise pulls Hannah closer to herself and soothes the horse with the same raised hand (on its nose) as she did with the heptapods. Here we make the connection Hannah/audience = Ian/Command Centre/Soldiers/Child; Horse = Heptapod and Louise = confident explorer/protector/mother in both sequences. This is another misleading connection. We often rely on past experiences and memories to help make sense of new events in our life (cite?). As a flashback that explains Louise’s action (doffing

the suit without permission and approaching the barrier) the V/M fits perfectly in a standard reaction to an unusual circumstance. Note: The rectangle frame is repeated behind the horse as is with the barrier in the spaceship.



5. Seq. 39 to 47 Louise is analyzing the logo forms when she has her second V/M. she gets up out of her chair and as she draws a line across the page, she pauses as if remembering something. In the next shot we see Hannah at 6, in a tall field of grass, looking for something with the camera approaching her. We cut to Louise in the Present again, frozen at her task, as if remembering Hannah who in the next shot has found a black caterpillar and is prodding it. In cutting back and forth between present Louise and V/M Hannah, we see Hannah playing with a stick in the water (making circular motions as if emulating the logogram and bent over in the same way Louise is over her desk) Hannah upturns a rock in the stream, the abrupt sound of which brings us back to Louise still bent over a desk. With a slight look up as if having heard the sound / figured out something, a tired looking Louise resumes her task. Chappelle W, in her article on the mnemonic devices in the film, points out that the black form of the logograms resembles that of the black caterpillar that Hannah touches in the V/M Louise experiences. (Chappelle Wojciehowski, 2018) explain.



6. Misleading Dialogue: Seq. 49 Ian says he's probably single because he doesn't understand communication. Louise points out that you could study communication and still end up single. Building on what we know about Louise so far, one can assume that Louise has had a bad relationship and is jaded from the experience. This misleads us into thinking Hannah was born and died before this present moment that we see.
7. Seq. 52. Louise is working on the logograms again when she hears a page turn. This is a non-diegetic sound. She looks around and Ian is working on his own console. Louise hears a little girl's voice saying 'What's this word?' (Non-Diegetic Sound) She gets up from the desk and feels dizzy and sits back down on a chair. Ian notices her and makes a move towards her. Louise hears her own voice say 'Planet (NDS), Like..umm, The earth is a planet' We see Louise sitting stunned. The little girl's voice continues 'Want to see my project for Ms. Garret's class?'. We cut to Hannah 6, and Louise at her dining table. Hannah shows Louise a drawing (out of focus) of her mother and father. She explains it's a show called mommy and daddy talk to animals. The drawing is out of focus and the lower part which has the canary bird in the cage is off screen. But the crux of the scene is Louise trying to make sure Hannah is okay with the divorce. Hannah says she understands but also seems like she doesn't want to talk about it. With an audio overlap of Ian saying "Louise?" we cut back to him crouched in front of Louise in concern back in the command center. She is unable to explain to him what is wrong when Col. Weber asks her when her check up was. Louise steps outside and paces with the spaceship looming in the background. We cut to a short burst of V/Ms, Louise putting Hannah to sleep, Louise on Hannah's deathbed, each composition similarly staged. At one point Louise in the present turns to look at the spaceship, as if trying to figure something out. We cut to the heptapod in the mist, and Ian's audio overlap asking Louise how she's feeling. Louise is now in her trailer in the Command Centre, she says she's fine, she just needs some sleep. Ian mentions the Sapir Whorf Theory and asks her if she's dreaming in the heptapod language and Louise pauses, we hear the NDS of the canary bird chirping

and as she defends herself, she looks into the other corner (where presumably Col. Weber stands) and we see that she's hallucinating, a Heptapod is in the trailer standing against the door. We cut from the Heptapod vocalizing to Louise in the same trailer sleeping. In this cluster from sequence, we start from a montage that has just explained to the audience everything the characters in the film know about the aliens so far. After one sequence showing soldiers listening to incendiary broadcasts, we come to this V/M where Hannah asks what a word is (Planet). This keeps with the theme of Planet earth that has been continuing from the montage. In a straightforward reading from a less vigilant viewer, Louise is exhausted from the work she's been doing and has flashbacks about her daughter and her ex-husband. According to Chappelle, this point is also where some viewers will make the connection that Louise hasn't, - that Hannah is her future daughter with Ian. (Chapelle Wojciehowski, 2018). We posit that the false reading is more prevalent than the solving of the mystery, as the drawing which affords the clue is out of focus and one cannot clearly see the canary at the bottom of the page. Especially, with Louise's reactions (she is bent over, like she's trying to process a difficult emotion) outside the tent with her V/M's of Hannah's life and death. In all, we feel this is a deliberate design on the part of the film makers to mislead the audience into making the wrong assumption.

8. Seq. 72 to 76
9. Seq. 80 to 83 NDS Hannah at 12 asks Louise what a term is. Louise and Ian are trying to analyze all the data they have received from the Heptapods before the bomb detonated. We cut to Hannah trying to get Louise's attention (Louise is bent over and lost in her work the same way as in the present time) Hannah asks her for a term to use in her homework. Louise doesn't know and asks her to call her father. Hannah turns away without a word, Louise looks at her as she climbs the stairs to go upstairs. We cut to Louise sleeping on the table in the command center next to Ian. The NDS footsteps continue for a moment. As she wakes up, Ian tells her he's had a breakthrough with the data. They go to the others to convince them to share the data with the other sites. As Ian explains, he uses the term non-Zero Sum Game, we cut to Louise with Hannah, repeating the term as Hannah walks up to her room. Hannah stops and says that's it, that was the term she was looking for.

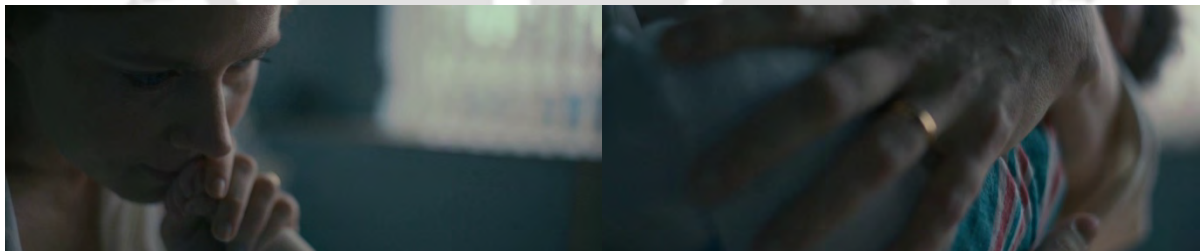
## Beginning Montage

002: Linear H

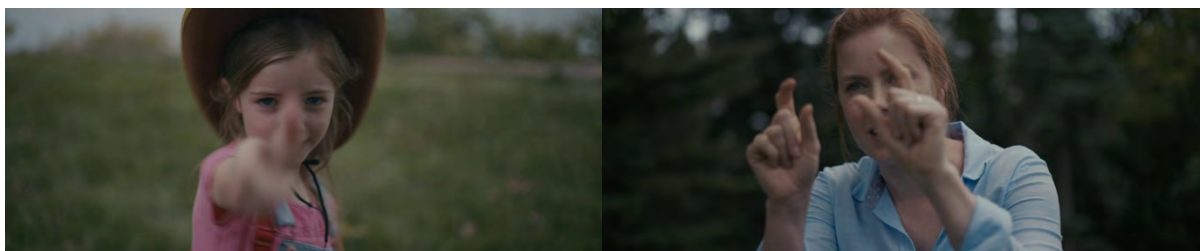


Louise VO. Two wine glasses on the table, melancholy music. Dusk. This rectangular frame is repeated all over the film, especially in the alien sequences. Louise's voiceover starts by saying- 'I used to think this was the beginning of your story. Memory is a strange thing; it doesn't work like I thought it did. We are so bound by time, by its order.'

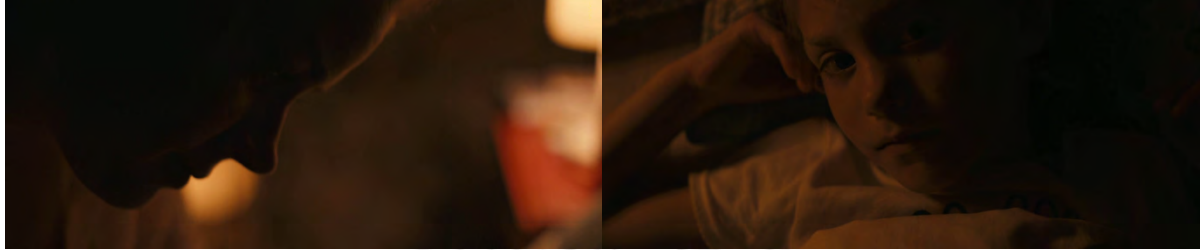
003-006: Linear K



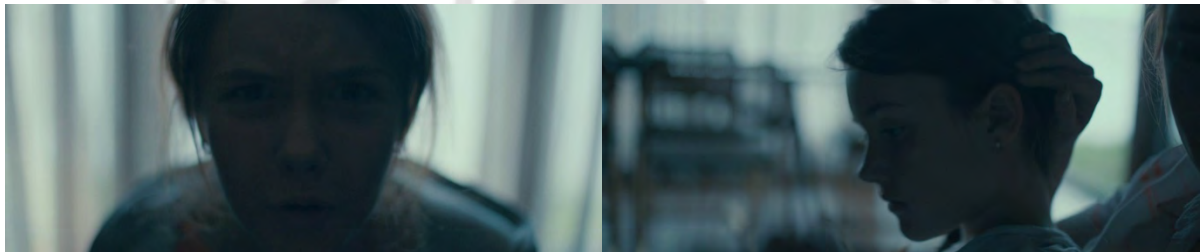
We see Louise with a newborn child, and assume that the 'you' she is this baby. Music continues. Louise takes the baby back from the nurse when it starts to fuss while saying 'come back to me'. She is wearing a gold wedding ring.



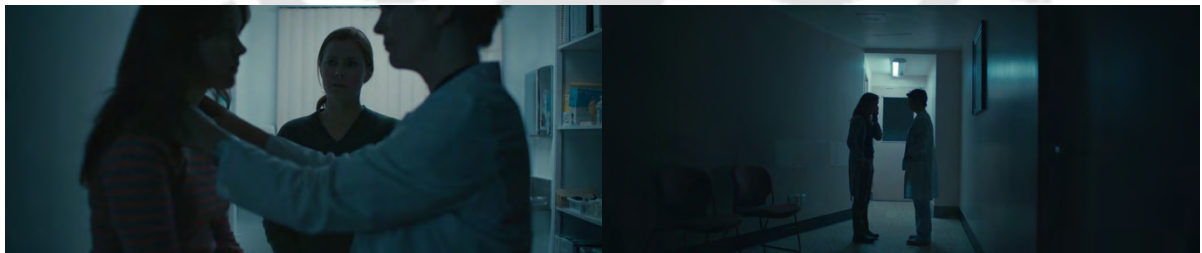
In the next sequence, she is playing with a 5 yr. old girl in the yard of the same house we saw before, judging by the lake in the background. Louise is still wearing the wedding ring.



Louise's VO: 'I remember the moments in the middle'. Her daughter is older now and she says 'I love you' to her mother. Louise's wedding ring is still visible.



Immediately we cut to an older girl, around 15, shouting 'I HATE YOU' to the Camera, continuing from the earlier shot, this is directed towards Louise. We see the girl being examined by a doctor, and Louise breaking down at the diagnosis.

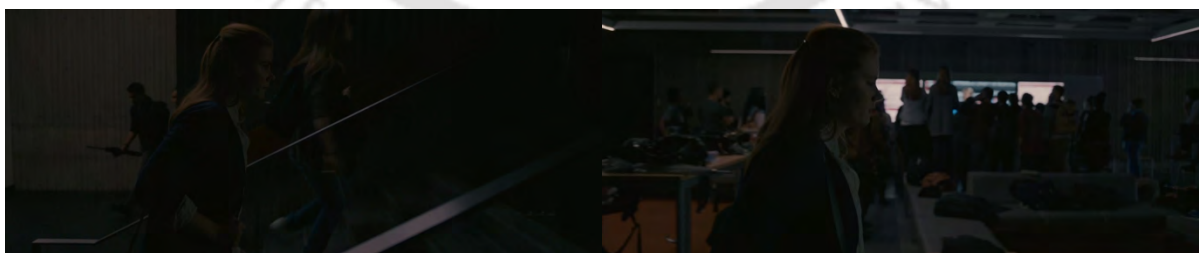


Louise's VO: 'And this was the end' Her daughter, now ravaged by the disease, dies in the hospital. Louise's hand is yet again visible and there is no wedding ring this time. We end at a shot of Louise walking away from the camera down an empty dark corridor, the path winding to the left. The shot fades to black and a final VO of Louise: 'but now I'm not so sure I believe in beginnings and endings'.



This starting montage, is a designed misdirection, meant to mislead the audience into thinking that this is something that happened to Louise before the story starts. This is reinforced by a. the fact that we see this the first thing before anything else. A prologue is a common enough device for most films and Villeneuve uses this device to lead the viewer into making the assumption, b. the camera movement from the last shot of the hospital corridor to the next shot where Louise climbs the stairs of the university is a match cut or follow through of movement. C. the voice over where she says 'I used to think this was your beginning..' and ends with 'now mi not too sure I believe in ..'. D. VO Continues: There are days that define your story beyond your life, Like the day they arrived.

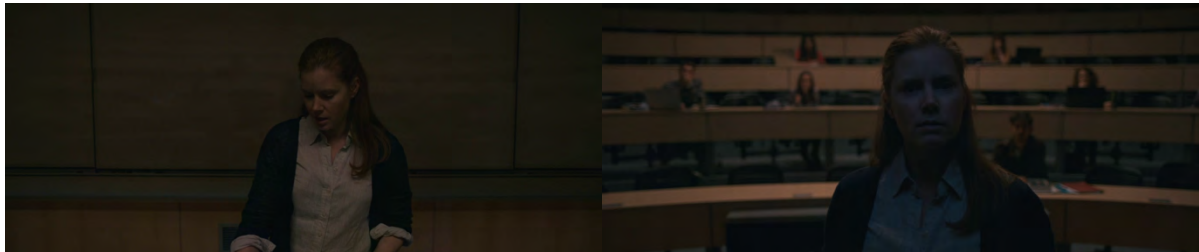
So the VO continues over the first montage and the next sequence which becomes our diegetic present.



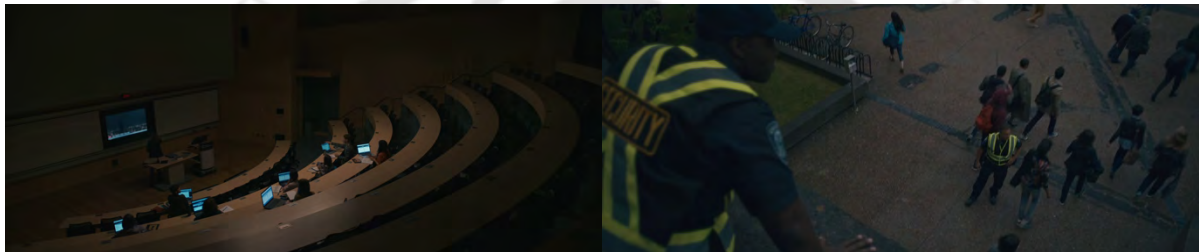
She passes another rectangular frame which has everyone's attention. This is a repeating motif. VO stops here and we continue to the central story. Going forward from here, we will identify the sequences and the story beats where required.

Linear A:

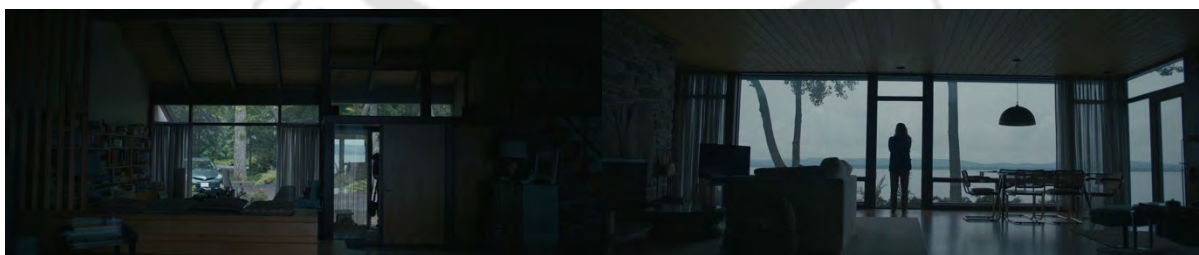
Louise enters her classroom, passing a crowd gathered in front of many tv screens. The attendance in her class is minimal, and as she's starting her lecture, students get notifications of something. Prompted by them, she opens the TV screen in the class. We see Louise and the students framed behind her, but not what she's looking at.



The VO from the TV news is talking about the Alien spaceships landing all around the world.



Another rectangular frame, as the alarm bells ring and class is dismissed. We continue to the outside, where students and staff are hurrying out of the buildings to the sounds of military jets flying overhead. Louise witnesses several accidents in the parking lot as people seem to be panicking. We follow her home, with the VO from the news reports. Louise parks and enters the house speaking to her mother. 'Yeah Mom, I've just got home,.. me? I'm just about the same.. mom, I'm fine, I'll call you later'



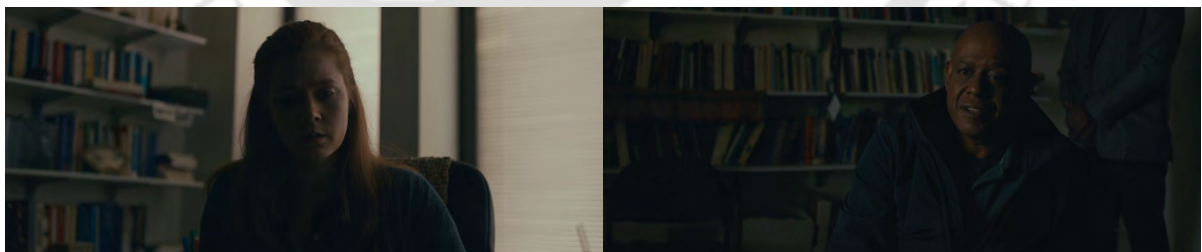
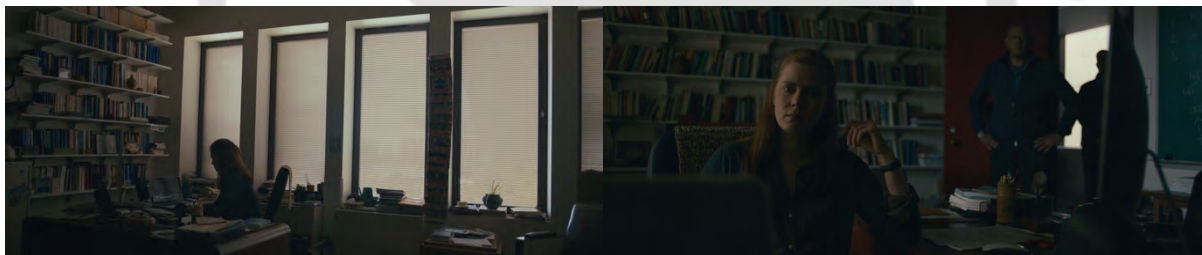
The dialogue with her mother tells us that she is worried about Louise, further compounding the idea that she's had something happen to her in the past. This is the same house, and she stands in front of the window-wall that we saw at the beginning of the film. The VO from news continues to give information about the alien's first contact as we see Louise in bed.



She falls asleep with the TV running. Here she's hugging a body pillow, something that commonly used by expectant mothers to ease sleeping at night in later stages of pregnancy. Next day morning, she walks across the empty quad of the university. We follow her walking alone through empty halls, and cafeteria. She goes to her empty classroom.



Upon seeing that no one has turned up, she goes to her office and is watching the news again.



This is when the colonel comes to her with a recording of the Alien's speaking and asks her to translate. She refuses saying that she will need to be on the location communicating with the aliens to help. The colonel refuses and gets up to leave. She guesses where he's going next and asks the colonel to ask the next linguist what the Sanskrit work for war is and its translation. The colonel leaves.

Linear B: Louise is back at home in bed asleep with the news on again when she's awoken by a helicopter flying over her house. Colonel gives her 10 mins to pack. Louise boards the chopper. Inside she sits across other crew members and meets Ian Donnelly a theoretical physicist. They fly to Montana and Louise sees the Alien spaceship for the first time. Here we also hear the signature music used for the Aliens. At the military base work is on at full swing. Colonel Weber takes them to the command center and introduces Ian to his team while taking Louise to meet hers. She notices that someone was transported out by medivac and finds out the earlier linguist could not take the strain of interacting with the aliens, and he was dispatched off. Immediately, it is time for the window in which the Alien's ship opens and allows audience to humans. With much trepidation, Louise, Ian and the rest of the team gear up and travel to the pod as they have been dubbed. A hatch opens at the bottom of the pod to allow a crane to lift the team into the pod. At one point inside the tunnel, gravity gradually flips and the team lands on the walls of the pod with the ground now behind them (instead of below) and a brightly lit antechamber lies in the opposite direction. Dubbed the nave, the facing wall of this room is an enormous glass window like frame which is entirely white. As the team approaches, Louise is overwhelmed and uncomfortable in the bulky suit. The other soldiers place a canary in the chamber to test the air quality. The two Aliens come into view and we hear and see them for the first time. Louise is visibly anxious and as Colonel Weber asks her to talk to the aliens, we jump cut to the team back at the base. As they sanitize, Louise asks the colonel if she's fired, but the colonel assures her that she is better than the last guy. And that she has 18 more hours to come up with something. Louise replays the recordings of the aliens but is no closer to understanding what they are saying. All through the film we get information about the outside world through news reports of increasing violence and confusion amongst the common people. For the second visit, Louise carries with her a whiteboard and a marker. In the nave, she shows the Aliens the word for human. The aliens reciprocate with a logogram made from some kind of ink. While this is a breakthrough, and the aliens write more, Colonel Weber expresses his discomfort at trying to teach the aliens to read and write. Louise is able to convince the colonel the need to teach the Aliens basic language to ask them the purpose of their visit. While they try to decode the symbols they have received, we find out that the Chinese site is run by a General Shang who is not convinced about the Alien's intentions on earth. Colonel Weber asks Louise to stick to her list of words on the third trip after she explains why. On their 3<sup>rd</sup> trip, Louise is trying to teach them her and Ian's names, when frustrated by the progress, she pulls off her hazmat suit. Everyone

panics, but she insists that the Aliens need to see her to understand. Here is where she makes the second breakthrough. The aliens approach closer and mimic her gesture of her hand on the glass partition. We see a closeup of their writing limb for the first time. Ian follows suit and removes his hazmat coveralls to introduce himself to the Aliens. The command center is in an upheaval. They have been able to illicit a response from the Aliens but possibly at great cost to themselves. As they come back to the base, Louise sees the first vision/memory of her daughter Hannah at 6 (49:40). Hannah is looking at a horse, but nothing is very clear. Louise is standing protectively near her and calms the horse down as it approaches them. Back in the present, Louise is doubled over from her memory/vision. Here the Audience have no way of knowing that this is a vision from the future. Everything so far has set it up as a memory from when she was married and had a daughter and her daughter dies of a disease. She doesn't acknowledge this. We see some soldiers observing her and then look at each other. The colonel and others decide to let Ian and Louise take the risk for the sake of getting ahead. Next, we see a soldier talking to his wife trying to assuage her fears on the phone. Back at the CC Louise is working on the logograms when she gets another vision/memory of her daughter playing in tall grass. She pauses at her work. We alternate between her memory/vision and the present. After a moment, Louise continues working. It is easy to assume that she's getting flashes of memories of her daughter. In the next sequence we see Ian and Louise work with the Aliens-now dubbed as Heptapods. In a vow Ian explains what all they have discovered about them and their progress. Louise has made significant progress with their written language which is semasiographic- conveying meaning but not sound; their written and their oral languages are unrelated; and that their language is non-linear orthography, in the sense that they have no forward or backward direction unlike humans who have a linear way of writing. In the next sequence, Louise joins Ian on the flatbed of a truck parked away from the CC at dusk. In their conversation, we have the next leading dialogue. When Ian makes a joke about him being single because he cannot communicate, Louise tells him that 'even if you understand communication you can end up single'. This can be construed to be read like she was married once and is now divorced since we have no other information to make any other assumptions on. Next, we see more news reports about the crisis going on in the outside world. We also see the same soldier listening to an incendiary talk show about the government not taking a sterner stance. Louise is back at her desk working when she gets the vision/memory again. Her daughter asks her 'what's this word?' the audio coming over the video of the present. Louise is disturbed and tries to get up out of her chair when she feels dizzy and

sits down again. Ian notices her and approaches her concerned. We alternate between a present time Louise staring into space with the audio overlapping and alternate shots of the vision/memory where Louise is reading a book to her daughter. Hannah shows her a drawing she made for one of her classes which is titled mommy and daddy talk to animals. From their conversation, its clear that Louise and her husband have separated, she no longer has the wedding band on her finger, and Hannah says she understands the situation. Ian back in the present tries to get her attention (his audio overlapped over the earlier shot). In the present, Ian asks Louise if she's okay and colonel weber asks her when her last check-up was. Louise says she's okay, and she cannot explain what she's thinking. Outside Louise walks towards the pod and sees more vision/memories from various stages of Hannah's life. Next, we see Louise in her trailer, a concerned Ian asking her how she's feeling while she's hallucinating that the heptapod is in front of her. Ian asks her about the Sapir Whorf theory where people learning a new language start thinking/dreaming in it and it rewires their brain and whether she's dreaming in their language. She protests saying that she is still fit to do this job while looking at the Heptapod in the corner of her trailer. Next, we cut to morning, Louise is sleeping when someone knocks on her door. She opens to see Colonel weber, Who asks her of she knows to speak mandarin. Back in the CC, she is given an audio file to translate from General Shang. They realize that the Chinese have been using the Mahjong game to communicate with the Aliens and that they are talking about giving advanced technology to humans. Colonel weber informs her that the Chinese has mobilized their army and other nations will follow suit. He insists that Louise ask them the question right away. Louise and Ian head back to the pod. Louise formulates the question and displays it to the Heptapods. In answer they reply 'Offer Weapon'. This sends the whole base in a tizzy. Back at CC Louise defends the Heptapods saying they probably don't mean it like a weapon, but the colonel and others are unconvinced. The interpretation is that the heptapods want humans to fight between each other. Immediately we see that the base has been given the command to go off the grid and cut communication from the other countries. Louise and Ian try to protest but are turned down. They hurry back to the pod and try to reenter the session. At the pod, a group of renegade soldiers load explosives into the pod and set a timer for 10 minutes. The heptapods watch then do this. Ian and Louise reenter the pod while the soldiers protest. Louise tries to ask the question again when one of the heptapods knocks on the glass. Below the soldiers arm themselves against the security that being sent their way. Inside the pod, the heptapod- Abbott beckons Louise to the glass and seems to be asking her to write on the glass.

While touching the glass, Louise gets a clear memory/vision of Hannah again. And she is able to write on the glass partition together with the heptapod. There are now only 50 seconds left on the bomb timer when both the heptapods suddenly fill the screen with countless symbols. That's when Louise and Ian hear gunshots. The heptapods push Louise and Ian outside the chamber to safety and seal the corridor just as the bomb explodes. Louise wakes up in the medical tent and the doctor tells her she has a concussion. She asks after Ian, who is fine and has gone back to CC to study the symbols. Louise also finds out that the perpetrators were some soldiers 'who had watched too much TV'. The base is about to be evacuated because of the bombing while both the teams work on the data given by the aliens. They have received the complete data feed despite of the explosion. Louise begs Weber to go back and explain to the heptapods that the explosion wasn't their fault. Weber denies her request, saying that they are preparing for retaliation. Just then the spaceship shifts position to higher above the ground, making the hatch inaccessible. Back at the command center, the secretary of defense lets the —know to get prepared for retaliation with the air force and infantry are on standby. We learn from new broadcasts again that the Chinese government has declared war on the Aliens and delivered an ultimatum to the Aliens to leave within 24 hrs. or they will have to face destruction. We also learn that other nations are following China's lead, while all the command centers remain in radio silence. In the meantime, Louise and Ian analyze the data in the CC. Louise, while looking at the semasiographs, has another vision/memory. Hannah, now 15 is asking her a question from her homework. She wants to know the word for a win-win situation. Louise in the memory gives her options but none of them are correct according to Hannah. Exasperated, Louise asks Hannah to ask her father since it's a science related term. Hannah, unwilling to speak to her father, says never mind and turns to walk away. In the present, Louise has fallen asleep on the desk in the command centre and wakes up at Ian's voice. Ian tells her that he's made a breakthrough. The data is 1/12<sup>th</sup> of a whole. Ian and Louise take the information to the colonel and his team. They ask for co-operation from the rest of the nations, but the colonel tells her it's impossible. No one is speaking to each other and there is no way to get the message out. They have information that the Russian team executed their own scientist to keep the message hidden. Louise argues that what the Aliens mean is that they must work together to decode the message. The — argues that no one will share their data, so Ian suggests the way to do this is to offer our own data in return — like a non-zero-sum game. Louise has another Vision/Memory in which she continues the earlier one where Hannah was leaving the room after asking the question about the term. She tells

Hannah the term -non-zero-sum game and Hannah says that's it, that's what she wanted. Back in the present Louise has another vision/memory of the Heptapods sending down a smaller pod for her/ She looks at her hands in another V?M and sees herself inside the spaceship with the ink vapor around her hands. All through this the audio from the tent overlaps the V/Ms where the colonel says there is no way to get in touch with the Aliens and that they might be asked to evacuate within the hour. Louise quietly slips out of the tent. Ian notices her go. We see her having driven out to under the spaceship, as Ian looks at her with binoculars. A smaller pod detaches from the main spaceship and floats down in front of her. Louise enters with a little hesitation. The pod shuts and starts to go back up. The chamber fills with white smoke and Louise exits inside the heptapods chamber. Only one heptapod- Costello is present, she finds out that the other one- Abbott is dying. The heptapod converses with her using the semisiographs which she understands. She asks him to help her. The heptapod tells her that she has the weapon, and to use it. When Louise says she doesn't understand, the heptapod tells her that they help humanity no, so that humanity can help them in 3000 yrs. time when they need it. When she asks how they know the future, Castello makes a sound at her. Louise sees another Vision/Memory of Hannah at 6. Louise says she doesn't understand, she asks 'who is this child' this is the first time Louise says that she doesn't recognize the child in her visions. She sees more memories, where Hannah shows her the drawing with has a canary in it, like when Ian and Louise have interacted with the heptapods earlier. Then we see Hannah making heptapods out of clay. In the present Costello tells Louise that she sees the future. Another vision of baby Hannah. Castello tells her that the weapon opens time. It then leaves Louise. Louise asks it to stop, but then has another vision/memory of herself, standing in the living room of her house. After depositing Louise back on the ground, the spaceship prepares to leave. Ian and colonel weber arrive to pick her up, Weber tells her they are supposed to evacuate. While trying to get into the car, she has another V/M. 6 yr. old Hannah asking Louise to help her with her shoe. They are at the banks of a lake and Hannah asks Louise if she's going to leave her like daddy did. Louise tells her that her father didn't leave her and that he will see her this weekend. Hannah says that he doesn't look at her the same way anymore. Louise, taken aback by this, tells Hannah that it's Louise's fault and that her father wasn't ready to hear what she told him. When Hannah asks what, Louise's tells her that she knows about something that going to happen and it has something to do with a rare disease. And when she told Hannah's father, he got really mad and said she made the wrong choice. She placates Hannah, who at 6 doesn't realize the import of

what Louise is saying. Back in the present, Ian has just caught Louise as her knees buckled. She tells him, that she just realized why her husband left her. Ian is confused as he didn't know she was married. As they leave the site, the spaceships all over the world start moving. Everyone panics thinking the aliens are going to attack. Louise has another Vision/Memory as she tries to figure out what to do. Hannah is asking her why her name is so. Louise explains that it's the same front as well as backwards. In the next quick montage we see Louise reach into her future memories to extract the information she needs to avert the crisis. As she moves through the command centre looking for an available computer, in her future she is slicing open a box of books. In the present she logs into a computer terminal. In the future she opens the box to find the book she written about the heptapods language in the future. (she is wearing a ring in her finger then). In the present she opens the data file sent by the aliens. In the future she sees the book is dedicated to Hannah. Back in the present again, Ian asks her what she's doing. Louise reaches forward into her memories and opens the book, and now in the present she is able to read the heptapod language fluently. Back in the future, Louise teaches a full class the heptapod language. In the present she tells Ian the message is not a weapon, it's a gift. Outside, they try to convince colonel weber that the gift is their language. And that when you start to learn it, you start to perceive time the way they perceive time, i.e. its non-linear for the heptapods. Weber stops her saying he cannot do anything now and that they should take the chopper back out of the site. Louise has another vision, Hannah is trying to wake her up, then she's suddenly in a party with many people. It seems to be a celebration with people from many different countries. Louise stands at the balcony looking down, on the wall we see a central flag with the semasiographic from the Heptapod's language. She turns around to see General Shang approaching. He comes up to her and says it's a pleasure to see her. General Shang says while the president called him for the celebration, he really came to see her in person. Louise is a bit confused, when he tells her that 18 months ago, she did something that not even his superior has been able to do; i.e. change his mind. He tells her that she is the reason for this unification, all because she reached out to him on his private number. Louise says she doesn't know his private number, so he takes out his phone and shows it to her. He says he doesn't know how her mind works but he believes it was important for her to see the number for some reason. Louise then remembers that she called him. Back in the present on the field, Louise now knows what she must do. She enters the command center and borrows a satellite phone. In the cc they find out that there is a sat line dialing China. They start a search for the phone. Louise in the meantime

dials General Shang while not yet knowing what she will say to him. In the future General Shang tells her that he will never forget what she said to him. He leans in and tells her that she told him his wife's dying words. In the present, Louise speaks to General Shang in mandarin while the soldiers pursue her. She locks herself in the sanitizing room while repeating what general Shang in the future is saying to her. In the meantime, Ian finds her and helps shield her from the soldiers who are threatening her. In the future Louise realizes what the information means. Back to the present, the news reports that China is standing down and they will share all the intelligence received from the aliens. The rest of the countries follow suit. And the spaceships take off and vanish from all over the world. We are back now to her house; in the scene we saw in the beginning. Louise walks into the frame with a wine glass. In the present, the choppers take off from the site and wrap up the base camp while Ian and Louise look out to where the spaceship was. In a VO Louise tells Hannah 'This is where her story began, the day they departed'. Ian asks Louise if she's alright. In the future, Louise looks out to the deck of her house and beckons the man standing at the edge of the water. Vo: despite knowing the journey and where it leads, I embrace it and I welcome every moment of it' Then Louise with baby Hannah again. Louise is playing with 1 year old Hannah, and the father is lying on the bed next to her. Hannah at 6 in bed, while Louise spells out her name to her. At the lake house, the man enters the house. Back with Hannah at 6, Ian comes into the frame with a book. He is about to read Hannah a bedtime story. He wears a wedding ring. We now know Ian is Hannah's father. Hannah says daddy. Back in the present, Louise looks at Ian on the field. Louise asks Ian what he would change if he could see his whole life from start to finish. Ian says maybe he would say what he feels more often. Back at the lake house Louise is dancing. In the present, Ian tells her he was the most surprised to meet her more than meeting the Aliens. In the lake house we see Hannah and Ian dancing. Back on the field, Ian and Louise hug. Same in the lake house. In the field Louise says she forgot how good it felt to be hugged by him, And Ian asks her at the lake house if she wants to make a baby. Next, we see a montage of Hannah and her life, and we see Louise say yes, she wants to make a baby.

We end at Louise and Ian hugging on the field.

## Response to Reviewers

### Indian Reviewer: Dr. Shilpa Das, NID Gandhinagar

The thesis, located at the juncture of narrative design, digital humanities, digital media studies, and cognitive film theory, is indeed original and comprehensive and has encompassed a tremendous amount of work and research which is highly appreciated. The subject of embodying conceptual metaphors in mainstream non-linear English film narratives. The manner in which the thesis constructs a taxonomy of cinematic transitions that encourage comprehension of story strands in a non-linear representation and the methodology it suggests for future researchers to analyse any of the 290 films that this research has collected and for film makers who may wish to incorporate metaphors in their own storytelling, and weaves these different pillars to weave a compelling argument is commendable. The literature review, and theorists covered, and the inferences from it is sound and comprehensive. The image schemas curated and extensively discussed in the thesis and how the editor plays a key role in these such as the hairpin bend, the circle/cycle, the zigzag, the fragmentation are appreciated. The methodology is sound, rigorous, robust, and painstakingly undertaken. The depth of analysis is also to be appreciated. The research suggests that film makers are reacting to the medium with their own embodied experiences of the world especially through the cinematographic and editing processes. The aim of the research in seeking to examine the presence of conceptual metaphors and image schemas in NLNs is fulfilled. Only deep immersive research and practical experience could yield the sort of insights the researcher has managed to unearth. This is indeed a huge quantum of work done.

1. Some operational definitions may need to be included in the thesis. For instance, the term 'embodiment': what does it mean? Which discourse is the concept of embodiment? pertinent to this study drawn from? On Page 4 where it first appears, it could be explained in a few sentences.

RE: Embodiment mentioned here is from Kiss and Willemson's work where they are using it in the cognitivist sense. I don't explain it at this point because I am referring to Kiss and Willemsens work.

A footnote has been added on page 4 for clarification. On pg. 29 when I talk about embodied cognition, I explain that I work primarily in that domain and the discourse surrounding it.

2. Same with conceptual metaphor theory on the same page. A clear explanation will guide a first-time reader.

RE: I have explained CMT immediately after the first time I mention it on pg.4 and added an example.

3. Or 'storyworlds' on page 87.

RE: Have added a footnote with the definition on pg. 4 when it appears for the first time, and I explain it on pg. 87.

4. Or 'art films' on page 244.

RE: A film made primarily for aesthetic reasons rather than commercial profit, often of an experimental nature or having an unconventional or highly symbolic content, aimed typically at a limited audience. Have added the definition in a footnote.

5. Page 189: para 1: ".....memories of the future." It's a paradoxical thing. How can there be memories of the future? Memories refer to the past don't they? We need some other word or phrase here. What could this be?

RE: I take the phrase from the novella where the character of Louise is trying to understand what is happening to her and also some articles that talk about the film (specifically the screenrant one

<https://screenrant.com/arrival-movie-timelineexplained/#:-:>

text=The%20timeline%20in%20Arrival%20is,and%20discovery%20as%20the%20protagonist. )

6. Would it have been possible to ask the research questions posed in chapter 3 on image schema in relation to Arrival (2016) to 21 Grams in chapter 2? Or vice versa: Would it have been possible to ask the research questions posed in chapter 2 on fragmentation in 21 Grams as done for Arrival (2016) in chapter 3? If yes, what interesting answers might we get?

RE: As discussed during the defence, we agree to this direction and consider it for the future of this study,

7. Page 238 (last para): “We hope to develop a combined list that will offer a ready compendium for film scholars first. For designers and film makers, this list will need to be constructed differently...” How might it be different?

RE: Have changed the phrasing of this paragraph: The primary distinction being that it needs to become a repository or a primer of sorts to help the designer/filmmaker make decisions regarding the appropriateness of usage. We envisage that once metaphors and schemas categorise the films, there will be enough material for case studies to be converted into a type of manual. This compilation will offer the same data but be targeted towards a reader who wishes to understand how to use metaphors and schemas in designing a narrative.

Overall, I appreciate all the important and original contributions this research is making to the discourse around conceptual metaphors and to film studies in general. The most important ones being the incidence of the metaphor in the structure of the narrative (hitherto almost missing in current scholarship), the formalization of the connection between embodiment, metaphors and image schematic structures and the introduction of a new perspective by applying CMT to the form rather than the content of visual narratives as embodied in complex non-linear mainstream English language films. The researcher is recommended to take the research ahead in future and beyond this doctoral study. The immense service this might do to cinema studies can only be imagined.

Especially as she mentions on page 241: “envisage a repository of all kinds of cinematic transitions, those which will be able to categorise the variety of ways (digitally and manually) in which a narrative

moves forward and makes sense to the viewer beyond the NLN aspect of the current study.” Well done!

**Foreign Reviewer: Dr. Elliot Panek, Alabama, Tx, USA**

Overall, this is an impressive piece of original scholarship - well-written, well organized, thoroughly researched, large in scope. Reading it, I'm convinced that Sheetal will contribute significantly to what we know about film narrative. Most of what I write here is less a critique of the execution of this particular project and more of an encouragement for Sheetal to consider where she locates herself within the academic discipline. As I was not involved in earlier stages of the work - at which point I might have offered more feedback to take the project in another direction - I will frame my comments as relatively minor recommendations for revisions/ additions and considerations of how to approach film narrative analysis in future projects.

1. My major critique has to do with the discontinuity between the cognitivist tradition of narrative analysis (Bordwell, Barry Salt, rooted in Russian formalism) and something more interpretive and impressionistic (I think of Robin Wood as an exemplar of this tradition though there are many others, rooted in semiology and psychoanalytic theory). These two perspectives often study the same object - the same film, or narrative structure more generally - but ultimately make different claims (I think the former school of thought offers falsifiable claims while the latter does not) and use different theories and methods. At first, my sense was this work would fit in the cognitivist tradition.

Certainly, the invocation of Bordwell, Cinematics, and the use of StoryCurves (thank you for drawing this work to my attention, by the way!) set it up as empirical and falsifiable. The careful, systematic parsing of the film narratives and transitions in subsequent chapters is in line with this. But when I consider the core of Sheetal's claims, they are rooted in conceptual metaphor theory as applied to the structure of film narrative. Sheetal notes on page 4 that the fields of linguistics and

psychology have “shifted” from cognitivism to this other way of thinking about comprehension. I don’t really think it’s a shift from one to the other. Without getting too deeply into the weeds of intellectual trends, feuds, etc., I would say that Sheetal’s approach to understanding film narrative are rooted in what Noel Carroll would call “interpretivist” approaches to understanding films. Here is the key point (and I don’t think Sheetal makes this clear enough): where do the metaphors of this theory reside? From what I gather, the claim is that the metaphors describe what goes on in the mind of the viewer (but, at times, Sheetal seems concerned with the filmmakers’ intended meaning, which is often not the same as what goes on in the mind of the average viewer). I am skeptical of this. I think that in most cases, metaphors exist in the mind of the scholar/critic and that there is no convincing empirical evidence that they reside in the mind of the audience (either on a conscious level or in some subconscious level that is revealed through how they talk about the film). In any case, I don’t consider it Sheetal’s responsibility to prove the validity of the linguistic/metaphoric approach to understanding film narrative. I do consider it her responsibility to make a clearer distinction between these two traditions - that which is rooted in Russian formalism and that which is rooted in linguistics and Marxist psychoanalytic theory - and more clearly locate her work as belonging to one or the other tradition (or trying to serve as a bridge between the two, though I think that’s a hard thing for anyone to do at this point). If this could be done, I would consider this to be a finished dissertation.

RE: I have expounded this point in several places in the thesis, especially Pg. 28. I am looking at a hybrid approach which takes from cognitivist approach of careful parsing and then applying the interpretative processes from CMT. I also refer (and cite) your article in which you mention that ‘Salt and his collaborators have continued to collect and analyse data, identify new types of data and devise new methods to analyse it’. The limitation of this approach, as Elliot Panek observes, is that while this style of statistical analysis may shed light on the visual style denoted by the shot durations and camera angles/movements, it fails to inform about the ‘qualities of narration’ (2014, 74).” He

concludes that diagrams of film texts manage to convey more information in less time, they can also be used to identify complexity in narratives and can facilitate pattern recognition and quick comparison. While Panek confesses that the diagram is unable to do is convey the more complex workings of the film on a scene-by-scene basis, it succeeds in providing unique insights into the film (ibid). My attempt at the hybrid methodology stemmed from the dissatisfaction of the current approaches which seemed either too rigid and restrictive or too interpretive. I have tried to find a common middle ground where the parsed data can back the metaphoric interpretation.

Below, I will provide more nuanced feedback. Again, I am really impressed by this work and the mind behind the work. I regret that I cannot be there in person, and I am eager to have a conversation about this work (I've been talking about it with colleagues) at some point. It is gratifying to see the field move forward!

2. Then, there is a claim Sheetal makes that is ultimately a materialist argument – that widespread adoption of digital editing led to a proliferation of non-linear narratives in film. Ultimately, I find this argument unconvincing (see below). In any case, it diverges from a purely cognitivist scholarly tradition, and so I would like to see it bracketed as such. Regarding the historical materialist claim that digital editing resulted in more nonlinear narratives: Versions of claims about the digital world were made by philosophers about the rise of the modern, urban, mechanized world in the early/mid-20th century, about the pace of life accelerating, changing how we think and communicate – see Walter Benjamin, MacLuhan, Adorno, etc. You could go back even further to the rise of industrialization in the late 19th century and see a similar reaction from storytellers (see H.G. Wells) and philosophers - technology is changing the way we think, communicate, understand, and tell stories. These aren't falsifiable, empirical claims. They seem to accompany the rise of a disruptive technology and are just as likely to be a symptom of disruption as a falsifiable claim, and are, in some sense, ahistorical (often neglecting the previous cycle of predictions). We seem to forget the last time we thought technology (the engine, the automobile, the telegraph, the radio) was going to result in the breakdown of existing ways of thinking and communication. A counterargument is that if people tell stories for a long enough period of time and audiences become familiar with certain structures,

they become OVER familiar with them and demand innovation, at which point storytellers innovate regardless of whether they are using analog or digital tools. We might call this the “sophisticated audience” hypothesis: audiences and storytellers get bored of the same structures and want to innovate, but the storytellers can’t be TOO innovative lest they confuse the audience. Sophisticated audiences existed for non-linear literature (the Aeneid), plays (Pinter’s The Betrayal), and other artistic forms, but film was a mass medium that didn’t demand too much of its audience until, perhaps, its most recent phase, but is that really because of digital editing? It’s hard to test this, empirically: even if you show that the appetite for non-linear narratives increased after the rise of digital technology, this is merely a correlation. We can’t know what things would have looked like had digital technology not arisen for another 5 decades (but maybe you could do a cross-cultural comparison contrasting places in which digital media adoption varied?). But I think the sophisticated audience hypothesis must be taken seriously.

RE: I have changed the language around the editing aspects of the study across several sections and included the filmmaker and the screenplay writer contributions to non-linearity in the arguments.

3. But here is the point I want to make about how it relates to non-linear storytelling. I can find instances of non-linear storytelling from hundreds of years ago and many linear stories that are popular and critically acclaimed. Sheetal mentions the Odyssey as a very early example of a non-linear narrative. Normally, I don’t like to be technical or pedantic, but since this is a dissertation defense, I’ll note: non-linear narratives are very, very common, in all phases of history and all modes of storytelling. Just from the domain of classic Hollywood film narrative, we might point to Casablanca, The Godfather, and Citizen Kane as examples.

RE: I mention the Odyssey in relation to the device of in medias res and not as an early example of non-linear narratives. On pg. 102 I am describing Aronson’s terminology for the type of NLN that 21 grams is, i.e., Fractured tandem narrative.

4. What does non-linearity accomplish? There are many popular stories structured en medias res (I think of Forrest Gump as a good contemporary example) – the plot begins toward the end of the story, goes back to the beginning of the story, catches up to the point at which the plot began, and then progresses – with story and plot in sync – to an ending. I think the primary reason why the story is told this way - and its primary effect - has nothing to do with metaphor.

RE: Agreed.

It is primarily about audience identification, emotion, and investment. This structure has the effect of introducing characters and answering SOME of the questions about their fate, then giving you context and more of a reason to care what will happen to them, and then – with that added interest in place – answer those questions. None of this seems related to digital editing technology either. This kind of non-linearity is not done to achieve some kind of thematic unity, nor are they used to give the audience something to figure out (i.e., how the pieces all fit together).

RE: Thematic unity is achieved as a result of the usage of the metaphor is the conjecture of this work.

It is used as a kind of emotional device – to give certain scenes more impact, to change viewers' hypotheses, to increase identification, to make audiences more invested in the outcome and thus more engaged. So, it seems to me that non-linear narratives where the structure is a kind of metaphor for a character's mental state is only a certain type or subset of non-linear storytelling. Really, that must be specified.

RE: Yes, not all non-linear narratives will have an identifiable metaphor or a thematic unity. I have made this clearer in the conclusion chapter.

5. A category like Aronson's "Fractured Tandem Narrative" is more specific and therefore better than words like "complex" or "non-linear" that are either vague or too inclusive.

RE: FTN only refers to films like 21 Grams. Arrival is more like motivated flashbacks or flashforwards, Sliding doors is a forking path narrative, also a split narrative, Dunkirk is another

fractured tandem narrative. FTN cannot encompass all the types of non-linearity found in the corpus.

6. It is noted on page 114 that the film version of 21 Grams is essentially as it was in the script. To me, this is evidence that the structure of the film - like many non-traditionally structured films - has nothing to do with what technology was used to edit it.

RE: Agreed, have changed language around this section to include the author and director intent as explained by them in interviews.

It is something in the script - in the formulation of the plot in the screenplay, not decided in the post-production phase. But then on page 117, you say that some scenes were reshuffled in the editing phase, which would seem to contradict what is said on page 114. It's important to resolve this.

RE: Resolved in the thesis.

7. Parts of this dissertation just get too deeply into the weeds (e.g., commenting on the typesetting of a screenplay, or having pictures of the Heptapods from Arrival, St. Augustine's definition of time, as fascinating as it is).

RE: Each one of the sections are motivated by the point I'm trying to make- typesetting to show Arriaga's drive to distinguish narratives, Heptapod's design because Chiang makes an important point in his book about the language developing due to the physiology of the aliens, and time because the primary experience of film is that of time. The work needs greater focus and should be pared down. Generally, the broader and longer a dissertation is, the worse it is. The more focused it can be around a particular claim, the better. So, if there is a sentence anywhere in the work that goes off on a tangent and can't be tied back to the core claim or idea, it should be excised.

8. It would be helpful to have an example of metaphoric representation and conceptual metaphors early on, maybe on page 4. You do a fine job of this on page 30, but bring it up earlier so the reader knows.

RE: Have added an example.

9. On page 10, when discussing montage, I think Marxists were really using what Bordwell calls “historical materialist narration.” Montage theory, as I understand it, just makes a claim about the effects of putting one image after another, be it within the confines of classical narration or in another mode, such as historical material.

RE: The Kuleshov effect is the underpinning theory behind the whole of Montage theory, I take these sections of discussion from David Bordwell’s work on film history.

10. Is it really a metaphor for Nolan or Inarritu to use black-and-white coloring for one timeline and color for another, or Innaritu’s coding of emotion with film grain, lighting, or handheld camera? This just seems like a straightforward way to help audiences remember which timeline they’re in without having to resort to intertitles, or to convey emotion. These tools – metaphors, whatever you want to call them – are like a scaffold that allows storytellers to tell more complex stories without confusing the audience. In terms of the way that light affects viewers’ emotion, it does not require interpretation or decoding - there is no metaphor other than the one imposed by the critic.

RE: I would disagree here. See the below point for clarification.

11. In the analysis of 21 Grams: The metaphor that a fragmented narrative is somehow connected to the fragility of life theme in the story is, in my view, a reach. It is something imposed by you, the critic/scholar, not something that exists in the text itself, nor something that is likely to occur in the mind of viewers, and it is, to me, irrelevant as to what Innaritu intended. If we look for connections this tenuous between theme and structure, we can find them - and their opposite - everywhere. A different scholar can look at the same film and find evidence of dialog or theme that are about connection and unity, the direct opposite of fragmentation. Where one critic sees a story that includes a trajectory (i.e., a journey), another sees evidence of characters who fail to reach their goal and ultimately stay in the same place. I think I could find evidence of the metaphor “progress is forward motion” in nearly all narratives, regardless of whether it is linear or not. I write this not to poke holes in your reasoning, but rather in the spirit of the skeptic who seeks to sharpen your

reasoning. I get the sense (as did Bordwell and Carroll, I think) that it is critics and scholars (e.g., Robin Wood), more than audiences, that are fond of using metaphors to create filmic meaning. At some point, you'll have to decide are you trying to "decode" the meaning of the text (that seems to be Wood's project) or understand what's going on in the minds of viewers (more of a Bordwell/Thompson approach). The example you give from Coegnarts & Kravanja (their reading of the scene in Spartacus) seems more like a decoding reading. There is nothing in that analysis (at least the way that it is presented in this dissertation) that suggests that there is evidence that the audience, on any level, perceived Caesar taking a side in that scene. A similar criticism could be made of the analysis of character placement within the frame in Disco Pigs on pages 66-67. Does that reading reside in the mind of the audience, the filmmaker, and/or the critic? Carroll and Bordwell (and I) would say that it's most likely only the critic and a small subset of the audience that reads the scene that way. This matters: sure, film – like anything else – can be understood in terms of metaphor, but who is using the metaphor? The filmmaker, the audience, or the critic? Decide before you write.

RE: CMT scholars have already shown us that the use of metaphors is inherent, inescapable, and unintentional. Central to CMT claims is the idea that the body is what drives the cognition of abstract and tangible experiences. Thus, I submit that by the virtue of having a body, the filmmaker first weaves the metaphor into the telling (with or without self-awareness), the audience member then internalizes the metaphor through their own experience of embodied cognition and gains a more affective understanding (again with or without awareness), and the critic can speculate on the existence of the metaphor at the junction of production and consumption of the object of art. In a sense all three stakeholders have the capability to read metaphoric propositions that these films might pose. I have added this clarification in the introduction.

12. At times, you refer to interviews with the filmmaker, which implies trying to know what the intention was, but does that really matter? I don't think it's relevant to discussion of what goes on in the mind of the viewer (see the intentional fallacy).

RE: Basic study of the CONTEXT that includes crew interviews and insights, special techniques, critic reviews, and acclaim. Although not a stand-in for audience surveys, the collected data can offer deep insights into the minds and attitudes of both the maker (without committing the intentionalist fallacy) and the consumer while avoiding unsatisfactory localized user studies that may or may not encompass the target audience for the film texts (added this note in the thesis). Through the close analysis of these films, I try to understand not only the workings of its non-linearity but also to possibly arrive at some understanding of how it works at a structural level. Although this reading (or the others in this project) does not use alleged directorial intention as primary evidence in support of the analysis, the director's comments on his aims have been used where available to indicate both how the film may have achieved the proclaimed objective or to have created its impact despite not having fully achieved it. While the metaphor of the accident plays perfectly into the fragmented non-linearity of the telling, it seems there is evidence of this being a coincidence than it being entirely by design. We propose that this design by accident is not an arbitrary co-incident but is informed by the filmmaker's embodied experiences of the world which manifest as metaphorical substantiations. The evidence for this is clear from the connections we brought forth from metaphors, image schemas and their manifestations in the design decisions. The same conceptual metaphors and image schemas are accessible to the audience and thus, the filmmaker may be able to reach the viewer by the use of these universal concepts in a deeper connection.

13. On page 34, you seem to suggest that the movement of the protagonist from left to right signifies the passage of time. I find this to be an improbable reading. If the same montage occurred while the character moved right to left, or stood still while seasons changed around him, wouldn't the audience still perceive the passage of time?

RE: Yes they would.

This reasoning seems in line with the Freudian belief that puns reveal some hidden layer of intention – a claim that I don't think has any real support. I would contend that critics and scholars can

probably find evidence of conceptual metaphors wherever they choose to look. If they choose to look at linear narratives, they will find them there, too. In any case, this is a problem of falsifiability I wouldn't expect you to resolve but would ask that you consider as you continue to analyze films.

14. You might consider studying counterexamples: non-linear stories that did NOT link the structure to the theme of the story nor some visual element. Generally, there is much to be learned by studying critical or commercial failures and asking, "what went wrong?"

RE: We did consider this, but discarded the idea because to prove something works while something else doesn't, the variables that need to be compared in case of cinematic narratives are too many to enumerate and compare across. Plus, the need was to create first a careful study of the films that worked with the mainstream audience and then as a next step take the study forward with the ones that didn't work.

Apologies for the non-linearity of these comments, though the structure only seems appropriate given the subject of the dissertation. Again, I congratulate Sheetal on an ambitious, impressive piece of original scholarship, and I will be following her career.