Film music as a guide in complex temporal narratives


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Master thesis 45 hp, VT2023
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Abstract

This thesis analyses Hans Zimmer’s film music in *Inception* (2010) and *Interstellar* (2014) that resulted from his collaboration with director Christopher Nolan. The focus lies on the narrative and temporal functions that film music can attain when used in temporal complex narratives. The analysis looks into how time is presented, manipulated, and connected through the music. Three aspects that are examined are: 1) how musical motifs function as a guide for understanding narrative themes, 2) how music gives temporal clarity within a narrative, and 3) how sound design contributes to an understanding of the temporal structure of the narrative. This thesis offers more insight into how music can function temporally, a subject worthy of more academic attention. It concludes that Zimmer’s “minimalistic maximalism” style and his creative process with Nolan are essential to how the music of *Inception* and *Interstellar* functions.
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Chapter 1

Introduction

Having worked on over 150 films that have earned him four Grammy awards, three Golden Globes, and two Academy Awards, Hans Zimmer has certainly proven himself to be an acclaimed film music composer. His success has been attributed to his recognizable personal style and to his ability to accompany the film’s narrative (Chrysostomou 2021). Many have replicated his style as is evidenced by the multitude of film trailers that make extensive use of the loud brass sound, also known as the “braaam” sound, which Zimmer made famous (Davis 2013). His personal style is not only recognized by film music fans and academics, but also by mainstream audiences as Zimmer’s name “has become a symbol of brilliant music and fantastic filmmaking” (Chrysostomou 2021). Amongst his most critically acclaimed film scores are those he has collaborated on with English film director Christopher Nolan. Nolan is known to apply almost exclusively nonconventional methods of storytelling which has gained him the reputation of a director of narratively and temporally complex films.

Their collaboration began in 2005 with The Dark Knight Trilogy: Batman Begins (2005), The Dark Knight (2008), The Dark Knight Rises (2012). Their partnership continued with Inception (2010), Interstellar (2014), and Dunkirk (2017). One peculiarity of their collaborative process is that no temp track is used. This refers to the task of film and music editors to place existing music alongside an edited film to gain insight into what might work for the film and to gauge the wants of the director. The composer will then later write the agreed-upon music specifically for the film (Pace 2023, 100). Nolan and Zimmer tend to take a different approach since they are of the opinion that temp tracks pose limitations. They find that it is often difficult to forget the music of the temp tracks and create original music that is not based on it. Instead, Zimmer writes musical ideas based on the narrative ideas that Nolan shares with him. Sometimes Zimmer is not even allowed to see any visual material of the film as it is being shot or edited, thus having to rely solely on the script or on conversations with Nolan. No temp track is needed in this case as the two are in constant conversation and the film and its music are created alongside each other (Pace 2023, 100). Pace (2023) states that the “complex approach to the soundscape of their films drives film sound further than it has ever been before. The collaboration between Nolan and Zimmer is paving the way for the future of director and composer relationships and the contemporary Hollywood film sound” (110). The films that result from their innovative creative process in which the music is specifically based on
narrative ideas and nonlinear complex temporalities make excellent case studies for narrative film music analysis, especially when Nolan situates the audience in these complex filmic worlds by placing the role of narrative coherence on the music (Pace 2023, 97).

This thesis takes the films *Inception* (2010) and *Interstellar* (2014) that resulted from their collaboration as case studies to look into the interaction between film and music, with the focus on how film music functions temporally in relation to the images shown on screen and how music can guide the spectator through a narrative by constructing time within the score. What is especially relevant is how time is presented, manipulated, and connected through the music. The analysis is divided into three chapters, which will discuss respectively: 1) how musical motifs function as a guide for understanding narrative themes, 2) how music gives temporal clarity within a narrative, and 3) how sound design contributes to an understanding of the temporal structure of the narrative.

**Literature review of film music studies**

Film music has been thoroughly researched but is often deemed a complex subject because of its interdisciplinarity. On a positive note, this means that it can be approached from a variety of perspectives which can offer many different understandings of film, music, and the interaction between the two. While film music might be listened to passively, it actively contributes to how meaning is made from a story. Although it is varied in its content and role, music’s primary goal is to render the individual spectator less critical, less aware of the technological nature of film discourse and thus more likely to go along with the fiction by lowering the threshold of belief (Gorbman 1987, 5–6). How we experience what is shown on screen is determined by what we hear. But just as music affects how we see the film, the visuals also affect how we hear music (Wingstedt, Brändström, and Berg 2010, 194).

Narrative film music has gradually become a prominent part of film music studies. H. Stephen Wright (2010) offers an overview of the development of the study of film music. He claims that early scholars writing about film music (in the 1920s and on) focused on technique or offered a historical overview of film music so far. Studies on film music increased from the 1960s onwards, although publications in English lagged behind. During the 1970s interest in film music increased even more with fan magazines and re-recordings of music from Hollywood’s Golden Age. The books from this decade mainly provided historical overviews, e.g., *Music for the Movies* by Tony Thomas and *Soundtrack: The Music of the Movies* by Mark Evans. The 1980s saw even more articles and books, such as the influential *Unheard Melodies*: 
Narrative Film Music by Claudia Gorbman (1987). In this book, film music is not approached from a musicological perspective like others mainly did, but according to Wright, this is the first book that examines the interaction of image, narrative and music using semiotics and literary theory. Other influential publications are Settling the Score: Music and the Classical Hollywood Film by Kathryn Kalinak (1992) and Overtones and Undertones: Reading Film Music by Royal S. Brown (1994), both also not musicologists. Since then, literature about film music broadly either takes a historical approach that focuses on composers and film scores that have been incorporated in the canon of North American and European film history or an approach that uses tools from film and literary theory (Wright 2010, 13–19).

Literary theory is an important element of narratology, a research topic many scholars have discussed, such as Lev Kuleshov and Sergei Eisenstein when discussing their ideas on montage or André Bazin and Siegfried Kracauer when discussing cinematic representation. However, starting from the 1970s, film narratology became its own distinct field, with scholars such as Seymour Chatman, David Bordwell, Kristin Thompson, and Michel Chion. They built on theories from literary theorists such as Gérard Genette and Tzvetan Todorov. From the 1980s onward, film narratology was also incorporated into the study of film music with scholars such as Kathryn Kalinak and Claudia Gorbman who asked questions about the origin of music using the concepts of diegetic, non-diegetic, and meta-diegetic to analyze whether the music was part of the storyworld. While the field of narrative film music studies has grown in recent years, there are still many aspects deserving of further analysis. Guido Heldt (2013) argues that we should now use the methodological discussion of narratological concepts to explore their usefulness for discussing films and genres. According to him, researchers should start to question how audiences construe film music’s place and sources in film and how this can be understood as narrative techniques and strategies (6–8).

How music can control our understanding of the passage of filmic time is one of the questions that should be asked by researchers. Daniel Goldmark (2016) emphasizes how little analysis has been done on how music complicates or smooths the manipulation of time in films. He remarks this as odd since the manipulation of time is ubiquitous in modern filmmaking. He refers to High Noon (1952) and Run Lola Run (1998) as two of many examples in which music “gives us a framework in which to decipher the sometimes elastic nature of time in films” and thus plays an integral part by telling the story and keeping time (95). Goldmark focusses on two approaches to time manipulation. The first regards scenes in which time is sped up or slowed down and the spectator has to decipher how time is passing. An example he uses is The Matrix (1999) which popularized a stylistic device known as “bullet time” in which an action scene is
shown in slow motion, with the camera moving around the actors. Composer Don Davis drew inspiration from minimalist and postmodern ideas. To make it seem like time was standing still and to create tension, the music was “playing two different chords at the same time in different parts of the orchestra, and they would fight each other dynamically, and the net results was whichever chord was loudest at the moment was the chord that you perceived” (Goldmark 2016, 97). The second approach regards the montage sequence which compresses a long period of time into smaller units and bridges gaps of diegetic time. Goldmark (2016) argues that a successful montage convinces the spectator that “the different images make logical sense together, and thus can tell a story that involves more than simply the passage of time” (100). These are just two exemplary approaches of how music controls our understanding of the passage and pacing of filmic time, but many more are possible.

Since film music analysis benefits from a large variety of perspectives, it remains a fruitful topic of further study, especially its narrative and temporal function. David Butler (2006) remarks: “The temporal properties of film music have tended to be referred to in passing or covered by an ‘umbrella function’ that does not specify time” (62). Even Butler (2006) acknowledges that while his analysis of Bernard Herrmann’s music is useful, it can only be a “tentative introduction” for much more research is needed to fully comprehend how music can expand our experience of time (62). Other authors referred to in this thesis because of their leading role in analyzing narrativity in film music such as Johnny Wingstedt, Sture Brändström, and Jan Berg (2010) also plead for further research:

Acknowledging the narrative impact of music in multimodal storytelling such as film, television or computer games, it will be of increasing importance to further explore how musical elements combine in aural statements that in turn combine with visuals and other narrative modes to form multimodal expressions. Looking at narrative media music as maybe the largest source of musical experience in our daily lives, it is clear that a better understanding of its meaning-making functions is of great importance (Wingstedt et al. 2010, 208).

This thesis contributes to the film-musicological discourse related to narrative film music, and specifically to the role narrative film music can play in giving temporal clarity. It starts with synopses of Inception and Interstellar and the reasons why these films are deemed suitable case studies. Then, the choice of methodology, namely a narrative film music analysis, is explained, followed by a theoretical framework that situates the analysis within a wider academic
discourse about narrative film music. The analysis consists of three chapters dedicated to each of the research questions mentioned earlier, namely:

1) How do musical motifs function as a guide for understanding narrative themes?
2) How is music able to provide temporal clarity within a narrative?
3) How does sound design contributes to an understanding of the temporal structure of the narrative?
Chapter 2

*Inception* and *Interstellar*

**Synopsis of the films**

In order to follow the analysis of *Inception* and *Interstellar* it is important to be familiar with the story of both films. Although the analysis includes detailed scene descriptions of the parts deemed relevant for the specific arguments made, here an attempt will be made to give a synopsis of the complicated narratives of the films as an introduction. Although these synopses will contain much information, it is highly recommended to view both films.

**Inception** (2010)

Released on July 16th, 2010, *Inception* follows Dominic Cobb (Leonardo DiCaprio), an experienced thief skilled in the art of extraction. This is the act of entering other people’s dreams to steal secrets from deep within their subconscious during the dream state for the aim of corporate espionage. Since this occupation has made him an international fugitive, he is unable to be with his children who still reside in the USA. However, he is offered a mission which could grant him permission to return home. For this mission he is enlisted by Saito (Ken Watanabe), a powerful and wealthy business magnate, to do the opposite of extracting an idea. Instead, he needs to plant an idea in someone’s mind, which is the act of “inception”. To accomplish his task, Cobb gathers a team of various specialists. Arthur (Joseph Gordon-Levitt) acts as Cobb’s right-hand man by researching the mission and ensuring everything is going according to plan. Ariadne (Elliot Page) is a student enlisted by Cobb to work as the “architect”. They design the mazes that act as layouts for the dreams. Eames (Tom Hardy) is also enlisted by Cobb, specifically for this mission. He is a forger because of his ability to shapeshift into other people during dreams and thus forge their identity. In this way he can convince the target that he is someone close to them if needed. The last member of the team is Yusuf, a chemist (Dileep Rao). He creates the compound needed for the members to remain in a dream and sedate them strongly enough to share multiple dreams within one another.

Their mission revolves around Fischer Morrow, an energy conglomerate, headed by Maurice Fischer (Pete Postlethwaite) and his son and heir of the company Robert Fischer (Cillian Murphy). As Fischer senior is on his deathbed, Fischer junior is planned to take over
the company, but Saito wishes for his competitor to disappear and thus enlists Cobb and his team to break up the company. In order to implant this idea into Fischer jr.’s mind without him growing suspicious, the team needs to enter multiple dreamlevels to plant the idea. On the level of ‘reality’, the team and Robert Fischer are in a plane on their way to the USA as they start their first shared dream. One dreamlevel lower (level 1), Fischer jr. gets kidnapped and driven around in a van by Yusuf as they are once again put to sleep to share a deeper dream. This level lower (level 2), the characters are in a hotel where Fischer jr. is made aware of the fact that he is dreaming by Cobb. Cobb convinces him that someone else is trying to steal secrets from his subconscious and turns him against his godfather Peter Browning, which Eames has shapeshifted into. Fischer agrees to enter a lower level with Cobb to supposedly enter Browning’s subconscious. Arthur stays behind on the hotel level to ensure the others fall into yet another sleep (level 3). Cobb, Ariadne, Eames and Fischer jr. find themselves in a snowy landscape aiming to enter a fortress that is supposedly Browning’s subconscious.

Throughout the film, it is hinted at that Cobb is hiding a secret about his troubled past. Through Ariadne’s curiosity it is revealed that he first performed inception on his wife Mal (Marion Cotillard). They used to share extensive dreams which gradually made Mal start to question her reality. As Cobb fueled this doubt, Mal eventually took her own life thinking she would wake up from a dream, not realizing she was already awake. As Mal is still very much alive in Cobb’s mind, she appears throughout the film on multiple levels attempting to sabotage Cobb and his mission for him to stay with her in the dream. She manages to enter Cobb’s mind on dreamlevel 3 and shoots Fischer Jr to sabotage the mission. Ariadne and Cobb attempt to save Fischer by going further down into another dream. Cobb and Ariadne meet Mal on this dreamlevel (level 4), and Mal attempts to convince Cobb of staying with her there. Ariadne eventually finds Fischer Jr and pulls him back from the dream. Cobb stays behind to find Saito, who died on a higher level and thus remains in limbo, a state of eternal dreaming. The team manages to complete the mission and they, Cobb and a recovered Saito included, return from the multiple dreams to awake back on the plane. As the team has successfully planted the idea in Fischer Jr’s mind that his father wanted him to be his own man and start something for himself, they accomplished their mission and Cobb is granted entry to the USA.
Inception has elicited much discussion and speculation online, e.g., whether inception is possible and if it can be supported by neuroscience (Lehrer 2010). There are also theories about the character’s names which according to one Reddit user spell out the word ‘dreams pay’: Dominic, Robert, Eames, Arthur, Mal, Saito, Peter, Ariadne, Yusuf (Flysolid 2018). Another theory around the character’s names regards their meaning. Ariadne shares the name with the daughter of King Minos of Crete in Greek mythology. She is known to guide Theseus with the help of a ball of thread through a labyrinth, which is in accordance with her character who designs the mazes and guides the team through the world she constructs. Dominic Cobb’s name has been connected to one of Nolan’s earlier films Following (1998) where one of the main characters is a manipulative thief named Cobb. But the name has also been connected to the Latin meaning of Dom, which is God, as Cobb has the most power in the world of inception. Both Yusuf and Mal’s names have also been speculated to carry a deeper meaning, as Yusuf’s name can be found in the Quran and whose story begins with a dream and Mal’s name can be translated to ‘bad’, reflecting her position as the antagonist of the team (Floorwalker 2021).
"Interstellar (2014)"

Released on October 26th, 2014, "Interstellar" is set in the future where dust storms, blight, and food shortages have reduced the population and forced most people to become farmers. As earth becomes less inhabitable by the day, NASA has been secretly leading missions to other planets and galaxies to find a new home for humankind, the Lazarus projects. Once the missions successfully lead to another planet on which humankind can survive, the plan is to transfer earth’s population there. In order to do this Dr. Brand (Michael Cain) needs to “solve gravity”. This refers to the problem of gravity weighing down any rocket ship that would send a large number of people into space. Dr. Brand thus needs to solve the gravity equation to manipulate gravity. The other plan to save humankind (Plan B) is to repopulate the new planet through means of fertilized eggs. This would mean abandoning people on earth.

The story revolves around Cooper (Matthew McConaughey), a former NASA pilot who now works as a farmer, harvesting corn. He is the father of Tom (Timothée Chalamet and Casey Affleck), also a future farmer, and Murphy (Mackenzie Foy and Jessica Chastain), his daughter who shares an interest in science with Cooper. The main events are set in motion when Murphy claims that a “ghost” is moving objects in her room. Cooper discovers that this is caused by a gravitational anomaly that spells out messages in binary code. These messages lead Cooper and Murphy to the NASA facility where they meet Dr. Brand and his daughter, Amelia Brand (Anne Hathaway) who introduce Cooper to the Lazarus projects. They convince Cooper to pilot a spaceship which will contact the astronauts of the Lazarus project’s to determine which planets are habitable. The decision to leave earth has great consequences for Cooper.

From Cooper’s departure onward, the film consists of two perspectives. The first follows Cooper as he travels through the galaxy. He is joined by Amelia Brand, Doyle (Wesentley), and Romilly (David Gyasi), fellow NASA astronauts. The second follows Murphy on earth as she grows up and becomes a scientist. Since time passes differently between the two perspectives because of relativity, Murphy grows older much faster than Cooper.

Cooper, Amelia, and Doyle first travel through a wormhole, mysteriously put in place by something, to “Miller’s Planet” (named after the astronaut of the Lazarus project who was sent there) while Romilly remains on the spaceship (the Endurance). There they find that the planet is uninhabitable despite promising data. They also discover that Miller is no longer alive and lose one of their own, Doyle. Once returned to the spaceship they reunite with Romilly who is now much older because of a difference in time passing. Their next option is to travel to Dr. Mann’s planet. There they find Dr. Mann (Matt Damon) who was in cryo-sleep until their arrival. Eventually Dr. Mann betrays Cooper and Amelia as it is revealed that his planet is also
uninhabitable. It initially only looked promising because of the data manipulated by Dr. Mann. He tries to use the spaceship to get away but after an unsuccessful docking attempt, he causes an explosion at the Endurance, killing Romilly who had remained there. With limited prospects and their previous plans having failed, Cooper decides to send Amelia to finish the mission. To be able to do this he needs to shed weight and sacrifices himself by detaching his craft from the Endurance. After this Cooper floats towards a black hole (Gargantua) and ends up in a space called the Tesseract. Through this multi-dimensional device Cooper can communicate through time and space with Murphy.

Meanwhile on earth, Murphy and Tom have grown up. Tom eventually starts a family but loses his child due to the lack of oxygen on earth. Murphy becomes a scientist who helps Dr. Brand with the gravity equation. They have limited communication with Cooper as they can send out messages but do not receive any from space. This results in Murphy not knowing whether she will ever see her father again. As Dr. Brand reveals that the plan of transferring people to another planet was never the aim, Murphy feels betrayed by her father because she is convinced Cooper knew this. But as she returns to her childhood home, she realizes that Cooper has been communicating to her all this time. This is where the two perspectives interact once again as Cooper sends messages through the Tesseract to Murphy. Cooper was the “ghost” that was communicating to Murphy in the beginning of the film. The grown-up Murphy also realizes that Cooper is sending the solution of the gravity problem in morse code through a watch. This leads to Murphy to solve the equation and eventually to humankind to embark into space to a temporary alternative habitat named Cooper station. Murphy and Cooper finally reunite.
Why Inception and Interstellar?

Both *Inception* and *Interstellar* resulted from the collaboration between Christopher Nolan and Hans Zimmer and are relevant case studies for this research for several reasons.

First, studying film music is particularly suitable to gain insight into the narrative function of music. The ability of autonomous or absolute music to contain a narrative is subject of debate. For instance, David Nicholls (2007), in accordance with Stravinsky and Jean-Jacques Nattiez, believes that music cannot have a narrative. He also refers to Abbott to argue that we as humans tend to see narratives when they do not necessarily exist. Such is the case when we perceive stories in musical texts that do not, per se, narrate (300). However, he does believe that when music is ascribed extra-musical meaning through being associated with an object or a concept, such as a leitmotivic function or when it interacts with other media, it can become part of a narrative discourse (Nicholls 2007, 300-301). Therefore, looking into music that interacts with the medium of film can offer valuable interpretations for how music can function narratively.

Second, the choice for the films *Inception* and *Interstellar* is grounded in the particular manner of storytelling that is used in the films. They contain a complex narrative that uses several devices that seem to manipulate narrative time, such as montage, flashbacks, and parallel action. As seen from the introduction to Nolan and the synopses, he is known for producing films that play with time in a complex way.

Third, other than a complex narrative that deals with time, *Inception* and *Interstellar* also contain scores specifically composed for the films. Music created specifically for a film is especially relevant to the narrative approach of this study for it is directly related to the story that is presented on screen. In both cases the music was composed simultaneously with the creation of the film and Zimmer was at times not even allowed to see the film, thus forcing him to compose based on narrative themes and the synopsis of the film (Pace 2023, 100).

Fourth, *Inception* uses Édith Piaf’s song ‘non, je ne regrette rien’ as diegetic music to transition between dreamlevels and as a basis for non-diegetic music. Looking into the different relations music has to the story world can offer us more insights in how music functions on different levels in the narrative.

Fifth, the audiotracks of both films contain many sound design elements, such as wind sounds and ticking, that add to the atmosphere that is created by the music and can reference other events in the story. The sound of ticking is also used to transition between dreamlevels in *Inception* similar to Piaf’s song. Nolan and Zimmer are known to closely connect sound with
diegetic music, making for innovative audiotracks (Pace 2023, 10). Examining the sound design
give us more insight into the temporal role it can play.

Lastly, by analyzing two films which share similarities, such as director, composer, and
extensive use of narrative time devices, but which also differ in how the narrative is constructed,
I aim to provide a comparative analysis that contributes to the discussion on how narrative time
can be established in film music in different ways.
Chapter 3

**Narrative Music Analysis**

In order to study how film music relates and can contribute to the narrative, a narrative music analysis will be performed. H. Porter Abbott (2002) offers a definition of narrative as the way in which humans organize their understanding of time and argues that the tendency to insert narrative into static situations seems almost automatic. According to him we try to understand the world not only in terms of space, but also in terms of time (11). The aim of my thesis to focus on how narrative time is represented through music, must therefore include an analysis of the narrative that is presented since narrativity is how we make sense of time. Narrative music analysis uses literary narrative theory and combines music text and music specific sound vocabulary to study music narrative (Li 2021, 102-103).

The first of these, literary theory, enables us to better understand the form of *Inception* and *Interstellar* and how their story is presented. Theories of narrative (narratology) look into notions of plot, narrators, and narrative techniques. They aim to understand the components of a narrative and analyze how narratives achieve their effects (Culler 2000, 83). Jonathan D. Culler (2000) discusses several elements of literary theory related to narrative that can aid in deconstructing *Inception* and *Interstellar* and their narratives. He argues that we make sense of our lives through logical stories, as a progression leading somewhere, as an understanding of how one thing leads to another (82). All events in a narrative constitute the story. This includes the ones explicitly presented and those the spectator infers (Bordwell and Thompson 1979, 70). Then there is plot as an elemental requirement of a story. A plot is “an organization that humanizes time by giving it form” (Culler 2000, 83). Going back to Aristotle, a plot is the ordering of a story, a level of structure to a story, consisting of a beginning, middle, and end (Culler 2000, 86). It includes “everything visibly and audibly present in the film before us”. This refers to events that are explicitly presented and non-diegetic material (material that is extraneous to the storyworld) (Bordwell and Thompson 1979, 71).

<table>
<thead>
<tr>
<th>Story</th>
<th>Presumed and inferred events</th>
<th>Explicitly presented events</th>
<th>Added non-diegetic material</th>
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<tbody>
<tr>
<td><strong>Plot</strong></td>
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Diagram of story and plot structure (Bordwell and Thompson 1979, 71).
The distinction between story and plot clarifies how time shapes our understanding of narrative action. We construct story time based on what the plot presents. A plot can present story events out of chronological order or present them more than once (Bordwell and Thompson 1979, 74). In order to determine what presentation of the story has been chosen and how it can achieve a certain goal, several questions formulated by Culler (2000) can be asked, such as who speaks? who speaks to whom? who speaks when? who speaks with what authority? and who sees? (86).

Narrative music analysis is heavily influenced by literary theory. The theory originated in literature but has expanded to other disciplines such as television, film, and music. Xiuming Li (2021) discusses classic narratology and post-classic narratology. The former is characterized by a text analysis based on structuralism that focusses on internal structural rules of narrative works and the relationship between various elements, while the latter is prominent since the 1990s and characterized by combining text analysis with other research methods, such as structuralism, discourse analysis, and film theory (Li 2021, 102-103). Music analysis uses these two approaches to interpret, comment and criticize music works and their cultural significance (Li 2021, 104). Li argues that the application of narratology in music analysis is made possible through the characteristics that music and literature narratives share, such as “repetition”, “expectation” and “solution” (Li 2021, 105). But music differs from literature in that the narrative medium is not words but sounds. Li refers to Wang to state that music has its own narrative language and possesses obvious and implicit narrative characteristics and can express emotional states. This contradicts Jean-Jacques Nattiez’s thesis about the existence of narrativity in music. For Nattiez (1990), pure sonorous configurations do have power of evocation, but “it is not within the semiological possibilities of music to link a subject to a predicate” (243–244). He argues that connections are situated at the level of plot rather the level of story. Returns, expectations and resolutions may be recognized in music, but it is not clear why they happen, since music cannot give that information (Nattiez 1990, 243–244). However, by ascribing music with extra-musical meaning such as when it interacts with other media, it can function as a narrative agent (Nicholls 2007, 300-301). According to Li (2021), music has a narrative function because listeners can connect emotional states to their experience and create narrative plots built on order, law, and logical relationships (106). Examples of musical elements that can narrate according to Li are musical instruments, human voice, harmonic progression, rhythm, speed, mode, and tonality (Li 2021, 108).

Nicholas Reyland (2005) notes that it is important to question to which degree instrumental music, with its semiotic limitations, is capable of shaping aspects of a narrative’s discourse (121). He discusses relevant questions that can be asked when performing a narrative
music analysis that are similar to Culler’s question about literary narrativity. When examining musical narrativity, one should try to identify the aspects of music which can signify elements of a plot according to listeners who are open to the perception of musical narrative (Reyland 2005, 122). According to Reyland, discourse can be analyzed by questioning whether a narrator is noticeably present, if they are internal or external (part or not part of the story), who is being addressed by the narrator(s), and when an event is taking place in relation to the story time. Another element to examine is not only who is telling the story but also whose point of view the narrator is representing since this is not always the narrator’s own point of view. Other questions are how and why events in a story have been highlighted, de-emphasized, or reordered in the narrative discourse (Reyland 2005, 122). The questions regarding narrative by Culler and Reyland will be used as a starting point to identify the narrative and its elements of the film to then analyze how the musical elements mentioned by Li are able to reflect the narrative of the film and its time.

In concrete practical terms, I began the analysis by watching the films and describing in a detailed table what could be heard when. While doing this, I paid special attention to the above-mentioned questions about the narrative. These narrative qualities were noted down, such as from whose point of view the events were happening, the origin of the music (diegetic, non-diegetic etc.) and how time was manipulated throughout the films and what could be heard at those moments. This not only included musical material, but also elements of sound design. Any patterns that were found and their narrative contexts were highlighted to later examine whether they were linked, bore resemblance, or presented consistencies that could then give more insight into how the music functions within the film.

I aimed to provide a thorough analysis that remains accessible to a broader audience interested in film and music. Possessing prior knowledge of music theory and narratology is advantageous when reading this thesis, but I have aimed to prevent over-analyzing the music. This is mostly done because the general audience does not have extensive music theoretical knowledge. The music theoretical approach is rather used to explain how interpretations are formed based on the nature of the sound of music. Furthermore, I aimed to create a balance between the different aspects needed for the analysis, namely narrative/scene descriptions, interpretation, and theory. Since both films consist of complex narratives, detailed descriptions are needed to understand what is occurring in terms of visuals and audio, which also includes, but is not limited to, a wide array such as (geographical) settings, camera angles, and dialogue. These aspects have been included when deemed relevant since they can have a great effect on how one interprets a film and/or its music (Wingstedt, Brändström, and Berg 2010, 194).
Chapter 4

Theoretical Framework

In order to answer the questions mentioned above and to perform an in-depth analysis, I consider four subjects to be relevant for the theoretical framework: the relationship between story world and music, functions that music can have within a film, leitmotifs, and narrative time.

Story world and Music

Firstly, to understand the relationship between the story world and the music, it is relevant to discuss the discourse surrounding diegesis and the use of diegetic and non-diegetic sounds used in film. David Neumeyer (2009) argues that although the use of diegetic/non-diegetic unfairly deludes to an idea that film music can be categorized into a dichotomous schema, it is still useful when analyzing the relations of image and sound and the narrative functions of music in film (27). To use Souriau’s definition of diegesis, this can be defined as “all that belongs to the narrated story, to the world supposed or proposed by the film’s fiction.” (Gorbman 1987, 21). This would mean that diegetic sound refers to sound in the world in which the story takes place and non-diegetic (or extradiegetic) sound refers to sound that is not in that world and belongs to the level of the narration (Neumeyer 2009, 28). This distinction can aid in analyzing the source of the music in *Inception* and *Interstellar* and how film music can operate on different levels.

While identifying the source of music in film it might also be helpful to determine why music is present. Emilio Audissino (2017) conceptualizes four motivations why music might be present. Firstly, music can be *realistically* motivated when its presence is logical and expected according to our knowledge and understanding of the real world. Secondly, music can be *compositionally* motivated when its presence helps us reconstruct the fabula (chronological sequence of events or story), when it clarifies narrative information, and when music makes narrative progress. Thirdly, music is *transtextually* motivated when the music refers to another film genre or when it is used for parodic purposes. Lastly, music is *artistically* motivated when there is no clear reason for its presence other than aesthetic effects (Audissino 2017, 127).
Narrative functions of Film Music

Secondly, theories about how music can function in different ways within a film and can contribute to the construction of a narrative in different ways will be used. The abovementioned motivations for music’s presence already show different ways in music can operate, but other (similar) relevant functions can be found in Gorbman’s principles of Composition, Mixing, and Editing in Classical Film, Audissino’s cognitive function, and Wingstedt’s et al. temporal function.

Gorbman (1987) offers an outline of different aims music has in classical (Hollywood) films through composition, mixing, and editing, which are: invisibility, ‘inaudibility’, signifier of emotion, narrative cueing, continuity, and unity. Especially narrative cueing, continuity and unity seem relevant here. Gorbman gives two subcategories here consisting of referential/narrative, which occurs when music “gives referential and narrative cues” which can be done by establishing setting and characters or clarifying point of view among other things, and connotative which occurs when music interprets and illustrates narrative events. The ability of music to provide continuity, which Gorbman explains as the providence of formal and rhythmic continuity between shots and transitions between scenes, and unity, the aiding in the construction of formal and narrative unity through repetition and variation of musical material and instrumentation, will also offer a better understanding of how the film music in Inception and Interstellar helps in the construction of a narrative (Gorbman 1987, 74).

In his book Film/Music Analysis, Audissino (2017) discusses the relationship between film and music and how they can be analyzed as one entity instead of separate entities. His focus is more on how the audience perceives music while seeing a film. According to him, music can have a perceptive function when it aids the spectator in understanding the spatio-temporal perception of a sequence. This function operates when images in the film are accompanied by sounds that the audience believe go together. The example given by Audissino is of someone falling while we hear a downward scale. Audissino argues that a particular micro-configuration of the music (downward scale, for example) is isomorphic to the micro-configuration of some other element in the film (character falling), either within the time dimension or the space dimension. He also mentions the spatial perceptive function which operates when music can point the spectator’s attention to an important visual detail or action by highlighting its presence (Audissino 2017, 136).
Moreover, Audissino (2017) speaks of the cognitive function of music where “music helps the spectator comprehend more complex narrative relations or even interpret implicit or symptomatic meanings” (141). He differentiates between denotative and connotative cognitive functions. The first, denotative, refers to music’s ability to highlight relations amongst elements in the narrative and thematic levels that help the spectator comprehend the narrative (Audissino 2017, 141). The second, connotative, refers to instances where its function is less obvious. In these instances, the spectator does not necessarily comprehend what is happening but must interpret it. “The music suggests some connotation, that is, an indirect meaning” (Audissino 2017, 144).

Wingstedt et al. (2010) offer similar narrative functions of media music which are inspired by and related to Halliday’s metafunctions of communication. Wingstedt offers six classes of musical narrative functions such as they appear in film: emotive, rhetorical, descriptive, guiding, temporal, and informative. In particular temporal and informative seem relevant for this thesis. The temporal function of music refers to the time dimension of music, music’s ability to provide continuity and music’s ability to contribute and define structure and form. The informative function refers to the ability of music to express or explain phenomena or events by communicating information on a cognitive level. In this case music can for example clarify ambiguous situations or represent a character or phenomenon by use of a leitmotif (Wingstedt, Brändström, and Berg 2010, 195).

**Leitmotivs and temporality**

How film music can function on a temporal level has mainly been discussed in relation to film music’s ability to establish a historical setting. Although this is an important function, David Butler pleads for a more extensive discussion of music’s temporal nature as he argues “time and music are intimately related, and the consequences of that relationship can have a significant impact on our understanding and perception of the passage of film time: both within the world of the film and our own experience of the film unfolding before us.” In his chapter “The Days Do Not End: Film Music, Time and Bernard Herrmann”, Butler (2006) aims to expand this conversation by discussing three ways in which music can aid in our understanding of a film’s temporal properties (51-52). The category of *Anachronism* refers to moments in which the music is out of place historically. This does not mean, however, that audiences experience this as wrong for the music might fit in conventionally. Underscoring a scene with music that ‘seems out of place’ can also be used as an advantage as it plays a role in how we
interpret a scene or can offer commentary on that scene. A second category refers to expansion, or the slowing down of a passage of story time. This can be done through the minimalistic technique of repetition that makes use of the ostinato which can create an experience of “timelessness”. Butler argues that through the repetition of a short phrase “the audience is given the opportunity to memorize its structure and anticipate its return” (Butler 2006, 60). Lastly, film music’s temporal nature can play a role in navigation. This is often discussed in relation to the device of the leitmotif. He describes a leitmotif as “the form of a musical phrase or ‘token’ that is associated with a particular character, object, place, concept and can thus, once the connection is established and understood by the audience member, refer to that character or object even if they are not present on-screen” (Butler 2006, 57).

The ways in which leitmotifs can be used for their ability of referentiality is discussed by Justin London (2000). Firstly, a leitmotif can underscore the obvious presence of its referent, which is clearly visible. Secondly, a leitmotif can indicate the presence of its referent that is otherwise obscure, such as being hidden, in disguise, or out of frame. Thirdly, a leitmotif can indicate the “psychological presence” of its referent as when a character is contemplating it (London 2000, 89). Since leitmotifs have this referential function, they can also act as a device for navigation. As Butler (2006) argues: “this virtue of the leitmotif makes it a particularly helpful device for navigating a non-linear narrative structure when it might otherwise be unclear when in the narrative we are” (57).

Richard Wagner’s concepts of foreboding (Ahnung) and remembrance (Erinnerung) in his theory of the Musikdrama can also be applied here. Wagner (1852/1964) discussed the ability of the orchestra to “speak” through the means of motives. Two manners in which this is possible are the foreboding of actions which will happen or the remembrance of actions which have already occurred. The foreboding happens when music triggers a vague anticipation of an object or event that has not yet appeared. It may thus announce the presence of something before it is known and defined, hint at the significance of something before it is explained or reveal that an event has not yet reached a satisfying resolution. Remembrance plays an important role in this for a spectator must be able to connect a motif to its known referent and thus remember the diegetic association of a motif even in absence of the object (Wagner 1852/1964, 222–227).

London (2000) argues that several constraints apply to leitmotifs for them to be successfully referential. Firstly, a leitmotif must be distinctive in its soundscape, but not too complex. Leitmotifs must be readily graspable as a significant musical figure, which can often be achieved through using a distinct melody and rhythmic profile. Secondly, leitmotifs must not be too discursive. In relation to film, “they must be quick enough to coordinate smoothly with
the image-track and dialogue”. Thirdly, the used leitmotifs must be stable so that whenever they are used, they can be recognized. Thus, a leitmotif may vary in terms of orchestration, dynamics, and small melodic or rhythmic variation, but it should still take on the same basic form otherwise it may lose its designative function (London 2000, 88).

**Narrative Time**

Lastly, to understand how the narrative of the films, and of the music coincidently, plays with time, includes temporal shifts, and connects different timelines, it is relevant to understand how we can think about narrative time. For this I use Gerard Genette’s three categories about narrative time relations: order, duration, and frequency. The first category concerns itself with the temporal order of events and the temporal order of the narrative (Genette 1971, 94). In his discussion of Genette’s analysis, Seymour Chatman (1974) applies this category to cinema and argues that the discourse can rearrange the events of the story as much as it pleases as long as the story-sequence is still understandable. Through montage or cutting, film, especially, can rearrange events to the point that it is difficult to know whether a certain scene is simply the next chronological event, a flashback, or flashforward. If the events are in chronological order, we speak of a normal sequence. A flashback (analepses) occurs when the discourse interrupts the story-flow to show events that happened earlier. A flash-forward (prolepses) occurs when discourse leaps ahead to show an event to then come back to the beginning point otherwise it would just be a jump in time, or a “long ellipsis within the normal order” (Chatman 1974, 353).

It is also possible to only partially jump in time, since there are two information channels in film, visual and auditory. So, a scene where a character tells a story in the present about an event happening in the past can be accompanied by images of the past, while the voice-over remains the present (Chatman 1974, 353–355). This is closely related to the concepts of sound bridge, sound advance, sound lag. A sound bridge uses sound to tie separate visuals together. A sound advance happens when we already hear sound from the next scene before it is seen. A sound lag occurs when sound from one scene lingers over into the next scene. Visual and auditory channels can act independently from one another and therefore smooth or point out transitions that jump in time (Buhler and Neumeyer 2016, 75–77).

The second category of duration refers to the relationship between the duration of events and the duration of the narrative (Genette 1971, 94). Chatman (1974) describes this as the difference in “the time it takes to perceive the narrative and the time the events depicted in the story took to occur” (358). This category is divided into subcategories; summary, ellipsis, scene,
and pause. For summary and ellipsis, the discourse-time is faster than story-time. For stretch and pause the opposite happens, where discourse-time is slower than story-time. The category of scene exists somewhere in between where discourse-time and story-time are of equal duration (Genette 1971, 101–102).

The third category of frequency refers to how frequent events in the narrative occur and is divided into three possibilities by Genette. A singulative narrative is the type of narrative in which a singular event is told only once. A repetitive narrative refers to a narrative that tells several times, possibly with variations, about an event that only happened once. An iterative narrative applies to narratives in which a single telling covers several recurrences of the same event. One event is represented by a single discursive representation (Genette 1971, 103–104).

<table>
<thead>
<tr>
<th>Type of narrative</th>
<th>Example</th>
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<tbody>
<tr>
<td>Singulative</td>
<td>Yesterday I read a book</td>
<td></td>
</tr>
<tr>
<td>Repetitive</td>
<td>Yesterday I read a book, Yesterday I read a book, Yesterday I looked through a book, etc.</td>
<td></td>
</tr>
<tr>
<td>Iterative</td>
<td>I read a book everyday</td>
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Relative frequency of narrated events examples.

Genette’s schema on narrative time can aid in analyzing time-relations in narratives and will contribute to understanding the narratives of *Inception* and *Interstellar* and their music.
Analysis

Chapter 5

Musical motifs as a guide for understanding narrative themes.

*Inception* and *Interstellar* deal with grand ideas of reality, the universe, and time and can therefore be perceived by audiences as complicated narratives. Zimmer’s music can offer guidance in understanding, not only the complex temporal narrative as we will see in chapter six, but also what lies at the heart of the film. It can be argued that understanding why the events are happening and why the characters make choices and behave like they do is one of the most important elements that needs to be comprehended to understand a film. This element will be discussed in this chapter by looking into how music can represent main narrative themes which is done through analyzing musical motifs and their possible narrative meanings.

Throughout this chapter, I argue that musical motifs can come to represent narrative themes through a combination of film music’s various functions. Firstly, an aim of film music that Gorbman (1987) discusses is its role in narrative cueing. This refers to music’s ability to signify formal structure, such as beginnings and endings, and its ability to emphasize or clarify a character’s subjectivity or simply put, a point of view. This can be done by connecting music to the appearance of character, a thematic association repeated and solidified during the course of the narrative (Gorbman 1987, 85). This is similar to Wingstedt et al.’s (2010) idea of film music’s informative function. The informative function refers to the ability of music to express or explain phenomena or events by communicating information on a cognitive level. In this case music can, for example, clarify ambiguous situations or represent a character or phenomenon by use of a leitmotif (Wingstedt, Brändström, and Berg 2010, 195). Together with music’s ability to signify emotion in which, according to Gorbman, music may set specific moods and emphasize particular emotions suggested in the narrative (Gorbman 1987, 73), music can show how a character (from their point of view) feels towards an event or other character.

These ideas about the how music functions in a film can help with understanding how music can gain meaning and highlight or emphasize narrative elements. In this chapter, then, the main musical motif of each film is identified and analyzed by focusing on the events happening in the scenes they underscore and in what variations they appear. The first part of this chapter will go into detail about the main musical motif in *Inception* which I have named the ‘Time’ motif. The second part discusses *Interstellar*, and its main musical motif called the
‘Murphy’ motif. These two motifs share similarities in their representation of themes and how they are used throughout their respective films.

Part 1
*Inception: Feeling guilt and losing one’s sense of reality*

In this part, I will focus on an important musical element of *Inception*’s score, the motif heard in the cue ‘Time’ (Zimmer 2010). I argue that this motif is related to the questioning of reality by Cobb and his complicated feelings of love and guilt relating to his wife which reflects his psychological and emotional state. Therefore, this motif can function as an emotional guide as discussed by Felix Engel and Janina Wildfeuer (2015). I will argue this by first, specifying what I mean by the motif of ‘Time’ to then single out the instances in the film where the motif is heard and in what variations. While discussing this, I will relate the motif to the narrative events shown and the state of mind that the main protagonist of Cobb is in.

As discussed by Frank Lehman (2016), Zimmer has a personal style which Lehman names “maximalist minimalism”. This refers to his use of simple, minimalistic motifs that through instrumentation and volume transform into a maximalist score of epic proportions (28). As the director of *Inception* and many-time collaborator of Zimmer, Christopher Nolan himself states:

Hans is a minimalist composer with a sort of maximalist production sense. So, he’ll work these incredibly specific and simple pieces but the way in which you’ll then record them and produce them on such a colossal scale and with so much movement and drive that there’s a point where […] we just let the music take over everything. I’ll make them just turn the music louder and louder because you realize that the momentum of the film is entirely defined by the structure of the music as the film sort of snowballs towards the end (Vudu 2014, 3:12).

Lehman (2016) also discusses how the cue ‘Time’, specifically as heard in its entirety at the end of the film and as on the official soundtrack is a suitable example of Zimmer’s maximalist minimalism. According to Lehman the “cue’s ‘colossal’ dimensions grow out of a simple seed” (Lehman 2016, 28). This ‘simple seed’, shown below is what I define as the ‘Time’ motif, named after the cue ‘Time’ on the official soundtrack.
The motif consists of eight measures and a harmony of an eight-chord diatonic progression, realized through an unvarying linear intervallic pattern (Lehman 2016, 28). This motif is also used in the cue’s ‘Half remembered dream’, ‘Paradox’, and ‘Waiting for a train’ (Zimmer 2010). This suggests that the motif is an integral part of the score and is used at different points in the film. I define this eight-measure long musical theme as a motif partly to avoid confusion since the term ‘theme’ can also refer to narrative themes, such as the themes of guilt and love that will be mentioned, but more importantly because the reoccurrences of this motif remain “specifically directed and unchanged in their diegetic associations” which is the case for motifs according to Gorbman (1987, 27). In the following analysis I will dive deeper into the diegetic associations connected to the motif and how the unresolved and ambiguous nature of this short motif is significant for the mood of the music and the ending of the film.

The first instance the ‘Time’ motif can be heard is during the beginning of the opening credits (00:00:00). By starting the film with this music, the motif is presented as one of the main musical motifs of the film. However, except for the studio logos, no visuals or speech is presented to the audience. The motif itself does not carry any representational meaning yet, but returning to Wagner, it functions as a foreboding of what will be the main narrative theme (Wagner 1852/1964, 222–227). According to Gorbman (1987), a motif can absorb the diegetic associations that are present during its first occurrence by being in conjunction with image or speech. When it is then heard again, it can recall those associations and filmic context again (27). This is also in line with Wagner’s idea of remembrance triggered by the orchestra referring to previous moments in which the motif was heard and its diegetic associations. Motifs can start to carry representational meaning when they repeated. Its representational character can accumulate various meanings or consistently signal the same meaning, referring to the same character, location or situation with every appearance (Gorbman 1987, 27). The ‘Time’ motif has yet to make a connection to any diegetic associations. However, it takes on a narrative cueing function that music during opening titles often does in defining genre, setting a general mood, and introducing the main musical themes which will appear later in the film. Gorbman (1987) argues that “the distinctness of the melody can cue even the nonmusical listener into this
promissory function, setting up expectations of the narrative events to follow” (82). On a more
general note, opening-title music signals that the story is about to begin and it “bids us to settle
into our seats, stop chatting with fellow moviegoers, and drift into its daydream” (Gorbman
1987, 82). The use of the “Time” motif at the opening-title thus foreshadows the importance it
will have in the film and sets the tone for the rest of the film.

The ‘Time’ motif gains representational meaning during the first instance the motif is
used in conjunction with image or speech. After Cobb has explained the idea of shared dreaming
to Ariadne by going into a dream together, she is woken up by being stabbed by the woman.
Once awake, Arthur explains to her that she could not wake up before because there was still
time on the clock. She only woke up by being killed. After Cobb also wakes up, we first hear
of a device called a totem. Arthur explains to Ariadne (and subsequently the audience) that a
totem is a small object that a person has on them at all times. It is unique and the function of it
is only known to the owner. Ariadne is also told that the woman in the dream is Cobb’s wife
named Mal. While their conversation is happening, Cobb goes to a private room to spin a
spinner. The audience can assume that this is his totem since these images are shown during the
explanation of what a totem is. Thus, in this scene both the idea of a totem, which can tell its
owner whether they are dreaming or not, and the character of Mal are introduced. While the
intermitting cuts of Cobb’s totem spinning and Arthur and Ariadne conversation are shown, the
‘Time’ motif is quietly introduced with high-pitched strings (00:33:54).

The ‘Time’ motif played by strings (00:33:54).
I argue that this connects the ‘Time’ motif with its diegetic ideas. Not only is it related to Cobb questioning his reality after he has woken from the dream, but also to the appearance of Mal, Cobb’s wife. (As I will argue later these two elements are in and of itself already related). The first idea, that this motif represents the questioning of reality, is formed by how the motif is heard during the dialogue between Arthur and Ariadne. The exposition of the totem as an object that tells the characters that what they are experiencing is real is underscored by this motif, so the audience can start to connect the motif with the idea of reality versus a dream.

First appearance of Mal (00:33:23).
The second reason why this motif is connected to Mal originates from the combination of the motif with the disturbance by Mal in the dream and Ariadne’s surprised reaction to their encounter. When it is shown that Cobb’s spinner eventually stops spinning and falls, signifying that he is not dreaming or in someone else’s dream, another layer is gradually added on top of the ‘Time’ motif. The high-pitched strings still maintain the foreground on top of a brass layer, which makes for an uneasy and eerie feeling. The motif is not given much time to grow into even more intensity yet because the narrative moves on to another geographical location that comes with its own music, “Mombasa” on the official soundtrack (Zimmer 2010).

We hear the ‘Time’ motif again at 00:49:30 when Ariadne informs Cobb of how she is designing the dreamlevels. Cobb does not want to know details because he might bring personal projections that will sabotage the mission. Ariadne realizes that Cobb means that Mal might return, she says: “if you know the maze, then she [Mal] knows it”. The ‘Time’ motif is played by celli right when Ariadne finishes her sentence. In the conversation between Ariadne and Cobb that follows we learn that Cobb cannot go home because he is a suspect in his wife’s murder. The motif underscores another important moment where the audience learns more about Cobb’s relationship with Mal and the reasoning behind attempting such a dangerous mission, namely the desire to return home.

The next time we hear the ‘Time’ motif is, again, when Mal enters the picture. This time Ariadne and Cobb are dreaming together, and Ariadne and the audience get more insight into Cobb’s dreams and past. Cobb has constructed a system to organize his dreams through the metaphor of an elevator. Each ‘floor’ represents a memory and by going to that floor, Cobb can relive his memories as dreams. He lets Ariadne see several floors which consist of memories Cobb has of his children James and Phillipa and Mal before he lost them. But before Cobb can fully finish his explanation to Ariadne about the last time he saw his children, Ariadne runs back to the elevator to descend to the basement floor, the floor Cobb did not want her to go. When she enters, it turns out to be a hotel room where Mal resides. When Mal approaches Ariadne, the ‘Time’ motif quietly enters (00:59:16).
Mal approaches Ariadne (00:59:16).

Where previously the motif was played by two voices in strings, this time only one voice takes the foreground. It can be argued that the two voices played by the strings represent the two important characters of Mal and Cobb. These string voices play the basis for the motif on which layers are later added. If we do hear these strings as representing Mal and Cobb and their connection, it makes sense that they are the building blocks for the music since they are the two main characters. Their love and troubled past are not only what sets the main mission of the film in motion, but they also create obstacles for the characters and serve as a constant reminder for the audience of the dangers of the mission and getting lost in a dream. As stated before, in this scene, however, only one voice in strings is played softly. It sounds like a continuation of the shrill sound coming from Ariadne stepping on glass when entering the hotel room, giving the motif a fragile yet dangerous feeling. This corresponds with the idea that only one part of the duo, Mal, is the current focus. This is only further emphasized by Mal asking Ariadne: “Do you know what it is to be a lover? To be half of a whole?”.

The scene ends with Mal’s attempt to attack Ariadne again. After Cobb’s shows up, the quiet eerie ‘Time’ motif makes way for loud, startling staccato strings and cannot be heard again in this scene. Ariadne and Cobb then ride the elevator back up and wake up.

The ‘Time’ motif can be heard again at another crucial point in the film for understanding Cobb’s past and his motivation. While ‘the kick’ to wake up all characters from their shared dream is already in motion, Ariadne and Cobb must go even deeper into another
dream to retrieve Fischer, who has been shot by Mal. This deepest layer of dream was not originally part of their plan but an improvisation to finish the mission. The two characters enter Cobb’s dream since they are convinced Mal will have hidden Fischer there. A wide shot reveals how big the city is that Cobb and Mal built together, which already reveals how long they were both in this dream before. At 01:57:04, the ‘Time’ motif starts, (“Dream Within a Dream”, Zimmer 2010) but this time it is introduced by brass and also underscores the intermitting shots of events happening on the higher levels. When the film cuts back to Cobb explaining to Ariadne how this world was built from memories, more layers get added beginning with a piano joining in on the motif. At 01:57:52, after an explosion sound caused by Arthur, a layer of distorted electric guitar is added. The music gradually grows in volume and grandiosity by the addition of strings as we see how time keeps ticking on the higher levels while the characters prepare for the second kick of the van hitting the water. By adding more and more layers, the intensity of the ‘Time’ motif keeps growing.

This is a technique that fits within Zimmer’s so called ‘epic’ style as argued by Lehman. It is yet another example of Zimmer’s “maximalist minimalism” tendencies. The short motif is repeated and accumulates new instruments with each repetition. Lehman (2016), therefore, refers to it as a cathartic ostinato, which he defines as a cue “built from the repetition and cumulative intensification of a short motivic module. The bases for these ostinati are catchy, melodically simple gestures that are tailored for their amenability to repetition” (29). According to Lehman (2016) these ostinati ensure that “listeners can be led blissfully along” (29). The entire cue of “Time” and its hypnotic minimalism is what makes Zimmer’s cathartic ostinato effective according to Lehman. For him it is suitable for “narratival turning-point revelations of crucial plot elements, outpourings of long dammed-up emotions and the like” (Lehman 2016, 30). Zimmer plays with this idea of adding and removing layers throughout the film whenever the ‘Time’ motif is used to create different levels of intensity and intimacy.

This is noticeable at 01:59:42, when the ‘Time’ motif slowly fades by removing the layers and then fades completely when Cobb and Ariadne enter Cobb’s old house where Mal is. Cobb explains how the smallest idea can come to define someone. Mal continues Cobb’s explanation to Ariadne by saying “a smallest idea, [such] as your world is not real. Simple little thought that changes everything. So certain of the world, of what’s real. Do you think he [Cobb] is? Or do you think he is as lost as I was.” Cobb answers with “I know what’s real Mal.” Their conversation about what reality is continues, while the ‘Time’ motif is mainly played by piano (02:00:46). Since Mal and this conversation are manifestations of Cobb’s mind, we get a glimpse into the psyche of Cobb. This manifestation of Mal is trying to convince Cobb that his
reality is not real. This shows how Cobb is still questioning what reality is. Again, the ‘Time’ motif underscores this questioning of reality that is related to Mal. When we switch to Arthur’s level and Eames’ level (level 2 and 3), the previously added layers are back, including staccato strings that create a pulse effect. This fades again once we return to Cobb and Mal’s conversation, creating a certain amount of intimacy around them. Cobb explains to Ariadne and Mal how he applied inception first on his wife by telling her that her world (their shared dream) was not real. In a flashback we see that even after Cobb and Mal have woken up from their dream, Mal refuses to believe that what she experiences is real. Strings and piano play the ‘Time’ motif once again (02:04:51) when Cobb explains to Mal “[…] even after you came back to reality, you continued to believe your world wasn’t real”. The music quickly grows in intensity when we realize that this is the reason that Mal died, accompanied by the images of Mal jumping out of a hotel window. After this quick climax of the ‘Time’ motif, piano and strings continue but do not play the motif again. In this scene, the ‘Time’ motif is connected again with the idea of Cobb questioning his reality and the character of Mal. Furthermore, we find out that the idea of questioning one’s reality is itself already strongly linked to the character of Mal. She lost her sense of reality which resulted in her death and so the two ideas are linked insofar that they can be considered the same idea that resulted in Cobb’s guilt.

After the climax of ‘the kick’ and all characters but Cobb and Saito (who are stuck in limbo) have woken up from all dreamlevels, we get another glimpse into the past of Cobb and Mal. In flashbacks (02:13:00), it is shown how they grew old together in their dream which is underscored by the ‘Time’ motif (“Paradox”, Zimmer 2010). It starts with high-pitched violins but is then combined with horns. In this instance the motif is still linked to the questioning of one’s reality. Cobb tells Mal how they grew old together in a shared dream, a fabrication of reality that they made. For them, that dream was reality since they spend a whole lifetime together in there. The ‘Time’ motif thus has a strong link with their past as well. It is important to remember that these events are happening while Cobb is stuck in limbo and are therefore not ‘real’. It is rather another dream that Cobb is having where he is remembering his past life while his wife was still alive, giving us another glimpse into his psyche and how he still feels conflicted towards her, but is slowly forgiving himself by letting Mal go.

Therefore, this scene and the use of the ‘Time’ motif still reflect his emotional state since the motif lacks a clear tonicity. According to Lehman (2016), each chord in the ‘Time’ motif “can credibly lay claim to the mantle of tonic” (28). He argues this by presenting an argument for each chord:

33
A minor—The recipient of the heaviest metrical stress in every 4-bar unit, and perpetual point of return and pattern resumption.

E minor—The resolution of a plagal motion from A minor.

G major—The subject of logical functional implications from all three of the other chords, including its own deceptively-resolved dominant.

D major—The resolution of a plagal motion from G major, paralleling the earlier A to E pattern (Lehman 2016, 28).

Without a clear tonicity, there is also no clear mood or tone established. A lack of a clear mood can be interpretated as reflecting Cobb’s complicated emotions regarding his wife and his past. The dreams Cobb has of Mal are based on happy memories of times when his wife was still alive but are clouded with guilt of her death and are only dreams, which makes for an overall unsure, but bittersweet mood.

The last time the ‘Time’ motif occurs is during the final scene of the film. We find ourselves in the same setting as the very first scene of the film where Cobb has washed up on shore. This is due to him being underwater in a van on a higher level (level 1). The first scenes of the film are played again but cut down to shorter scenes. It is assumed that the spectator realizes that the film has arrived at the same point in the plot as the first scenes. This time we see the continuation of the conversation Saito and Cobb have. Cobb must remind Saito of something he once knew, something Cobb also seems to have forgotten. Saito has spun Cobb’s totem of which we see a close-up. The sight of the totem spinning reminds Cobb of what he had to tell Saito: “that this world is not real”. At this moment (02:16:40) high pitched strings softly begin playing the ‘Time’ motif.

Saito has spun Cobb's totem (02:16:40).
When Cobb tries to convince Saito to “come back” (to reality), the second voice in the strings is added, almost emphasizing Cobb’s words by adding more gravitas. When Saito then reaches for the gun, their interaction is still underscored with an eerie mood of uncertainty. When Saito touches the gun, the film suddenly cuts to Cobb opening his eyes back on the plane (‘reality’). At the moment of the cut (02:17:17), the percussive synth has grown louder making the sudden cut feel even more of an abrupt change. Throughout the rest of the scene of Cobb and Saito waking up and realizing they have accomplished their mission, the cue named ‘Time’ from the official soundtrack is played out in its entirety.

The ‘Time' motif is given freedom to reach its full potential in expanding into a climatic piece of film music and to dominate the audience’s senses. As Nolan has expressed, Zimmer produces music that is on such a colossal scale with so much movement that the music can take over everything. The music grows louder and louder because it defines the momentum of the film as the film snowballs towards the end (Vudu 2014, 3:35). How the ‘Time’ motif grows louder and louder can be seen below. It starts with piano and synth pad but adds layer upon layer of instruments to reach twenty-two brass instruments to eventually return to a quiet piano once again.

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It is this moment, ‘Time’ gets close to reaching its full potential as a cathartic ostinato, described by Lehman. The hypnotic nature of ‘Time’ achieved through its many repetitions and integrated layers is what makes this cue effective in expressing the long dammed-up emotions of Cobb that are at play in this scene (Lehman 2016, 30). The piece is both cyclical, since its main building block, the ‘Time’ motif, is repeated numerous times, but by adding layers and increasing in volume and instrumentation it also builds up towards a goal. This is the moment Cobb has been working towards the whole film. Most of the music is shortly halted except for strings and percussion that almost seem to still echo when Cobb reaches immigration in the airport on his way back to the United States. Cobb must wait to see whether Saito has kept his word and whether he will be granted entry to the U.S. so he can finally see his children again. This creates more tension by halting everything that has happened before to see whether the mission has paid off. Once Cobb has been granted access, an electric guitar gets added as another layer. More layers get added as we see that Cobb gets picked up by his father-in-law at the airport and how they return to Cobb’s house. For a moment Cobb starts doubting whether this world is real, and he spins his totem. However, he does not wait for it to stop spinning as his children take up his full attention. By this time, the layers abruptly ended, and we are left with the piano and strings. We have gone back to the essence of the ‘Time’ motif while also going back to the main motivation for Cobb actions in the film, his children. The question whether Cobb is in the real world, or yet another dream is now put on the audience as we see...
the totem continue to spin, but ever so slightly start to topple. No clear answer is given to the question whether Cobb is still dreaming or if his world is real.

This open ending is also reflected in ‘Time’ as discussed by Lehman who points out that the ‘Time’ motif lacks a clear tonicity and authentic cadence. This parallels the ambiguous ending of *Inception* itself. The motif and the ending are both ambivalent and open to interpretation (Lehman 2016, 28). Similarly to how music during the opening-title signals the beginning of the story and prepares the expectations of the audience, ending music also has a significant role in the formal structure of a film. Regarding the narrative cueing function of music, Gorbman (1987) argues that “musical recapitulation and closure reinforces the film’s narrative and formal closure. Often, it consists of an orchestral swelling with tonal resolution, sometimes involving a final statement of the score’s main theme. At any rate it typically provides a ‘rising crescendo,’ ‘loud and definite’ (82). The ‘Time’ motif strays from the convention as it does not offer a clear, grandiose closure. Instead, piano and violins play its full two-part version (representative of Cobb and Mal). When piano and the lower violins end, the remaining violins play the treble part alone with a pale sound (sul tasto) ending in the middle of the phrase on f # with a crescendo al niente.

Through underscoring image and speech with specific motifs, a connection is made between the music and its diegetic associations. Music can carry representational meaning in this way. I have analyzed how the ‘Time’ motif is used in such a way that it is able to represent the emotions and psyche of the protagonist, Cobb. Since the motif is used in moments where Cobb is reminded of his late wife and how she lost her sense of reality, the motif carries representational meaning of the themes of loss, guilt and losing one’s sense of reality. The motif is especially suitable to represent these themes because of its seemingly lack of clear tonicity as described by Lehman. This makes that the motif has no clear mood and lacks a clear ending which is in accordance with the complicated emotions of Cobb and the open ending of the film. Furthermore, this motif is an example of Zimmer’s maximalist minimalism tendencies since it is suitable for repetition and often grows in intensity by adding layers of instruments and growing in volume. This parallels the moments where the stakes seem especially high. While at other times the music is less intense and quieter. This parallels the intimacy between two lovers who are in turn represented by the two voices in violins in the ‘Time’ motif. Through these many ways in which the music parallels and represents Cobb’s emotions and psyche, the ‘Time’ motif can be seen as an emotional guide that helps the audience towards an understanding of Cobb’s emotions and therefore towards a better understanding of the film’s main narrative themes overall.
Part 2
*Interstellar: The bond between father and daughter and the promise of returning home*

When Nolan began writing *Interstellar*, he gave Zimmer a typed letter only the size of a single page with the theme of the film without any further ideas of the story. For this, Zimmer was set with the task to write down some musical ideas. As Zimmer said in an interview with *The Hollywood Reporter* he wrote “about what it meant to be a father” (Appelo 2014). When Nolan explained the idea of *Interstellar* further, Zimmer was unsure about what he had written since it reflected a “tiny, intimate piece” and not a story of space, philosophy, and science. However, Nolan was satisfied with what Zimmer had come up with and responded that now he knew “what the heart of the story” was (Burliingame 2014). So, while *Interstellar* deals with grand ideas about the universe and laws of nature, what lies at the heart of the film is the relationship between a father and his child(ren). For *Interstellar* this then applies to the relationship the main protagonist Joseph Cooper has with his children and mainly his daughter Murphy.

Similar to the ‘Time’ motif in *Inception*, which represents the relation Cobb has with Mal and the guilt he feels, musical motifs also represent the relationship between two of the main characters in *Interstellar*, Cooper and Murphy. The main musical motif that propels the momentum of *Interstellar* forward, is in this instance not strictly linked to the appearances of specific characters but is used in moments where Cooper is linked to his daughter Murphy and when their relationship is affected by the events that happen and the choices that are made. The motif appears in different variations that reflect the emotions at play in the various scenes it can be heard in from intimate to high intensity, life changing moments. These variations and scenes will be analyzed in a similar manner as is done for *Inception*. A second motif will also be included for it also relates to the same narrative theme of the connection between Cooper and Murphy and shares similarities with the main motif. This main motif will from now on be referred to as the ‘Murphy’ motif.

In its most abstract form, the ‘Murphy’ motif consists of a steady pulse through repetitions of the note ‘e’ and another line that start with the note ‘a’ accompanied by merely three chords: Fmaj7, Em, and Am. The lower notes starting from ‘a’ ascend to meet the high ‘e’. The ‘e’ grounds the motif, and this note then can be heard as the center throughout *Interstellar*’s score. The example below shows the motif in its simplest form. Often the music
will build on this melody in Zimmer’s signature “minimalistic maximalism” style by adding layers, instrumentation, and volume.

Similarly to Inception’s ‘Time’ motif, it is possible to see the two main characters in the main motif, if we would consider the above motif to consist of two lines. The first line consists of quarter notes and begins on ‘a’ and ascends to ‘d’, while the other line remains on ‘e’ and consists of half notes. The steady ‘e’ which grounds the motif can be linked to Murphy. She remains on earth and is a grounding factor to Cooper who wants to return to her. His line, then, is the ascending one, which slowly tries to meet the other line in ‘e’ but does not quite get there. As we will see in the further discussion of this motif and when it occurs in the film, the movements of the lines follow and parallel the journey of the characters and underscores scenes in which their relationship is at stake and obstacles stand in the way of Cooper returning home to Murphy.

The first instance the ‘Murphy’ motif is used is early in the film around 00:06:06 when Cooper and his children are on their way to the children’s school and their car breaks down. Tom, the son, tries to fix the flat tire after Cooper instructs him to do so, saying: “I’m not always
gonna be here to help you”. This simple sentence already foreshadows Cooper’s imminent departure. It is then at this moment that the ‘Murphy’ motif starts. Underscored by this motif, Cooper and Murphy talk about the meaning of Murphy’s law, after which she is named. Cooper specifies: “Murphy’s law doesn’t mean something bad will happen, what it means is whatever can happen, will happen.” Not only does Cooper reassure Murphy by stating that she was not named after a bad thing, he also lays the groundwork for the rest of the film by mentioning predestination. As we will see, the events that happen early in the film are caused by events that happen towards the end and all center around Cooper’s love for Murphy that transcends time. Film music’s narrative cueing ability as described by Gorbman is at work since this is the first instance where a thematic association is made (Gorbman 1987, 85). By underscoring this moment that is exemplary of Cooper and Murphy’s bond with the motif, it can start gaining narrative meaning and representation. During the course of the narrative this association is repeated and solidified (Gorbman 1987, 85).

At 00:28:07 we can hear a variant of the ‘Murphy’ motif again when Cooper and Murphy have arrived at the science facility after coordinates spelled out by mysterious gravitational fields have led them there. They meet professor Brand, who is in charge of the so-called “Lazarus project”, the mission for which several astronauts have been sent to different planets to find one on which humanity can survive. Dr. Brand tries to recruit Cooper, a former NASA pilot, to man the spaceship that will try to contact the astronauts. In this moment Cooper knows he must make an important decision: stay with Murphy and see how life on earth slowly becomes impossible as Dr. Brand explains: “your daughter’s generation will be the last to survive on earth” (00:29:32) or become part of the mission and possibly not see his daughter for a long time or ever again, but her generation and many more might survive. At this moment, Amelia asks if Murphy can rest in the office, separating her from her father and in a way foreshadowing their future separation. In this scene the motif gets further connected to the relationship between father and daughter and also connected to the internal struggle of Cooper in deciding whether he is willing to sacrifice seeing Murphy grow up in order to create a future for her and mankind.
Variation of the ‘Murphy’ Motif in the cue “One Day” (Zimmer 2010).

The variation of the motif that can be heard during this scene starts out in the piano with repetitions of Murphy’s note (‘e’). This is after four bars accompanied by the other piano line, which starts on ‘a’ and ascends multiple times but keeps moving between the ‘e’ and its (octave) higher counterpart. This can be heard throughout the scene. Once Dr. Brand shows Cooper the spaceship and states: “we’re not meant to save the earth, we’re meant to leave it”, the music picks up tempo and another variation of the motif played by the organ can be heard on top of it.

Through the connotations of the organ, Zimmer manages to add a deeper level to the score. Zimmer and Nolan deliberately chose this instrument since it represents the connection between earth and space in different ways. Firstly, the organ used is a Harrison & Harrison, four stop organ, built in 1942, which was at the time the largest instrument created with a total of 3828
pipes. It resembles the extend of human knowledge and its advances in technology. This can be connected to the mission of the crew to save humankind. Secondly, organs are often played in religious venues, such is the case with the recording for *Interstellar* at Temple Church in London. The connotations of the organ with religion can be representative of how humans seek meaning ‘out there’ which they cannot quite understand as Nolan discusses (Elegyscores 2014, 2:00). Rather than finding meaning in religion and God, in *Interstellar*, the crew hopes to find a new home among the stars. Thirdly, the way the organ is utilized, with its slow harmony and melody, suggest a grandness, a vastness of the universe. At the same time this sound can only be produced if a human plays the instrument, and the sound is made through air, it needs to breathe which makes it human, therefore connecting the two (Burlingame 2014). As Nolan remarks about the use of the organ: “You feel human presence in every sound. I think that was very important to keeping the film in bound. Not just the space we’re looking at but the people in that space. There was an intimacy as well as massive scale”. This juxtaposition is part of the “maximalist minimalism” signature style of Zimmer as discussed in part one. *Interstellar’s* score makes extensive use of relatively small and simple melodies which are put against the vastness of space. The music reflects the vastness of space that separates the two main characters. However, an interpretation of this style could be that the melody is not only connected to the father-daughter relationship but more generally to the smallness of humankind compared to the grandness of space and thus also plays a role in the presentation of those moments, e.g. when we see the Endurance, the spaceship Cooper pilots, frantically spinning in space but is presented only as a little dot when the camera zooms out (02:07:34).

The next instance the motif is used is when the crew, now only consisting of Cooper and Amelia, returns to the Endurance after the events on Miller’s planet. Once returned, they find a significantly older Romilly. Feeling defeated from losing Doyle and failing their mission, Amelia asks why Romilly did not sleep. Romilly answers with “I stopped believing you were coming back” (01:18:18). This is underscored by the ‘Murphy’ motif in its simplest form but played by the organ. The reality of how much time has gone by starts to set in for the characters. Cooper and Amelia only spent little time on Miller’s planet but for Romilly and the others on earth, 23 years have gone by. That Romilly states that he stopped believing that the crew were coming back is also significant for Cooper since this can mean that Murphy might also has stopped believing he will come back. Romilly then explains how he has been unable to send messages but has been able to receive them. This leads to a scene where Cooper and Amelia watch 23 years’ worth of messages from back home. Cooper starts watching the videos from the beginning, when his son Tom is still the age he was when Cooper left, but Cooper gradually
sees him age and live out his live. When Tom says he must let him [Cooper] go and ends his last video message the music seems to be stuck on c-a for some time and then abruptly stops (01:21:30). When an older Murphy (in fact she is now the same age as Cooper) appears on screen, all that is played is a single note on the organ which slowly fades away and the film switches perspectives to the earth perspective when Murphy ends the video. In this example, the motif underscores how the threat of time has become a clear realization for Cooper and the continually expending emotional, physical, and temporal distance that is created between him and Murphy.

At 01:31:26, the motif is heard again during events that are happening on earth this time. Murphy has gone to see Dr. Brand who is in hospital on his deathbed and wishes to speak to her to ask for her forgiveness. During the start of their conversation, we hear Cooper’s line of the motif which gets mixed with a high ‘e’ in a lower tempo than before (“No Need to Come back”, Zimmer 2010).

![Murphy visits Dr. Brand's deathbed (1:31:26).](image)

Dr. Brand talks about how Murphy kept faith that her father would return to her: “I wanted you to believe that your father would come back”. The music functions as an emotive signifier that first underscores a moment of sadness as Dr. Brand speaks with difficulty in a moment that suggests will be his last. But this sadness turns into feelings of betrayal when Dr. Brand asks for forgiveness because he has lied to Murphy.

![Professor Brand tells Murphy the truth (01:31:36).](image)

At this moment the motif fades away and high-pitched strings/ synthesizers take over, giving the scene a more sinister feeling. He admits that “There’s no need for them to come back” referring to Cooper and the crew. This has great consequences for Murphy who starts to
question whether her father knew this before leaving and thus betrayed her and left her to die on earth. The scene then continues with Murphy sending a video message to the crew about Dr. Brand’s death and asking Amelia if she knew all along. In this moment the film switches perspectives from earth to the Endurance. The camera pans to a window in the spaceship as Cooper and Amelia fly away to Dr. Mann’s planet. Murphy and the audience have learned that the crew might not return and humankind on earth might not be saved, but the crew is unaware of this. The scene thus creates a lot of tension in this way. What it supports is that the motif is used again to underscore moments in which the audience learns vital information regarding how the relationship between Cooper and Murphy is at stake and how obstacles stand in the way of their reunion. Through repetition of this motif at these moments the link between the motif and its narrative association is reinforced.

This link is further supported by its use at 01:55:26 when Cooper has learned of Dr. Mann’s true intentions and is left with a sabotaged spacesuit causing him to slowly run out of air. Two variations of the ‘Murphy’ motif start at 01:56:06, the slower variation that plays during Dr. Brand’s deathbed and the organ variation. Dr. Mann still speaks to Cooper: “Do you see your children? It’s okay, they’re right there with you.” As time is running out for Cooper and the film cuts between the space perspective and the one on earth where we see Murphy burning down a cornfield as a distraction for her brother, the intensity and pace of the music increases similarly to the ‘Time’ motif in Inception by adding layer upon layer. The eventually frantic and scary music is suitable for a moment in which Cooper panics and Amelia races to save him. Through flashbacks we see how, in his seemingly last moments, all Cooper thinks about is his daughter and the moment he left her. The flashback of Cooper and Murphy comparing their watches that can be seen during this moment, refers to earlier in the film when Cooper explains how he and Murphy could be the same age when he returns. This moment has happened so Cooper essentially has broken his promise to be back on time. Continuing the thought expressed earlier about this motif consisting of two lines that represent the two main characters and their journey, in this variation, Cooper’s line ascends and descends multiple times which parallels his journey from earth through space finding a way to come back home but being stopped by obstacles such as Dr. Mann. While Murphy’s line is relatively, a stable, constant pulsing beat.
The next time the ‘Murphy’ motif returns is at 02:08:10 when Cooper attempts to dock after Dr. Mann has caused an explosion at the Endurance. The second variation of the motif at 02:10:02 resembles the one heard during the cornfield chase at the start of the film with its emotive signification of trying to reach a goal. The significance here of the motif may not be as directly linked to Murphy as the previous example in which we see flashbacks to a younger Murphy because Cooper thinks of her. However, there is still significance in this scene as Cooper’s actions will have great consequence for whether he will see Murphy again. At 02:10:01, another variation of the motif in its most abstract form is layered upon all the previous musical material. Zimmer utilizes the different variations on the motif as different layers creating another “minimalistic maximalist” composition.

Before continuing with scenes in which the ‘Murphy’ motif plays a role, I would like to discuss another motif which carries narrative meaning and needs to be understood before returning to the climax of the film. This motif is what I call the ‘Ghost’ motif but has also been named the “Anomaly,” “Gravity,” or “Dust” cue by others (Richardson et al. 2021, 393). This motif plays an important role whenever something mysterious occurs which the characters are yet to understand. This often coincides with mentions of ‘the ghost’, the name given by young Murphy for the being that moves her books from the bookcase. The first mention of the ‘ghost’ happens around 00:02:00 when Murphy hears her father wake up from a bad dream and says: “I thought you were the ghost”. At 00:14:36 when Cooper enters Murphy’s room to investigate the books falling from the bookshelf, the ‘ghost’ motif can also be heard.
This motif can be heard again at 00:19:45 when Murphy has forgotten to shut the window and the dust that has entered her room spells out coordinates which led them to find Dr. Brand’s NASA facility. As is foreshadowed by the dialogue and shown at the end of the film, Cooper turns out to be this ‘ghost’ trying to warn his past self to stay with his family and give Murphy the key to solving the gravity equation. When he says his goodbye to Murphy he explains “once you’re a parent, you’re the ghost of your children’s future.” (00:35:46). Unsurprisingly, the motif also underscores this moment. Once Cooper has left earth, the ‘ghost’ or the ‘beings’ are mentioned several times more such as at 02:27:47 when TARS explains the gravity dimension to Cooper and what ‘they’ (unexplained beings or ‘ghosts’) are doing. Gradually Cooper and the audience learn that those ‘beings’ are actually humans that live many years from now and who have discovered new dimensions and can manipulate time and space.

The significance of this motif is the narrative meaning of the scenes which it underscores. These scientific mysteries that are happening are what brings Cooper and Murphy together but also pulls them apart. Both of them share an interest in science and what is beyond what one can see (as opposed to the grandfather and Tom who seem to be content with working on the farm). It is Cooper who tells Murphy how to scientifically gather evidence on what this ‘ghost’ is. But, by investigating this, Cooper finds the facility of Dr. Brand and eventually leaves Murphy to go on the mission. He physically leaves Murphy, but they also drift apart emotionally since Murphy feels as though her father is abandoning her. The interest in science and ‘what is out there’ is thus also what pulls the two characters apart.

Besides underscoring particular moments through which it gains narrative meaning, the motif itself also contains musical material that reflects its meaning. In their chapter on visceral involvement in film music that creates experiences of altered space and time, Richardson et al. argue that the music in these moments depicts “the strength and gravity of the relationship, it also embodies how it is depicted as transcending time, moving into a mythical or eternal zone
through the use of repetition and looping, which forms the basis of their attempts to save mankind from impending destruction.” (Richardson et al. 2021, 391). In their discussion they also mention the ability of music to reference other music as they argue that the violins circle around the fifth, tritone and major sixth which is reminiscent of Wagner’s “infinite melodies” and the music in Kubrick’s *2001: A Space Odyssey* (1968), which took inspiration from Strauss’ *Thus Spoke Zarathustra*. As Richardson et al. (2021) point out, there is a sense of optimism and wonder within the motif as “both the laws of gravity and of musical resolution are suspended” (392). It is static as the root of the chord is unchanged and the melody only implies tonal movement (Richardson et al. 2021, 392–393). They also argue that the diatonic ascent in the organ intertextually references Baroque and “post-minimalist chaconnes”, which would imply transformation and cyclical movement. According to them this is essential to the narrative as it returns to the start when Cooper interacts with his daughter in the past (Richardson et al. 2021, 391).

This brings us back to the next instance in which the ‘Murphy’ motif is heard. Cooper is in the Tesseract, a device through which the five-dimensional space is visualized. Here, Cooper can go through time and space and thus see and interact with a younger Murphy. He tries to spell out “S.T.A.Y.” through the books to persuade his younger self to stay with Murphy. On the earth perspective we see an older Murphy who is also going back to the bookcase to see if she missed anything. When she realizes that the books spells out the word “stay”, a quick melody in organ that is inserted into the main motif signals towards this important narrative element. In this moment the music attains a *spatial perceptive function* as described by Audissino. This occurs when music points the spectator’s attention to an important visual detail or action by highlighting its presence (Audissino 2017, 136). In this scene everything that has been discussed and shown before is accumulated. This is also reflected in the music which consists of multiple cues that have been introduced throughout the film. Richardson et al. (2021) discuss the combination of themes that are used and how “the connection between the two characters is accentuated by the compressed space-time of the singularity, but also through the leitmotivic use of similar musical materials.” (393). Starting from 02:28:48, the ‘Murphy’ motif and the ‘Ghost’ motif are layered upon each other. Richardson et al. argue that the “S.T.A.Y.” cue (Zimmer 2014) points towards Murphy’s increased importance within the story as Cooper realizes that it is only Murphy who can save the world. Murphy’s important role in the future of humankind is also further emphasized by the realization of Cooper that love will guide him towards the right time and place in the Tesseract where he can communicate with Murphy, emphasizing the main narrative theme of a father’s love for his daughter. Murphy’s increasingly
more important role as an active agent is also reflected in the musical material of the ‘Murphy’ motif. Richardson et al. (2021), point out that the motif has a “Morse code-like mechanical quality” (390). The motif consists of a combination of short and long notes that ascend and descend in a calm manner where every note could contain a meaning. Eventually we learn that Murphy is the one who will solve the gravity equation and does this through Cooper’s message that is spelled out through morse from him being in the Tesseract.

Similarly to the climax in Inception, the music here grows in momentum and is an accumulation of the various motives that have been presented throughout the film. It signals that this is what it has all been for and that previous events are all interconnected. The ‘Ghost’ motif no longer represents the mysterious and scary unknown. Instead, answers have been provided and we have now learned that it was Cooper and his love for Murphy that was transcending time and space all along. When Cooper has succeeded in sending his message to Murphy, the Tesseract starts to fold in on itself and Cooper is left floating in space.

However, this is not the final moment in the film. Cooper wakes up after this climax of sound. When he is finally reunited with Murphy on her deathbed, the organ builds up and after a moment of silence, the ‘Murphy’ motif in its most basic form plays in organ. Cooper says to her “it was me Murph, I was your ghost’, but Murphy knows this already and admits she never lost hope, “because my dad promised me”. The ‘Murphy’ motif is repeated multiple times as the two characters are finally reunited. As Murphy tells Cooper to go to Amelia who is setting up camp in another galaxy, the motif builds up again. It keeps unfolding as Cooper steals one of the spaceships and makes his way towards her. This time the orchestra does swell towards a resolution with the final statement of the main theme as Gorbman argues is often the case with the ending music. This final statement of the motif signals the closure of the film’s narrative (Gorbman 1987, 82).

The motifs in Interstellar attain representational meaning in a similar manner to the motifs in Inception. For Interstellar, the ‘Murphy’ motif is utilized to underscore images and speech related the connection between father and daughter and through these diegetic associations, it is able to represent the narrative theme of love. The motif is used in moments where the relationship between Cooper and Murphy is tested by both internal struggle and external obstacles. Cooper must face the struggle of making the life-altering decision to pilot the spaceship and thus leaving Murphy on earth, when he knows she will feel resentment towards him for this. Then, Cooper faces the external obstacles of time slippage caused by differences in gravitational pull, Dr. Brand not being truthful about the nature of the mission, and Dr. Mann’s betrayal. These events all cause Cooper to be further removed from his
daughter. The ‘Murphy’ motif is especially suitable to represent their relationship because of its feeling of altered space-time as described by Richardson et al. The motif has no clear mood and lacks a clear ending which is similar to the complicated emotions of Cobb and the open ending of *Inception*. Furthermore, this motif is also an example of Zimmer’s maximalist minimalism tendencies since it is suitable for repetition and often grows in intensity by growing in volume and adding layers of instruments and other motifs such as the ‘Ghost’ motif. This reflects moments in which their relationship is at stake. Through reflecting the connectedness but at the same time the distance between Cooper and Murphy, the music can be seen as an emotional guide that helps the audience towards an understanding of Cooper and Murphy’s emotions and point of views and therefore towards a better understanding of the film overall.
Chapter 6

Music’s function for temporal clarity in a narrative

As discussed earlier, film music can function on a temporal level due to its ability to establish a historical setting. Discontent with this dominant idea, Butler (2006) offers alternative manners in which music’s temporal qualities can play a role in our understanding of the passage of film time (51). In his discussion of how music can help with navigation, Butler refers to the referential function of music through leitmotifs. As we have also seen from the theoretical framework, leitmotifs can aid in navigating a non-linear narrative structure and make clear when in a narrative we are (Butler 2006, 57). Butler’s example of Gillo Pontecorvo’s *The Battle of Algiers* (1965) gives insight how music can offer clarity in temporally complex narratives. He remarks how the transition into a flashback is accompanied by downward glissandi which gradually slow down. The combination of the visuals and music imparts “an effective sense of sliding back in time”. Furthermore, the events of the main storyline, i.e., before and after the flashbacks, are accompanied by the same leitmotif, in this case a particular snare drum pattern. Butler discusses how this functions as a “final confirmation that we have come full circle and the flashbacks have caught up with the events at the film’s outset”. It is not necessary here for the visuals after the flashback to fully repeat what happened before the flashback since the strong audio-visual connection has already been established (Butler 2006, 58).

These accounts will be helpful in the discussion of the role of music in *Inception* and *Interstellar*’s complex temporal narratives. As seen from the first chapter, the main narrative themes of the films consist of relatively simple universally felt and understood themes of love and guilt. The manner in which these themes are presented, however, is complex as timelines exist within one another and time is treated as circular. In this chapter, music’s ability to act as a guide through the temporally complex narrative will be discussed. This will include how diegetic and non-diegetic music in *Inception* signal changes in timelines and thus changes in how time passes. For *Interstellar*, focus will be on two elements, namely the use of a steady beat during specific scenes which signify the passage of relative time and how leitmotifs connect the present with events in the past.
Part 1
Inception: ‘The kick” to awaken and signal time difference

Not long after Inception was released, a Youtube user by the name of Cameron Whitehouse uploaded a video that showed how the film used Édith Piaf’s song ‘non, je ne regrette rien’ by incorporating the chord rhythm into its score. In the description he stated:

I'm not saying the cues we hear in the movie are slowed down. Zimmer appears to be using Piaf's song as a foundation for extrapolation. This phenomenon may be obvious to a lot of you out there, but this video serves as a way for people to hear them side by side and to visualize and understand what Zimmer is doing with the score (Whitehouse 2010).

In an interview with The Hollywood Reporter, Zimmer reacted to the increasing amount of interest in this discovery by saying: “I was surprised how long it took them to figure it out” (Itzkoff 2010). He continues that it was not only intentional, but also not supposed to be a secret. Rather, it was used as a clear signpost that the characters are moving from one dreamlevel to another. According to Zimmer this element “was like a drawing of a huge finger saying, O.K., different time” (Itzkoff 2010). The first part of this chapter will go into this idea by analyzing how ‘non, je ne regrette rien’ acts as an auditory narrative device that guides the spectator through the manipulation of time by connecting the different timelines with one another and representing time differences. Thus, aiding the audience towards a better understanding of the temporality of Inception’s narrative.

Before examining how ‘non, je ne regrette rien’ does this, I would first like to turn to the possible significance of this particular song for the main narrative theme of Inception. As seen from the previous chapter, one of Inception’s main themes is guilt. As pointed out by Engel and Wildfeuer, the choice of the song has significance on its own by representing the inner conflict of the main protagonist. The lyrics talk about not feeling guilt and can therefore be connected to Cobb, who does feel a sense of guilt over losing Mal and his children. According to Engel and Wildfeuer (2015), the chanson expresses the need and wish of the character Cobb for forgiving himself for his responsibility in Mal’s death (241). However, it also carries some irony since the song in which Piaf sings about not feeling regret is used in relation to a character who does feel guilt. Engel and Wildfeuer (2015) therefore state that the song is “emotionally
clarifying or, dependent on the particularly preferred interpretation, even evaluative” (241). For Zimmer this was also at the core of the whole composition. Zimmer describes how he was writing about nostalgia and sadness “this character carries this sadness all the time that he cannot express […] It’s about adding a sense of loss and mystery, and a sense of emotional belonging in a time that no longer exists” (Martens 2010). However, Jacqueline Waeber (2013) contradicts this idea of a connection between the lyrics of the song with the narrative of the film. She argues that the film does not offer any connection that contextualizes the meaning of the song. In her opinion, “Nolan never intended to insist on its semantic meaning” and argues this is made clear by the lack of explicit reference by the characters to the song, as they simply refer to its function by calling it the “music” or the “musical countdown” (Waeber 2013, 53).

Another connection between the song and the narrative of Inception is made by David Kyle Johnson (2012), who discusses the main question left on many people’s mind after viewing the film; is Cobb still dreaming when he is reunited with his family? Here Johnson points out that Inception has a running time of exactly 2:28 (in hours and minutes), which is the same as the song, ‘non, je ne regrette rien’ that is used to signal the end of a dream 2:28 (in minutes and seconds). According to Johnson this could be a clue that the events happening in the film are a part of Cobb’s dream since when the song is over, the dream is over (Johnson 2012, 8). According to my knowledge, neither Nolan nor Zimmer have expressed that this particular song was used for its lyrical meaning or runtime. Regardless, it shows how audiences look for meaning in the music and try to connect it to the narrative. As seen from the quote from Zimmer, however, the connection between the song and complex temporal narrative of Inception was in fact intentional.

The function of the song within the narrative as ‘the kick’ is explained at 00:52:33 while the characters discuss the time differences between the dreamlevels. At 00:52:08 it is explained that to gain more time on the dreamlevels for this particular mission, the brain function of the characters is made to be twenty times faster than normal. This is due to a special formula to share dreams made by Yusuf. The effect of this sedative is compounded every time they enter another dream within a dream. This means that time passes differently on the levels. On the first level the dream lasts a week, the second level lasts six months, and the third level lasts ten years. To not get stuck on one of the dreamlevels and end up in a ‘limbo’, they need a physical push that awakens them. This is
described in the film as a ‘kick’: “the feeling of falling that jolts you awake, snaps you out of that dream” (00:52:51). In order to experience ‘the kick’ at the right time the characters need to synchronize it so that it can penetrate all three levels. They use music since our sense of hearing is never fully asleep. Now the function of Édith Piaf’s song ‘non, je ne regrette rien’ is concretely explained.

Not only is the song played in different speeds to reflect the differences in time passing, it is also used as a foundation for the score by Zimmer. Zimmer’s signature loud brass sounds, often named ‘braaam’ sounds, are based on the song. To realize the contrast of the original song and the ‘braaam’ sounds in the score, Zimmer did not simply slow down the audio, like it might seem. Rather, he focused on two notes from the recording and used those as a base for much of the music. As Waebert (2013) explains from her analysis: “Zimmer had used the opening measures of the instrumental introduction from the Piaf song, in which the scansion of a low ‘g’ on a single iambic rhythm is heard. Other cues from the soundtrack are based on a very simple melodic material, the semi-tone ‘g–f♯’ that characterizes the bass line of the song (see example 1, left hand, bass line g–f♯–f♯–g)” (Waebert 2013, 48).

Example from Waebert: “What’s in a song” (Waebert 2013, 48).

That ‘non, je ne regrette rien’ plays such an important role throughout the score of the whole film is evident in the following quote from Zimmer:

All the music in the score is subdivisions and multiplications of the tempo of the Édith Piaf track. So, I could slip into half-time; I could slip
into a third of a time. Anything could go anywhere. At any moment I could drop into a different level of time (Itzkoff 2010).

The film and its music are thus strongly linked, both manipulate time to enter different levels of time. Similarly to how Butler remarks that the transition into a flashback in his previously mentioned example is accompanied by downward glissandi that gradually slow down (Butler 2006, 58), the transition from the original version to the modified version also contains a gradual slowing down.

The song and the transition to the modified version are used for the first time in a mission that has already started before the main mission about Fisher Jr. In this mission Cobb and Arthur are trying to extract information from Saito, a Japanese businessman who will later in the film hire them for the Fischer mission. At 00:12:37, a character that we only meet at this point in the film, Tadashi, puts headphones on Nash while they are on the train dreaming. He looks at the timer in the suitcase and starts the song. While the camera stays on a close-up of Nash with his eyes closed, the music grows louder and louder. At 00:13:02 the film cuts to Nash standing in a room with his eyes open and looking around, slowly realizing that he hears music. The song acts as a sound bridge that connects the two separate shots, making the sudden transition less noticeable.

Engel and Wildfeuer (2015) have analyzed the logical forms of this scene and conclude that because of the visible contrast between the two scenes, the two shots are interpreted in different ways. In the first short Nash appears with his eyes closed, in a train while Piaf’s song plays. This will lead to an interpretation of the character as asleep. In the second shot we see the same character but this time he has his eyes open, whilst in a house and we hear a slowed down, modified version of Piaf’s song. This will lead to an interpretation of the character as awake and listening (Engel and Wildfeuer 2015, 238).
As is evident from the inclusion of the music in their analysis, interpretations of this scene are not only dependent on the visuals. The contrast between the two different versions of ‘non, je ne regrette rien’ also contributes to the interpretation of this scene as depicting two dreamlevels and thus orienting the spectator both geographically and temporally (Engel and Wildfeuer 2015, 239). In the first shot the original version of the song is played, but when the film cuts to an awake Nash, all that is left from the song is the low brass section with the “braam” sounds. But the clear recognizability of the song and its vocals does not disappear completely. At 00:13:06, Piaf’s vocals can be distinguished as they sound in the distance and are stretched out. The combination of the isolated low notes and the stretched-out vocals of Piaf suggests that the song has been slowed down because time passes faster once the characters enter a lower dreamlevel.

The second time the song is used is at 00:27:40 when Cobb tests Ariadne skills in the dreamworld. When he admits to her that they are in a dream, the dream slowly starts to collapse because of Ariadne’s panic. This is visualized by objects around them exploding. While the dream is collapsing and the characters are thus close to waking up, the modified version of ‘non, je ne regrette rien’ starts playing. After both characters wake up, Arthur explains the time difference between reality and the dream state. We learn that while an hour went by in the dream, only five minutes passed in reality. During this dialogue, the original version of the song plays in the background. While the song retains its function as a musical signpost for the characters to wake up, in this instance it is shown in an opposite order. We are with the characters in the dream and first hear the modified version whilst the dream is collapsing. An observant spectator might already notice the significance of these notes and as the film cuts to Ariadne and Cobb in their awake state, ‘non, je ne regrette rien’ is clearly noticeable. By showcasing the song for a second time but in a slightly different way, the spectator can start to associate the song with the process of waking up further, creating an even stronger connection between the song and its diegetic associations. Although the function of the song as a musical signpost has not been explicitly explained yet, several clues have been giving for its significance. Furthermore, the contrast of the modified version of the song whilst dreaming and the original version whilst awake reaffirms that time passes differently between dreaming and the awake state. This in combination with the dialogue about the concrete time difference of five minutes to an hour, further cements the connection of the song with a temporal shift of narrative time.

This connection is explicitly reaffirmed during the scene at 00:52:33 where the characters discuss the time differences and the function of ‘the kick’. Once the Fischer mission
is in motion, ‘the kick’ is used from 01:42:54 onwards when the characters are woken up from several dreamlevels at once, resulting in a sequence in which the film cuts between the different dreamlevels in a quick manner. First, we see Yusuf on level one as he puts the headphones on Arthur (01:42:45) and starts ‘the kick’ by playing the song. Next, we see Arthur in the dreamlevel lower in an awake state and recognizing the song (which we hear in its modification). The film cuts to another level lower where Eames notices sounds. He calls out to Cobb and says: “Cobb, do you hear that? I first noticed it about 20 minutes ago”. Cobb responds: “I hear it. It’s music” (01:43:20). What they hear is another modified version in which the music and the vocals are even more slowed down but still audible and recognizable as ‘non, je ne regrette rien’, especially once Cobb points out it is music. Eames and Cobb decide that they must hurry as their time is running out. At this point the slower modified version of the Piaf song fades away as the cue “Dream within a Dream” (Zimmer 2010) starts playing. Cobb quickly calculates how much time each level has left before ‘the kick’ is in full effect; Yusuf on level 1 = 10 seconds, Arthur on level 2 = 3 minutes, and Eames and Cobb on level 3 = 60 minutes. As Cobb mentions each level the film shows the visuals matching that level. On Yusuf’s level the “Dream within a Dream” cue continues. This can be explained based on point of view. Since we experience that level from Yusuf’s point of view, as he is the only character awake at that level, we would not be able to hear what is playing on Arthur’s headphones. When the film cuts to Arthur on level 2, the low brass notes from the modified version are still audible. Thus, the diegetic music of ‘non, je ne regrette rien’ is realistically motivated as it only underscores the level of the character that realistically can hear the music playing. On the other side, the non-diegetic music of the “Dream within a Dream” cue is compositionally motivated as it helps us understand that the sequence of shots are happening simultaneously because the cue runs through all dreamlevels (Audissino 2017, 126). The film stays on level 3 for a while as we see the characters try to make their way to the safe. When it does cut to another level, Yusuf’s level, the music remains the same as we still experience the events from Yusuf’s point of view. Unsurprisingly, when Arthur’s level returns, the modified version is again audible, and
this time layered upon the “Dream within a Dream” cue (Zimmer 2010) which underscores this sequence for its remaining time.

However, at 01:45:16 when the film quickly switches between all three levels the modified version takes the foreground and the idea of the Piaf song as realistically motivated is abandoned. It can be argued that the low brass notes of the modified version are now bleeding into the non-diegetic music and have become part of Inception’s score. When Yusuf drives the van off the bridge, the low brass notes stop as time seems to also come to a stop (this will be further discussed in the next chapter about sound design). The characters missed ‘the kick’ but get a second chance once the van hits the water, thus the waking up process is not over yet.

At 02:06:30 a similar sequence is set in motion, again underscored by the Piaf song. On level 2, Arthur has put headphones on Eames and begins the song. Since Arthur has started the song on his level, the original version plays. Similarly to the previous sequence, the film cuts to Eames on the lower level who is awake and listens to the song. Both sequences thus make use of the contrast between facial expression, setting, and music as described by Engel and Wildfeuer to differentiate between dreaming and awake state.
The modified version continues as Eames tries to shock Fischer Jr. back to consciousness after Mal has shot him. The sound of the defibrillator is used to cut to the dreamlevel that is even lower (level 4) in which Cobb and Ariadne talk to Mal to bring Fischer back. The modified version stops after this sound as Cobb and Ariadne cannot hear ‘the kick’ but are made aware that it is happening since they know Eames is trying to bring Fischer Jr. back. At 02:07:17 the non-diegetic low brass notes (‘braaam’) return on level 4 and continue as the film cuts back to the other levels, again being compositionally motivated rather than realistically. A brief intermission occurs when Fischer Jr. talks to his father. When Eames sees that the idea of abolishing the company has entered Fisher Jr.’s mind, he triggers the explosives on level 3 to start ‘the kick’. This is accompanied by the low brass ‘braaam’ sounds once again (02:11:18). These continue as the film cuts to Arthur on level 2 but slowly fade back into the modified version of ‘non, je ne regrette rien’ at 02:11:33. However, the music no longer functions as a cue to the time difference between the levels since this modified version underscores the rest of the sequence and once again is incorporated into the non-diegetic score of the film. At 02:12:24, Piaf’s vocals briefly return as Ariadne wakes up through multiple dreamlevels. This sequence ends at level 1 at 02:12:35 when Yusuf’s van hits the water.

As Engel and Wildfeuer (2015) point out, even though this scene makes use of the song as ‘the kick’ similar to the two abovementioned scenes, its guiding function that helps the spectator understand the different dreamlevels is different in this scene. Engel and Wildfeuer argue that “it is no longer possible to work out concrete textual cues on the level of that music that still indicate the specific contrast between the dreamlevels and thereby orientate the recipient temporally or spatially.” (Engel and Wildfeuer 2015, 240). This is because the sequence that is set in motion at 01:42:40 consists of a quick succession of shots that transition between dreamworlds which are not distinguishable through the music. Thus, the contrast between dreaming and awake state that is shown in the scene described at the start of this
chapter is no longer as clear. However, since the connection between the song and its narrative function has been established through its display in the two scenes in which it is first used and its explicit explanation by the characters, ‘the kick’ does not lose its narrative meaning. As Engel and Wildfeuer (2015) allude to, the music takes on another function within this sequence. It “creates a coherent and dynamic sequence of these events” (241). The music functions on a temporal level by providing continuity amongst the different dreamlevels. Discontinuities of editing within scenes and sequences can be smoothed over by music, resulting in a less noticeable or jarring jump between shots (Gorbman 1987, 89). The music acts as a sound bridge because the sequence is underscored by the same music that continues as the events unfold. Therefore, it is easier to consider the events as happening at the same time or in as a progression (happening after each other).

As Jason Southworth (2012) remarks, Inception uses music not only to convey feelings, but also to convey story information. Piaf’s song signals that dream time is running out. Southworth compares the use of music in Inception with that of Jaws (1975) where the music that signals that the shark is approaching makes us feel something viscerally. Inception is different in this way since “the tone and mood are not set by our visceral reaction to the music.” (Southworth 2012, 43). What is rather happening with the music of Inception is that the music functions because it requires our conscious recognition of what it means. Southworth also argues that the audience is sharing an emotional response to the music with the characters since both the characters and the audience are aware of the significance of the music (Southworth 2012, 43). Thus, ‘non, je ne regrette rien’ attains a cognitive function within Inception. Audissino (2017) argues that music has this function when it helps the spectator understand more complex narrative relations or interpret implicit or symptomatic meanings. Specifically, Audissino speaks of a denotative cognitive function when the music “highlights relations amongst elements in the narrative and thematic levels that helps us comprehend the narrative in a better and less equivocal way.” (Audissino 2017, 141). The audience has learnt of ‘non, je ne regrette rien’s significance for the narrative and its connection with a limited amount of time. They can realize that the characters need to act quickly and anticipate a sequence in which the story moves between dreamlevels.
Part 2

*Interstellar*: Ticking clock and circular time

The complexity regarding time in *Interstellar* lies with how the narrative is constructed around relativity. The music was carefully composed by Zimmer to ensure that its pacing could present time running faster on certain timelines and could create the extreme tension and pressure the characters were under (Pace 2023, 104). The film deals with a reversed temporal structure compared to *Inception*. In *Inception*, the characters gain time the farther they travel, i.e., the lower they go into the dreamlevels. In *Interstellar*, the characters lose time the farther they travel from earth. For *Interstellar*, two aspects of narrative time are deemed important for this chapter. Firstly, how, similarly to *Inception*, time can pass differently on different levels. For *Interstellar* the different levels exist on different planets and even different galaxies. The narrative switches between earth where we see Murphy and Tom grow up and space where Cooper and the crew try to accomplish their mission. The music that underscores scenes in which time passes differently aids the audience in understanding these temporal differences on levels that happen simultaneously. In this part, several scenes in which this occurs are analyzed with a particular focus on the “ticking clock” as both a narrative and musical device. Secondly, gradually throughout *Interstellar* the audience gains an understanding that time in this filmic universe is not linear. Several times throughout the film, the past and the future interact, and these moments can be underscored by the same music to connect them. For this part, these scenes are put together to analyze how the addition of music contributes to a better understanding of the narrative structure.

“Mountains” and the ticking clock

From the moment that Cooper and the crew leave earth, *Interstellar* essentially consists of timelines that are based on two perspectives, namely Cooper’s perspective in space and Murphy’s perspective on earth. Because of their proximity to a black hole, time passes slower on Cooper’s timeline resulting in him barely aging while Murphy has lived out her whole life when Cooper is finally reunited with her. The music that underscores the events on Cooper’s timeline represents how time is passing differently. For the discussion in this part, the focus is on the musical material that plays a role in representing time. While an important part is the ticking noise that is used throughout *Interstellar*’s score, this aspect will be examined in the next chapter about sound design.
The first scene in which temporal differences between the two perspectives occur is when the crew lands on Miller’s planet to rescue Miller and hopefully find another planet that humankind can survive on. It is explained that one hour on Miller’s planet lasts seven years on planet earth (01:02:07). This causes a problem since the crew, and especially Cooper who wants to return to his children like promised, has to race against the clock to waste as little time as possible. This race against the clock is once again represented through the music as in *Inception*. The music acts as a constant reminder that time is passing on Miller’s planet, but more importantly that with every second that passes there, much more time is passing on earth. In this sense the music acts as a “ticking clock”. In *The Anatomy of Story*, John Truby (2007) describes the technique of a “ticking clock” or a “time endpoint”. This refers to setting a specific time for when an action in the film must be completed which creates tension since there is a clear deadline. Truby argues that this technique creates an “intense narrative drive and great speed”. Many different, meandering, storylines can be presented without losing a sense of narrative drive and urgency (Truby 2007, 216). In action movies this can take the form of a literal timer running out, for example if the characters need to defuse a bomb. In the case of *Interstellar*, there is no literal clock or end time set. As Truby notes, the technique of a “ticking clock” can at times lack subtlety as seems to be the case with the timebomb example. In *Interstellar*, the “ticking clock” is introduced by Cooper, but it is the music that from that point on acts as a constant ticking reminder that time is running out.

For the crew, the clock starts ticking as soon as the spaceship lands and the sense of hurry is established by Cooper who tells the crew to “go, go, go” (01:08:28). This is where the “ticking clock” is put in motion. At this time the music also starts with a steady pulse on woodblocks. It creates a literal ticking sound that closely resembles a dripping sound that can be attributed to the planet being covered in water (“Mountains”, Zimmer 2014). Cooper reminds the crew once again that one hour on this planet equates to seven years on earth, further emphasizing that they need to hurry. The ticking on the woodblock is then accompanied by strings who play the same rhythm, but they gradually add a melody that rises in pitch. The high-pitched strings play along with the steady rhythm of the woodblock. Tension is created by adding even more layers while the crew realizes that there is nothing for them on this planet and the, presumed, mountains in the distance are actually waves coming towards them. When the waves are about to hit them, the music swells up and the steady pulse increases in speed.

Pace argues that the audience gets situated within the narrative through the varying degrees of tension produced by the soundscape. This is also based on the idea that the audience is reminded by the music how the presence of Miller’s planet will have a great impact on
humankind. She argues that tension is built through the notes of the A minor scale ascending, referring to what I have named the ‘Murphy’ motif. Tension is further built when Cooper realizes that waves are approaching them. The speed and volume of the music quickly increases (Pace 2023, 104–106). Again, Zimmer’s “minimalistic maximalism” tendencies come into play as layers of new instrumentation are introduced such as horns, the organ and a range of wind instruments which gradually get louder and louder. The sense of urgency that is the main aim of the ticking clock device is established through these techniques because the steady instrumental beat mimics ticking.

**Musical motifs that connect the past and future**

In *Interstellar* events are presented multiple times throughout the film, whether by showing the exact same visuals or by referring to them. The relationship between discourse-time and storytime concerns the third category posed by Gerard Genette (1971), *frequency*. Out of the four subcategories that Genette poses, the third category about *repetition* applies here. This refers to the use of “several discursive representations of the same story moment” (Chatman 1974, 366). In *Interstellar* this manifests itself in the way visuals of certain scenes return in the film and seem to happen again. Cooper is essentially able to time travel back to these moments, creating a circularity in time. The music parallels this circular nature of time in the film through assigning motifs to moments in the film that also occur later. When an event that returns later in the film is underscored by the same motif, it can make it clearer to the audience that the two scenes are connected or even present the same event. This, in combination with the now newly attained context of the other events in the narrative, can create a better understanding of the narrative and the structure of the film. For this part on music as a guide through the temporally complexity of *Interstellar*, I will discuss three sets of events that are linked throughout the film and how the music that underscores these moments can contribute to an understanding of these events as the same and thus time as circular. I argue that music attains its informative and temporal function as described by Wingstedt et al. (2010) in this way since it communicates information on a cognitive level and contributes and defines structure and form (195).

The first pair of events was already partly discussed in the previous chapter, namely Cooper’s time spent in the Tesseract through which he interacts with a younger Murphy. According to the film, love can transcend time and thus Cooper’s love for Murphy helps him to interact with a younger Murphy. The second pair of events regards the moment Amelia reaches out to a ‘being’ and the later scene in which Cooper reaches out to Amelia, thus confirming he is that ‘being’. The next pair is the overarching plot construction which starts
and ends the film. The story is introduced to the audience through interviews of the elderly who talk about what life was like on earth. These interviews return towards the end of the film with similar visuals but not exactly the same.

**Interactions through time and space with Murphy**

The first set of scenes that are linked together through their similarities are the interactions between Cooper and Murphy through time and space. Since these scenes are essential in exhibiting the close relationship between these characters, they have also been discussed in the first chapter about the ‘Murphy’ motif and how it guides the audience through the main story lines with its narrative associations. In this section, however, focus will be on how the addition of music to the visuals aids in understanding how the different timelines interact by looking into one scene in particular: The scene in which Cooper floats through the Tesseract and interacts with a younger Murphy. The audience also sees the older Murphy realize that her father was sending messages. What is particular about this set of scenes is that their ‘past’ counterpart, the first time we see it, are not underscored by any music, while the second presentation, which refers to Cooper whilst in the Tesseract, are underscored by music.

The scene in question starts at 02:21:50 when Cooper discovers that the Tesseract has taken the form of a bookcase through which he can communicate with Murphy by the means of gravity. He hits the walls of the Tesseract which causes a book and a replica of the lunar lander to fall of young Murphy’s bookcase. Through the gap in the bookcase, he sees a young Murphy. This is intercut with shots of a grown-up Murphy back in her childhood bedroom looking at the bookcase and picking up the lunar lander.

![Cooper's POV from the Tesseract (02:21:50) – Murphy with broken lunar lander (00:03:47).](image)

Although this particular scene has not been shown before, it is connected to the scene earlier in the film (00:03:37) where young Murphy walks into the living room and asks her father to fix a broken lunar lander. Tom makes fun of Murphy because she believes a ghost has knocked it of the bookcase, after which Cooper tells her to gather scientific evidence to make her feel
better. This scene is not accompanied by any music, but Cooper looking onto a Murphy from the past is. The shots from Cooper’s point of view of the young and grown-up Murphy are underscored by a variation of the ‘Murphy’ motif.

As Cooper moves further within the Tesseract and sees multiple versions of Murphy’s room, we can hear the cue “Day One Dark” (Zimmer 2010). At 02:23:25, Cooper watches how young Murphy sits on her bed after she has barricaded her door. He now watches as his younger self tries to get into Murphy’s room to say goodbye. This is the same event that happens at 00:35:55 after Cooper and Murphy return from the NASA facility.

The scene continues with Cooper spelling out S.T.A.Y. in morse code by pushing specific books out of the bookcase. As he watches on how young Murphy tries to decode the morse, the ‘Murphy’ motif starts.

Since the scenes from the past are not underscored by music, it is not possible argue that the music is what connects the scenes from the past and present, as is the case with the next examples. To understand that we are seeing the same events, we depend on the visuals.
However, it is possible to interpret the addition of the music, not only as a way of signifying the built-up emotions of the climax of the film, but also as establishing how we now have gained more information about the past events. We have learnt that there was indeed a ghost and that it was Cooper who was communicating with Murphy. This newly gained information can be heard through the addition of the ‘Murphy’ motif and the ‘Ghost’ motif that underscore the ‘present’ scenes and Cooper’s point of view on the past.

**Interaction between Cooper as the ‘ghost’ and Amelia**

In the next example, the similarities of events in the past and present can be heard in the music more noticeably but remains subtle. This example regards the moment that the crew approaches a worm hole that the ‘beings’ put in place. A pulsing music plays that as the crew comes closer rises in intensity with prolonged notes in the organ rising in volume. When the crew breaches the outer layer of the worm hole, the music abruptly stops as rattling sounds and beeping alarms take the foreground. The tension builds up as they have no knowledge of what the crew will find and whether the spaceship can withstand the forces. As the crew enters the worm hole deeper, they enter a space that is beyond the known three dimensions in which they can no longer exercise any control over the spaceship and are left to only “record and observe” (01:00:44). As their reality starts to warp and space-time gets distorted, Amelia observes the ‘beings’ as Doyle asks: “what is that” and Amelia replies “It’s them”. She slowly reaches out as we hear a voice in the background (TARS) shout “don’t, don’t”. As she looks on in complete wonderment, her hand warps in unnatural ways. All of this is subtly underscored by atmospheric synth drones which add to the simultaneously uneasy and exciting feel of the interaction.

Amelia reaches out to the 'being' (01:00:44).
Much later in the film after Cooper managed to send a message through the bookcase to Murphy (02:34:08), the Tesseract starts to fold in on itself. While all the visuals start to blur and warp, we see a hint of the Endurance floating in space. Cooper is moving towards it and sees Amelia looking his way. This is all seen from Cooper’s perspective which is visualized through blurry visuals as he moves through dimensions. Amelia is reaching out to him as the film cuts to the same scene as described above (01:00:44). In the image sequence below, this corresponds with the second image.

The two scenes are connected through Cooper’s ability to move within the Tesseract and thus through time and space. While he does this and interacts with Amelia from the past, a similar ascending scale is played by drone synths and organ. While the visuals in this instance are the clearest in creating the link between the two scenes through the usage of the same shots, the music has an aiding function in confirming the connection. It consists of similar musical material, namely a c major chord in the organ. When we see Amelia reach out for the first time, the music takes on an uneasy and unsure feeling that captures how little the crew knows about these ‘beings’. The second time we see Amelia reach out we have learned that it was Cooper reaching out and the music has less of an uneasy feeling and more one of wonderment and revelation. It has a confirming factor that these ‘beings’ were people all along. As Bordwell and...
Thompson (1979) discuss, the plot can provide us with more information so that the event can be understood in a new context when it reappears (76). The music manages to add a different interpretation to the scenes by connecting them to through the repetition of musical material.

**Interviews that construct the film as a flashback**

The third example does not refer to events from the past or present that are connected through the music but works on a more meta-level that constructs the whole film from 00:01:28 as a flashback through talking-head visuals of interviews. A flashback refers to moments in which the discourse breaks the story-flow to recall events that happened earlier. In order for a sequence to be anachronous such as a flashback (analepses) or flashforward (prolepses), the events in the **now** must be recounted at some point (Chatman 1974, 353). In *Interstellar*, the transition to the flashback takes the form of an “partial” or “split” flashback. Since films make use of two information channels, visual and auditory, one can be kept in the present while the other is flashbacked. After the first studio logos are shown, atmospheric sounds of windstorms can be heard. A short melodic line enters once the next set of logos and the film title enter the screen. We see an elderly woman (later revealed to be an old Murphy) in an interview setting who recalls: “Well, my dad was a farmer, just like everybody else back then. Of course, he didn’t start that way”.

![Interview at the start of *Interstellar* (00:01:20).](image)

This intercuts with visuals of cornfields that sway in the wind. The auditory channel stays in the present, while the visual channel shows images of the past, showing the time when the
woman’s father was a farmer. Immediately after the woman has finished the sentence, the film cuts to a sequence that we learn is a dream that Cooper is having of the time he crashed, so the cue that underscores this part is aptly named “Dreaming of the Crash” (Zimmer 2014). Through cutting directly to Cooper after the woman mentions her father, it can already be assumed that this flashback tells the story of her father. Several more interview shots follow of other people recalling events from that time as the film continues to cut between the auditory channel of the interviews and the visual channel of earth further establishing the “partial” flashback. This partition disappears at 00:03:26 when the flashback fully plays out in both channels.

The film does not return to these interviews again until 02:37:33 after Cooper has left the Tesseract and wakes up in a hospital facility on “Cooper Station”, a spacecraft named after Murphy Cooper where humankind lives after earth became inhabitable. He is guided towards a replica of his old house on earth that functions as a museum about life on earth. At 02:37:54, the same audio can be heard from the women as the camera zooms in on a screen playing the interview. It is now confirmed that the woman was indeed the older Murphy talking about Cooper’s life on earth as a farmer.

When Cooper enters the house, several more screens are dispersed throughout the house showing interviews of people who explain what life was like. From this context it is now clear that the interviews at the beginning of the film were exhibits in the museum and thus the events starting from 00:01:28 anticipated the end of the film. The music that can be heard during these scenes confirms this by underscoring both scenes with the same cue “Dreaming of the Crash” (Zimmer 2014). Similar to Butler’s example at the start of this chapter, the return of the same
music once the film returns from the flashback is a “final confirmation that we have come full circle and the flashbacks have caught up with the events at the film’s outset” (Butler 2006, 58). Knowing now that the interviews return, it can also be argued that the interviews at the beginning of the film were a flashforward. Genette (1971) argues that flashbacks and flashforwards can function as announcements, which seem connected to Wagner’s idea of musical foreboding. Announcements can alert the spectator to the meaning of events that will only be fully revealed later (Genette 1971, 97). With the newly gained context, the scene takes on its full significance only when it is repeated (Bordwell and Thompson 1979, 76).

Bordwell and Thompson discuss how audiences are accustomed to films that present events out of order, meaning not in chronological order. They take Edward Scissorhands as an example to exemplify how the character of an old woman recalls her life to her granddaughter as a bedtime story. The film depicts the events of her life. Bordwell and Thompson (1979) argue that this reordering of events does not confuse us since we mentally rearrange events into the order they would logically have to occur, namely childhood before adulthood. “From the plot order, we infer the story order” (74). We do the same for Interstellar. Once we learn that the women is an older Murphy, we would assume that all the events that young Murphy experiences occur before the interview. Thus, since the plot of a film can manipulate story order, duration and frequency in various ways, the spectator must actively make sense of the narrative by making assumptions and inferences (Bordwell and Thompson 1979, 76).
Chapter 7

The narrative role of sound design

How the narrative can be incorporated into the music is an important part of Zimmer’s composing process. In an interview with MusicTech, Zimmer describes his process:

A director will phone me up and say: ‘I want to tell you a story’. As they’re telling me the story, I’ll start to get ideas and the main one will usually be, ‘What’s the sonic world that we’re going to go and drop the audience into?’ So, it’s not just instruments, I think if you just drop an orchestra on top of the sound effects then they’re too separate. What I try to do with my work is figure out how to bleed into the picture, bleed into the frame and bleed into the story. Blurring the lines between the sound design and the music. So sometimes you can’t tell what’s what (Price 2018).

Zimmer’s aim for his music to “bleed into the picture, bleed into the frame and bleed into the story” and thus blur the lines between sound design and music can be noticed in Interstellar when the music builds up and eventually gets overtaken by the sounds of the spaceship taking off (00:42:15) resulting in a seamless transition between non-diegetic music and diegetic sound design that bridges the jump cut from Cooper driving to take-off. Other examples include how the music in both Inception and Interstellar mimics the sound of ticking by keeping a steady beat, often in the percussion. As already discussed in chapter six, this adds to the idea of a ticking clock which reminds the audience that time is running out and adds a layer of tension. Thus, sound design has a significant role in how films can be experienced.

This chapter will focus on three aspects of sound design and its role in the perception of time: the use of ticking sounds, slow-motion in sound, and silence. This structure will differ from the previous two chapters by discussing both films side by side based on these three aspects.
Part 1
The clock is ticking

As can be seen from the previous chapter, both films deal with the manipulation of time and there seems to exist a pressure of time running out. In *Inception* the characters race against the clock to complete their mission of implementing an idea into Robert Fischer’s mind while within a dream. Time passes differently on every dream level and the characters are constantly under time pressure. For if they do not wake from a dream on time, they end up in ‘limbo’ which essentially means the same as death. For *Interstellar*, the pressure of time is put on Cooper and his crewmates to spend as little time as possible on Miller’s and Mann’s planets since the differences in gravitational pull cause time to pass slower there, meaning they will lose time on earth. As has been discussed in the previous chapter on *Interstellar*, the sound of ticking plays an important role in guiding the audience towards an understanding of these time differences. In this part the role of ticking will be expanded on with the focus on the ability of ticking to remind us of time passing and to alter our experience of filmic time.

<table>
<thead>
<tr>
<th>Ticking sound in <em>Inception</em></th>
<th>Ticking sound in <em>Interstellar</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>0:04:19 ticking noise speeds up</td>
<td>00:59:24 ticking (space)</td>
</tr>
<tr>
<td>0:04:55 ticking noise slows down</td>
<td>1:08:28 ticking (Miller’s planet)</td>
</tr>
<tr>
<td>0:06:55 ticking in music</td>
<td>1:52:40 ticking (Mann’s planet and earth)</td>
</tr>
<tr>
<td>0:12:37 fast ticking of watch,</td>
<td>2:00:36 fast ticking (Mann’s planet and earth)</td>
</tr>
<tr>
<td>0:14:36 (digital) ticking</td>
<td>2:03:02 two types of ticking (space and earth)</td>
</tr>
<tr>
<td>0:35:04 ticking in music</td>
<td>2:07:48 two types of ticking (space)</td>
</tr>
<tr>
<td>0:44:42 ticking</td>
<td>2:14:56 ticking (black hole)</td>
</tr>
<tr>
<td>0:51:05 ticking noise</td>
<td>2:20:39 loud ticking (Tesseract)</td>
</tr>
<tr>
<td>1:02:16 ticking</td>
<td></td>
</tr>
<tr>
<td>1:28:25 ticking (level 2)</td>
<td></td>
</tr>
<tr>
<td>1:40:37 quiet ticking (level 2)</td>
<td></td>
</tr>
<tr>
<td>1:42:02 ticking (level 1 and 3)</td>
<td></td>
</tr>
<tr>
<td>1:46:42 slow ticking (level 1)</td>
<td></td>
</tr>
<tr>
<td>1:49:26 fast ticking (level 1)</td>
<td></td>
</tr>
<tr>
<td>1:50:42 fast ticking noise (level 2 and 3)</td>
<td></td>
</tr>
<tr>
<td>2:05:36 ticking (level 1)</td>
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</tbody>
</table>

As is evident from the two lists above, both films utilize ticking sound a substantial amount throughout the entirety of their running time. The ticking sounds appear more frequently throughout *Inception* and gain significance early in the film. However, the ticking is more often incorporated in the score in such a way that it might be difficult to distinguish it. The ticking in *Interstellar* only appears once the crew have made their way into space but takes on a more distinguishable role. Also seen from the table above, the speed of the ticking changes
throughout both films which would indicate, that if the ticking represents time, that time does not pass the same on every level (Inception) or place is the universe (Interstellar). Several scenes that are exemplary of this will be discussed in more detail.

In the case of Inception where timelines are nested within one another, the ticking of a watch is initially similar to the function of ‘non, je ne regrette rien’ as discussed in the previous chapter. It functions as a transition between dreamlevels by showing how time is altered between them. The first occurrence of a ticking clock is at 0:04:21 after the opening scene of the older Cobb and Saito. In the following scene, a younger Cobb and Arthur try to convince Saito to accept their help in training him to defend his subconscious from people entering. When Saito leaves the dining room to consider their proposal, Arthur remarks that Saito knows he is dreaming. As soon as he does so, the room begins to shake, and Cobb looks at his watch. The camera shows a close-up on Cobb’s watch that is upside-down.

[Image: close-up on Cobb's watch (00:04:21).]

The second hand of the watch barely moves when we see this shot even though in real time a second has gone by. It slowly starts ticking and speeding up with every second it counts. After approximately nine ticks on the watch the film cuts to a different scene that starts with explosions in a street. When continuing the scene, we find out that Cobb and Arthur are dreaming on this level and another character named Nash is keeping an eye on them. The ticking noise functions in two ways here. Firstly, it cuts two different scenes together, ramping up the ticking noise to almost resemble a ticking time bomb, that in the next scene, the higher dreamlevel, explodes. Secondly, and more importantly, it indicates that time moves slower on the level where Cobb and Arthur try to convince Saito. Again, it functions as a transition
between the two levels, starting with slow ticking to represent time on Cobb and Arthur’s level, then ticking quicker to catch up, to ending with how time passes on the higher level.

Similarly, from 00:04:55 on, the image of Cobb’s watch and the ticking noise are used to show how time passes differently. Still on the level of Cobb, Arthur, and Saito dreaming, this time it shows time slowing down. The ticking noise starts before we get a visual of the watch. When we do see the watch, the ticking and the second hand slow down. This time, the visuals of this level are also slowed down. Outside a car is shown to explode in slow motion before the film cuts to the lower level of Cobb and Arthur walking around in Saito’s house. This further shows to the audience that time passes slower on this level and shows the time pressure that they have to operate under. In both these instances, it can be argued that the noise is diegetic since we do see the source of the sound, Cobb’s watch. However, it would be hard to argue that the characters can actually hear the noise from a small wristwatch while explosions are happening outside. Furthermore, starting from before the ticking noise starts, around 00:04:50 when Nash goes to check on Arthur and Cobb, non-diegetic percussion in the score creates a similar pulse as the ticking noise for a short moment, almost mimicking the ticking from the watch. On the lower dreamlevel, the ticking continues in the score at a ‘normal’ pace, indicating that time moves at an expected ‘realistic’ pace on this level. The ticking fades away once the characters become aware of the presence of Mal in the dream and her motif takes the foreground. The ticking noise transitions from a possible diegetic relation to the film to a non-diegetic one.

Once again, at 00:12:37, the ticking on the watch is used to signify the difference in time passing on different levels. On this level Nash is also asleep and another character, Tadashi, is keeping an eye on them. We get another glimpse of the watch when Tadashi looks at it. This time the sound of ticking is sped up, representing how seconds are passing by quicker on this level. What this shows is that the speed of the ticking is related to the dreamlevel that came before this, the level that is taken as the basis. Once Tadashi prepares the sleeping characters to be woken up, the ticking remains as part of the background noise, but ticks at ‘normal time’ every second. This ‘normal’ time is also noticeable in the countdown on the machine that Tadashi uses.

In *Interstellar* the ticking noise is also indicative of the difference in time passing between timelines. Here it is related to how time passes on different planets. The events on one timeline (the crew on Miller’s planet) do not have a direct effect on the other timeline (earth) as the two timelines exist next to each other rather than within one another, as is the case in *Inception.*
In this instance the ticking is utilized to remind the audience that the clock is ticking, but more importantly that with every second that passes on Miller’s planet, more time passes on earth. This ticking is not merely background noise that resembles a clock, it is a musical sign that might even denote how much time is passing. It has been speculated that each tick in the music represents a day passing on earth. One user on the website Reddit offers a calculation on how the ticking represents how much time passes on earth.

When they arrive on Miller (the water planet), this track [“Mountains”] starts to play. A prominent feature of the track is a constant ticking. I just timed 60 seconds of the track, and there were 48 'ticks'. So, each 'tick' interval is 1.25 seconds. "Every hour on Miller is about 7 years on Earth". There are 3600 seconds in an hour, and (86400 x 365.25 x 7) or roughly 221,000,000 seconds in 7 years, giving us a conversion factor of 221,000,000/3600 ≈ 61400 seconds which pass on Earth for every second spent on Miller. Times this by the interval between each 'tick', and you get 77000 Earth-seconds, about 21 hours. So, each 'tick' you hear is a whole day passing on Earth (Reddit user: Baconarcher 2014).

Since this is only speculation and not confirmed by either Nolan or Zimmer, it cannot be taken as evidence. These calculations do coincide with how much time has passed since they have been on Miller’s planet. When Cooper and Amelia return to the Endurance, they find out that they have been gone for 23 years, 4 months and 8 days. This post and the subsequent comments do show that audiences are aware of how meaningful the ticking is within Interstellar, similarly to how audiences quickly discovered that the low brass notes in Inception were based on the slowing down of ‘non, je ne regrette rien’. So, whether or not this was intended by Nolan and
Zimmer, it adds a terrifying layer to the film for anyone who is aware of this, possibly upon a second viewing.

Thus, even though the films utilize the ticking in different ways, the function remains the same; to signify that time passes differently between their respective timelines. Furthermore, both films also contain moments in which two types of ticking can be heard that differ in sound and speed. Around the 01:28:38 mark of Inception, when Saito rushes to throw away Fischer’s wallet on level 2, the ticking seems to originate from two different watches ticking at different speeds and forming a rhythm together. One ticking is relatively slow, seemingly hitting the seconds as the ticks go by while the other ticking is much faster. Again, a reminder of the time pressure and difference in passing of time, but perhaps also to emphasize that the events are simultaneously happening but on different timelines.

At the 02:03:02 mark of Interstellar two types of ticking can be heard when Murphy finds the watch that Cooper gave her when she was younger. As soon as the image of the watch is shown, both types of ticking start. The slower ticking takes the foreground while the much faster ticking quietly gives the scene more urgency. The image shows that one of the hands of the watch is broken and does not move anymore. Later the significance of the watch will be revealed as Cooper uses it to transmit morse code to Murphy. For now, it can signify the difference between Murphy’s and Cooper’s timelines as time almost stands still for Cooper in relation to Murphy. At 02:07:48 a similar contrast of types of ticking can be heard. After Dr. Mann has caused an explosion at the Endurance, it is spinning fast, and Cooper is trying to line the spaceship with Amelia and him up with the Endurance. The ticking can function in the same way here but might also parallel the different speeds of the two spaceships.

*Interstellar:* Murphy is holding a broken watch (02:03:09).
For both films the ticking noise is either used in the way described above to show the difference of time passing or to remind the audience that the characters have limited time to succeed in their mission. The passage of time is their antagonist, and the audience is constantly reminded of this. In Inception, the ticking noise fades in and out on several occasions, blending in with the instruments. The ticking can be heard when Arthur comments on the brilliance of Eames’ idea (00:47:44) and during an establishing shot of Paris (00:47:48). At 0:50:30 when the team is discussing how to implant the idea of splitting up the Fischer empire, it is once again heard to be ticking at a relatively slow pace, while at 00:50:58 it ticks much faster. Each time the ticking can only be heard for only a few seconds before fading away or blending in with the rest of the score. An interpretation for this can be that the goal is not to be too obvious or to tell the audience what to feel directly, but rather using the ticking as a reminder that the clock is indeed ticking. This is a common use of ticking noise as is the case in Harry Potter and the Prisoner of Azkaban (2004) when Harry and Hermione time travel to the past and have limited time before they must return to the present. Or in High Noon (1952) where the protagonist is reminded by the ticking of the clock that it will strike twelve soon and he must face his enemies. While Audissino (2017) speaks of the function of music on a cognitive level, I would also apply this to sound design. While the link between the ticking sounds is not a difficult one to make and used in many different films, it still needs to be interpreted by the audience. Especially when no visuals are shown of a clock or watch and in instances when it quickly fades in and out. It does not simply tell the audience how they should think or feel. Its aim is to emphasize that the clock is constantly ticking which must then be interpreted on a cognitive level just as is the case with music.
Part 2

Slowing down sound and time

According to a study by Clemens Wöllner, David Hammerschmidt, and Henning Albrecht (2018) on the influence of music on duration perception, the presence of music played a role in how accurately duration was estimated by its participants. They argue that “music may thus function as a pacemaker that facilitates timing judgements”. In research where the tempo of music was manipulated, it was found that digitally slowed-down music reduced perceived duration (Wöllner, Hammerschmidt, Albrecht 2018, 11). Slow-motion refers to moments where narrative time is *stretched*. This refers to situations in which the discourse-time is longer than story-time (Chatman 1974, 362–363). Music’s ability to alter our perception of story time is one of the ways in which music’s temporal qualities play a role in our understanding of the passage of time in film (Butler 2006, 59). In this part this idea will be taken as a basis when examining scenes that contain a combination of slow-motion visuals and sound that is slowed down to analyze how sound design can guide the spectator to a certain understanding of narrative time.

Regarding *Inception*, the transition to another timeline, previously discussed in relation to ‘non, je ne regrette rien’ and ticking, is also represented through the gradual slowing down of other sounds. At 01:04:00 a button is pressed to make all the characters fall asleep in the plane during the main mission. When the button is pressed the music stops and all other sound is quickly slowed down, making it sound warped. The sounds stay warped to mimic how time is slowing down like it will do in the dream, which is thus similar to how the ticking on the watch slows down to signal a transition into dreamtime. When the film switches to the dream the environmental sounds (pouring rain and cars honking) are back how one would expect them to realistically sound. Music still does not continue however, making the scenes almost stand out against the rest of the action sequence.

For *Inception* the slowed down scenes also put emphasis on how events and actions on a higher-level influence what happens on a lower level. Such is the case when Cobb is aware of his body falling. At 00:10:58 when Cobb is not waking up from the first dream in which they try to get information from Saito, he is given ‘the kick’ to wake him up. When he and the chair are falling backwards, the images are in slow-motion.
The sound mimics this by also sounding slowed down and warped. The intense music and sounds that were heard on the lower dreamlevel also disappear which Cobb notices, therefore he assumes he is going to be woken up. When Cobb hits the water, the sound is still warped. When Cobb is fully submerged in the bathtub and pulls his head from the water, the ‘normal’ speed and sound continue. Not only does the combination of slow-motion in the visuals and audio show how the higher levels have control over what happens on the lower dreamlevels, it also compares the temporal qualities of the two levels by showing them side by side. The lower level remains in ‘normal’ speed as we see how the higher level moves into slow-motion.

Another example of this happens at the 01:45:20 mark. Through parallel editing, the act of switching between multiple scenes that happen on different locations, the film quickly crosscuts between dreamlevels so the events are understood as occurring simultaneously. The parallel action starts when Yusuf drives the van of a bridge to start ‘the kick’ during the Fischer mission. As soon as the van hits the railing and starts falling, the sound is warped and muffled, mimicking how time is once again slowing down. This sound continues on Arthur’s level (level 2) who is now floating through the air because of the lack of gravity resulting from the van falling on level 1. On level 3, this is visualized by an avalanche coming down the mountains. This happens at a ‘normal’ speed, but still feels like quieter, muffled sounds since the snow also dampens the sounds that are made on this level. While we see Arthur on level 2 and the other characters on level 3 continue their mission like before, the van on level 1 is still falling in slow-motion and the sound is still warped and lowered in pitch. Similarly, to the first example, the timelines and differences in the sound design are put next to each other so the audience is able to understand how the difference in passage of time relate to one another.
Peculiarly, *Interstellar* makes no noticeable use of slow-motion in its visuals and sound design. As seen from the discussion of *Inception*, the main reason for the slow-motion images and audio is to visualize how time passing on one dreamlevel compared to the other dreamlevels. In *Interstellar* this is not the case as the two timelines of earth and space exist next to each other. The difference in passage of time between the two perspectives is visualized by showing the difference in age of the characters on earth while Cooper and the crew remain the same age. This also applies to Romilly growing older while Cooper and Amelia are on Miller’s planet. Thus, the sound design of both films is specifically adapted to fit with their respective timelines and uses different techniques to connect audio with the visualization of the passage of time.

Part 3
Silence can speak volumes

This chapter deals with a special aspect of sound design, namely silence. Choices made when to omit music or any sound can play an important role in how a scene is perceived. In this chapter, several scenes that include some form of silence are discussed in how silence functions on different levels. As Danijela Kulezic-Wilson (2009) suggests, silence in film can function on a structural and affective level in a similar fashion as it can in music. Structurally, in the case of *Inception* and *Interstellar*, silences create either boundaries or connections between events and guides spectators’ attention to certain aspects that are deemed of importance for the narrative. Silence can also guide spectators through the temporal structure of the film by giving the idea that time is slowed down or halted in a sense and by, similarly to the ticking, guiding spectators through the transition of levels or timelines. On an affective level, silence functions by representing emptiness, startling spectators, and raising the levels of tension felt by spectators.

Before discussing specific scenes in *Inception* and *Interstellar* it is important to note what is meant by silence. The idea of silence in cinema does not necessarily refer to complete silence. The existence of complete silence in general can be questioned since environmental sounds will always be present (Cage 1961, 41–43). Kulezic-Wilson (2009) distinguishes cinema silence as layered and often as carefully designed as any film soundscape. Cinema silence can still include distant or quiet sound within a diegetic world, but it is *perceived* as silence. What we perceive as silence is namely dependent on the context it is ‘heard’ in. It is
relative to other sounds that came before and after the silence. That we can experience noise as silence is “the result of our responsiveness to extreme changes in soundscape design; whenever one level of sound is suddenly and deliberately dropped – either diegetic sound or music – we are often ready to perceive the ensuing result as “silence.” (Kulezic-Wilson 2009, 2). For this analysis I will therefore use the terms absolute silence and relative silence. Absolute silence refers to moments where all music and sound has been cut off. For moments where the term relative silence is used, music and sound can still be heard but related to the previous level of sound, it is relatively quiet and perceived as such.

According to Kulezic-Wilson (2009), in most Western cultures, absolute silence has connotations of death and is therefore often avoided and suppressed by adding sounds of talking or music. This avoidance of silence can be attributed to two ideas. Firstly, music can render spectators of cinema passive, leading them along with the action without having to think. Secondly, by avoiding silence, film can offer escapism to its spectators since silence is often experienced as uncomfortable and reminds audiences of the discomforts of the real world. As Kulezic-Wilson puts it: “music is there to help the audience cope with an unpleasant situation or remind them that it’s only a fantasy”. Kulezic-Wilson notes, however, that not all cultures are inclined to suppress silence, such is evident in the Zen-Buddhist concept of ma which roughly refers to “empty,” or ‘space”. According to this concept, sound is complemented by silence. This idea is visible in many artforms, even Western ones, where silence between words and notes is utilized in poetry, music, and film (Kulezic-Wilson 2009, 1).

Even though connotations of emptiness and discomfort surround silence, this does not necessarily mean that silence is always avoided. Rather, these connotations can be used to achieve a certain effect. Directors such as Ingmar Bergman use long shots in combination with silence to express loneliness or desperation (Kulezic-Wilson 2009, 2). On several occasions in Interstellar absolute silence is used on exterior shots of the spaceship. For example, at 00:43:39, 00:49:05, and 01:05:28, images of the spaceship floating in space are accompanied by absolute silence to realistically mimic the lack of sound in space. The sound design attains a perceptive function in these instances since silence is realistic in space. The connotations of silence are used to represent the feeling of the vastness of space and its emptiness. The silence is a reminder of how isolated the characters are and how far removed they are from their loved ones on planet earth.

Furthermore, the lack of sound in Interstellar establishes a new point of view. The film switches between images of events on earth which are accompanied by realistically motivated sounds to images of the exterior of the spaceship floating in space which are accompanied by
silence. The contrast between the sounds on earth and the lack of sound in space aids the spectator in their spatio-temporal perception of a sequence (Audissino 2017, 136). The pauses in the action and sound allow time for the spectators to shift their focus from the storyline on planet earth to the storyline in space. In this way, silence acts as a boundary separating different timelines and their temporal differences. Silence in film can be compared with silence in music in this way where it acts as a boundary between phrases, sections, or pieces. Silence organizes music into separate units but whose elements should nonetheless be understood, evaluated, and remembered together. Time is given to reflect on such a unit. As Elizabeth Hellmuth Margulis (2007) points out “silence allows the time for a shift in orientation, from a lower to a higher level of the discourse structure” (253).

Silence does not necessarily have to be an absolute silence to create a boundary between different discourse levels. The silences in Inception function in a similar way. When Ariadne wakes up from her first shared dream with Cobb, a clear difference in sound can be noticed to create a boundary between dream- and awake state. Ariadne slowly becomes aware that she is dreaming (00:27:47) and starts to panic causing surrounding objects to explode. The accompanying sounds mimic loud explosions but seem to be damped to add to a feeling of being in a dream. When the film cuts to Ariadne waking up, the lack of overwhelming sounds of explosions that were building up and increasing in intensity from the previous scene can be perceived as a relative silence. This sudden perceived silence creates a clear boundary between the experiences Ariadne has in the dream that comes with its own diegetic sounds and Ariadne who is awake.

Another use of silence is to focus the spectator’s attention to an important narrative element. A popular strategy in action films is to suddenly cut off music which functions as a wall of overwhelming sound, to then focus solely on scenic sound which produces an effect of sudden silence (Kulezic-Wilson 2009, 3). This strategy can be used to direct spectators’ attentions to specific narrative aspects. An example is the first moment that Cobb is seen to be spinning his totem (00:15:46). The environmental sounds that are heard from the previous scene are cut back until only the spinning of the totem is heard. These previous louder sounds are no longer relevant for the aim of this scene, namely introducing Cobb’s totem without fully explaining its function just yet. Thus, these sounds are no longer heard, but instead the sound of spinning takes the foreground. The spectator’s focus is directed to this object by an ‘acoustic close-up’ that slowly fades environmental sounds except the spinning. The transition from loud environmental sounds to only the spinning can be perceived as silence even though the scene
is not completely silent. Once the totem falls more sounds gradually return, such as the sound of a phone ringing.

A second exemplary moment where previous present sounds get cut back to focus the attention to important narrative elements occurs when Fischer opens the vault in which his father is lying on his deathbed (02:09:15). This is an important moment within the film because this is what the mission was all about, for Fischer to meet his father and attain the idea to abolish the family company. As the music abruptly stops, the character of Fischer takes a deep breath. The sudden stop of the previously present tense music also allows the audience to take a deep breath, similarly to how silence functions in music and in speech. Other diegetic sounds of Fischer opening the safe are still present and realistically motivated. Once Fischer sees his father the music returns to underscore their emotional interaction. It is noteworthy here that both the music and silence also seem to have an affective function here apart from the structural function of pointing out important narrative aspects. The music returns in time to underscore the emotions from Fischer and his father during their reunion and Fischer Sr.’s death. The silence stops the action momentarily to point out the big step that Fischer is making that will affect whether this mission succeeds or fails.

The silence has a similar function during the third exemplary scene where Cobb tries to enter the United States (02:18:36). He must pass the border security check to see whether he can finally return home. The volume of the increasingly intense music of the cue named ‘Time’ (Zimmer 2010) is lowered and the layers are stripped back which results in a relative silence. The silence emphasizes the question whether Saito has kept his word and the goal of the mission (and subsequently the whole film) has been affirmed and Cobb can return home to his children. Once this question has been affirmed the music returns. In these previous examples, the relative silences guide spectators’ attention to specific narrative aspects by focusing on specific sounds and omitting irrelevant background sound. In the last two examples, the silence creates suspense which is then resolved by returning to the sounds that were omitted before.

However, it is also possible to break with a silence with relatively louder sounds. After the tension raised in the (absolute or relative) silences these sudden loud bursts of sound can create a startling effect. Kulezic-Wilson (2009) compares the silences in The Matrix and Atonement to accented rests in music since they share the same rhythmic and dramatic function. They raise “tension by temporarily suspending the action and prolonging the moment of resolution”. She notes that silence can only reach this full dramatic potential in combination with the visuals of the film. They play an essential role since they initially build up the tension (Kulezic-Wilson 2009, 5). Similarly, silence will be perceived as an interruption when it
precedes closure and “silent periods reveal the impact of surrounding events.” (Margulis 2007, 255).

This is the case for Yusuf’s scream as the van with him and the other characters tips over a hill (01:39:16). The music suddenly stops, and a moment of absolute silence occurs before Yusuf’s scream of terror interrupts it. In this moment of absolute silence, time seems to stand still and a sense of anticipation is created for what will happen next. After Yusuf screams and the van fully tips over the hill, the previous sounds return. An even louder break of silence occurs at 01:51:18 on level 3 where Eames is fighting in the snowy mountains. To shake off the enemy that is following him on a snowmobile, he blasts the snowmobile. Before the big explosion happens, the music stops for a split second. Once again, the absolute silence seems to stop time and creates anticipation for what is about to happen. Once it explodes, the volume seems relatively higher, making the explosion feel more intense.

The final instance I want to point out occurs around 02:12:35 when the characters are waking up from the dreams. In this sequence the focus lies on Ariadne as it is shown how she wakes up from one dreamlevel to the next dreamlevel. Once she wakes up in the back of Yusuf’s van, level 1, the music halts for a split second before the audience is overwhelmed by the sound of the van crashing into the water. Like Ariadne, who only has a brief moment to realize where she is in the middle of the waking up sequence, the audience only gets a second to realize where the story is before getting plunged into a wall of sound.

What silence means within a film needs to be interpreted by the audience. Especially when its function is not clearly laid out. The spectator is invited to draw their own conclusions. It might not always be a direct instruction on what the spectator should feel about that moment or how they should interpret it (Kulezic-Wilson 2009, 6). Silence may be used for emotional affect by creating anticipation or feelings of emptiness and isolation. Silence attains a connotative cognitive function in those instances in which its function and motivation are less immediately graspable than in the denotative cases. This is especially the case when silence is used in moments where it is not expected. As Audissino (2017) argues: “We notice that the music [or I would argue sound in general] is apparently inconsistent with the visuals, and this inconsistency seems to point to something else (144). This is the case when the Endurance explodes after Dr. Mann’s unsuccessful docking attempt (02:07:23). Although the events are still happening in soundless space, one would perhaps expect a loud explosion, but rather counter-intuitively, no sounds can be heard.

Thus, whether the lack of music and sound occurs in absolute or relative silence, it attains an important function within the narrative in several ways. It can point the spectator
towards important narrative elements which includes transitions between timelines, and it can seemingly stop time for a moment to create boundaries between events or timelines, or to create anticipation for what happens next.
Chapter 8

Conclusion

As evident from the detailed descriptions and analysis of *Inception* and *Interstellar*, both films consist of complex narratives that deal with non-linear time and multiple timelines that co-exist and affect each other in different ways. Their narratives benefit from carefully thought-out music that guides the spectator towards a better understanding of the main narrative themes and how the temporally complex timelines interact.

I have analyzed the role music plays in constructing a clear and understandable narrative that audiences can follow, firstly, by analyzing how the ‘Time’ motif in *Inception* and the ‘Murphy’ motif in *Interstellar* can gain narrative significance in conjunction with its visuals. The motifs connect to the protagonists and their relationships in a leitmotivic fashion. They underscore moments in which guilt, abandonment, and the effect of time on their relationships take the foreground, thereby signaling their significance to the audience. Secondly, the analysis focused on how music can also attain a direct temporal function, that is to say, it can emphasize how narrative time is passing and thereby guide the audience towards an understanding of how different timelines, in which time passes in different speeds, intersect and play out. The music also takes on a unifying function that establishes the form of the narrative by connecting events in the ‘past’ and ‘present’ and framing the major portion of *Interstellar* as a flashback through also connecting the interviews musically. Thirdly, sound design was discussed since Nolan and Zimmer are known to blend music and sound design. Both films make extensive use of ticking sounds that not only signal to the audience that time is passing and thus the pressure of time the characters are under in both films, but also represents time slowing down or speeding up in *Inception* and signals how much time is passing in *Interstellar*. Furthermore, how sound and simultaneously time can be slowed down is discussed. In a similar fashion to ‘non, je ne regrette rien’ and ticking, the sound design in *Inception* signals how time slows down once a character enters a dreamlevel. *Interstellar* makes no use of slow-motion visuals and sound which can be attributed to the construction of the two timelines in which characters age at different speeds. Lastly, the use of absolute and relative silence can aid our understanding of the structure of a film by creating boundaries, while also represent themes of isolation and function on a temporal level by seemingly halting time.

Zimmer partly follows the traditions of the classical Hollywood era by making the music embody abstract ideas and create moods and emotions. The idea of connecting film music to
the content of the narrative is not wholly new, but Zimmer takes a different approach. A high degree of direct synchronization between music and narrative action was convention as “music punctuated narrative” by matching facial expressions, bodily gestures, and camera movements (Kalinak 1992, 84). Zimmer does not make the music mimic actions on screen, but rather creates a soundscape that embodies the atmosphere and gives both Inception and Interstellar their own distinctive sound. An important element of both films is the time pressure the characters are under. This is emphasized by the use of a ticking clock device in the music, which can also be found in other films, such as High Noon (1952). However, Zimmer realized the further temporal potential of music as guidance for spectators. Not only by giving the ticking sounds more significance in relation to the narrative but also by using diegetic music (‘non, je ne regrette rien’) as a transition device in Inception and non-diegetic music to emphasize the circular nature of time in Interstellar. Zimmer also built on the idea of leitmotifs, which composers such as Max Steiner already used to connect narrative content with musical accompaniment (Kalinak 1992, 79). However, instead of creating music that is symphonic, romantic, and lavish like prominent classical Hollywood composers as Steiner, Erich Wolfgang Korngold and Alfred Newman did (Kalinak 1992, 79), Zimmer creates his own “minimalistic maximalism” style.

Zimmer’s innovative style is essential to how his music functions on a narrative and temporal level. Both the ‘Time’ motif and the ‘Murphy’ motif are connected to the two main characters emphasizing the importance of their relationship to the narrative. The motifs exhibit a neutral character compared with traditional Hollywood scoring as they do not establish a particular mood. This parallels the open endings of the films and the troubled nature of the characters’ relationships which are under pressure from forces greater than them, mainly time. The lack of a clear mood also makes them compatible with a broad range of situations and emotions. They are malleable and can be changed to fit with the preferred emotion of many scenes, may it be an intimate moment between two lovers or an action in outer space that will have great consequences for the future of mankind. The main themes of the films relate to personal relationships, but also to more general narrative ideas of love, loss, and hope. Zimmer’s “minimalistic maximalism” is especially apt to express this juxtaposition. He starts with a relatively simple melody that underscores moments of intimacy or sadness. He then adds more layers of instruments and increases the volume to grow the simple melody to epic proportions that underscores moments in which everything is at stake. Since he uses relatively simple motifs as building blocks for his score, it is also possible for Zimmer to add motifs upon motifs. The malleability of the motifs is most likely a result of the creative process as Zimmer
does not base his composition of the final cut of the film. Instead, he has to imagine the film based on scarce material from Nolan and create cues out of minimalistic ideas that can be adjusted to the final cut eventually.

Just as Steiner, Korngold and Newman’s music has served as inspiration, Zimmer has become an inspiration for younger film music composers. Composer Ludwig Göransson comments on the collaboration between Nolan and Zimmer and says it “has been groundbreaking. What they’ve been doing with cinema and how they’ve been pushing together visuals with music. I’ve never heard a score in a blockbuster have so much room and really feeling like a character of the movie. […] I wanna be able to do this” (Rolling Stone 2020). Göransson composed for *Tenet* (2021) which, also directed by Nolan, deals with the reversal of time, and treats time, like its title, as a palindrome. It would therefore be worthwhile to analyze how a different composer than Zimmer approached a complex temporal narrative. The approach taken in this thesis that focuses on motifs and sound design can be applied to this example and others to gain even more insight into the meaning-making functions of film music, especially when Zimmer and his style have acted as inspiration. As Lehman concludes “Zimmer’s epic style will undoubtedly be seen (and heard) in decades to come as an enormously characteristic component of the late 20th and early 21st century’s cinemascapes” (51). The influence Zimmer’s style and his close collaboration with Nolan have had and will continue to have on cinema cannot be emphasized enough. Undoubtedly, the music for *Inception* and *Interstellar* plays a major role in this due to how it functions as a guide through the temporally complex narratives. It will most likely be a long time before another composer as innovative and influential as Zimmer enters the scene.
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Other


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