

Inception, a New Breed of Thematic Film
Scoring

by Alex Williams

Inception tells the story of Mr. Cobb, who has been estranged from his family due to his line of work. In the movie, Cobb has learned the art of constructing dreams by using a military device that had been developed so that soldiers could be trained for battle in their dreams. This device makes it so that one person can design a dreamscape and others could follow this “architect” into the dream so that they all would be able to dream corporately. In these dreams, if a person dies, they would simply wake up.

After learning the ability to do this, Cobb begins to work for secret organizations who are carrying out illegal operations, which include using these dreaming machines to get another person into a dream to steal information from them. At first the audience is led to believe that it is because of these illegal operations that Cobb is now unable to return home to his family, but it is later revealed that Cobb and his wife, Mal, used to experiment with dreams in the past. During their experimentation, Cobb and Mal got so far into a dream that they became lost and trapped for years, growing into old people before they finally woke up. This region of dream space is known as “limbo” and is called “deconstructed dream space” where a person can become stuck for decades.

In order to break free from Limbo, Cobb devised a plan to perform inception, the birthing of an idea in another person’s mind, on his wife. He planted in her the idea that her world was not real, because after so long she had forgotten that their world in “limbo” was not real. When she conceived of this idea, she killed herself in

the dream, which finally woke both of them up, old souls in young bodies. The problem with this inception was that the idea planted inside of the dream grew to take over Mal's mind, eventually causing her to believe that the real world that she had returned to was also not real. This meant that in order for her to really "wake up", she needed to kill herself.

Cobb tried over and over again to talk her out of it, but deep down she didn't believe him and set him up with a trap where she killed herself and framed him as her killer, which forced him to flee the country. We find Cobb now trying to get back to the United States from Japan. He is once again working for an organization to steal information from a wealthy businessman's mind, but ultimately fails as this guy, Saito, has been trained to recognize dream thievery.

After waking up, Saito hunts Cobb and his partner Arthur down and blackmails Cobb to try and get him to break into his opposition, Robert Fischer Jr.'s mind. Saito wants Cobb to get Robert to break up his business empire, and promises Cobb the ability to pass back into America freely once he finishes the job. Cobb reveals that the ability to plant the idea that would cause Robert Fischer to break his empire up is possible, as he's performed it before, and agrees to the job.

This starts a longer trek, where Cobb must find the ingredients he needs to do it. In order to plant an idea in another person's mind during their dreams, it has to come from the dreamer in the form of self-realization, and this must take place in

a deep level of a dream. In order to get to a deep-enough level, the dreamers must be heavily sedated so that they will sleep long enough to get there, also making room for them to create several dreams inside of one.

First, he goes to his old teacher to find someone to architect the dreams that they will enter. His teacher points him to this girl student named Ariadne who he tests thoroughly before he and Arthur begin to instruct her about corporate dreaming. Here he starts to reveal some parts of his past, which includes the reason why he no longer architects dreams.

Cobb goes to Mombasa to recruit someone to help him: a thief known as Eames, who points him to a chemist named Yusuf who concocts formulas that cause people to dream for long periods of time. During this period of time, more people in suits chase Cobb from other organizations that are after him.

With all of these new team members, they begin to think out how to plant the idea in Robert Fischer's head, including how to get to him. Once all of this is mapped out, they set their plans into motion. Early on in the dream, their plans are sabotaged, because they soon realize that Robert Fischer has been trained so that his mind defends itself subconsciously. Saito becomes wounded early on which means that he only has a little time to live, because the more dreams within dreams one creates, the more time becomes stretched: 5 minutes becomes an hour a level down and so on.

The other major problem is that the reason why Cobb doesn't architect dreams anymore is because of the guilt he feels towards having performed Inception on his wife, ultimately leading to her death. Now whenever he dreams, she appears inside of his dreams to sabotage whatever it is that he's doing. Since they're all dreaming corporately, she enters into the dream from Cobb's subconscious to attack everyone.

As the team goes through the levels of the dreams that they have planned out, the dramatic intensity increases. When Saito is shot, Cobb reveals to the team that if they die inside of the dream, they will fall into limbo because they are too heavily sedated to wake up normally. Also, each level of Fischer's dream is full of defense units that the team has to fight in order to continue to operate. When they get to the bottom level of the dream, Mal shows up and shoots Fischer, so Cobb ventures into Fischer's subconscious to pull both him and Saito, who has finally died from his bullet wound on dream level 1, back out of limbo. He succeeds in rescuing Fischer from Mal, but Christopher Nolan made it unclear as to whether or not he was able to save Saito as well.

This is important because the very beginning of the movie is set up as a frame, where the very first scene is Cobb supposedly finding Saito inside of limbo after he has aged. This scene is shown before the concept of dreams, who these characters are, and what they're doing are even explained.

In order for Cobb to “rescue” everyone from limbo, he must release his guilt of having killed Mal and to let go of her existence in his dreams. After this, they wake up and Cobb is finally able to return home to his kids. To sum it up, this is a story of a man riddled with guilt who finally overcomes his deepest darkest secret to save himself, his crew, and to be reunited with his family.

Hans Zimmer’s approach to this movie is very similar to Christopher Nolan’s narrative. He very carefully followed Christopher Nolan’s plot and dialogue and spun musical themes that would serve the movie to dramatize scenes and create subconscious references to emotions and connections between characters. This paper will explore the connections that Hans Zimmer has set up between his themes and the characters and plot of the movie, ultimately revealing a set amount of themes that have been largely stitched together through music editing and are set up and referred back to in order to carry more specific meanings. It will be organized separately by themes, which will each follow chronological narration of their uses.

Old Souls

The most important theme in the movie could be considered to be what is referred to on the soundtrack as Old Souls. This theme is most often used to represent the connection between Cobb and Mal that exists as their tragic

relationship through aging and eventually Mal's death surrounding their corporate dreaming. The soundtrack of the movie contains some of the themes as played verbatim in the movie and is useful for dissecting what's going on. The reason why it's obvious that much music editing has been done is that the theme exists as one full track and is being dropped into certain scenes.

Old Souls melody:



Hans very brilliantly follows the dialogue of the movie and then whenever Cobb has a passing thought about Mal, or when he has a flashback about her, he drops this theme. The very first time this theme appears is 6 to 7 seconds before Cobb first sees Mal in his dream operation at the beginning of the movie. A low pad playing in the right key before the theme is brought in achieving this transition from more general action-cue music. Then Cobb and Mal begin their conversation. The part of the whole "song" as played on the soundtrack that this bit of music uses happens at about 3:45 in the track audio. This continues verbatim until 6:57 when Hans drops a different theme, called One Simple Idea on the soundtrack, which will be discussed later.

The second time Old Souls is brought in happens at about 23:18. To make it fit here, Hans uses the pad sound to sit under the dialogue, which fades in very quietly. Since Old Souls starts with a special synth pad, it doesn't distract the audience from the dialogue, but at 24:00 Cobb starts talking about Mal not allowing him to design dreams anymore. So, of course, Hans knew that the dialogue was going in this direction and he used this track in this particular place to serve the purposes of giving background music to heavy conversation without interrupting it, drawing parallels between this theme and Cobb and Mal's relationship, and quite possibly to present the theme as many times as possible to give the audience a better chance to internalize it.

The third time Old Souls is used happens at 41:00. At this time, Arthur and Ariadne are walking around inside of Arthur's dream as he explains different dream tricks to her. For this sequence another piece of music is being used, but almost immediately as soon as Ariadne asks why Cobb doesn't build dreams anymore and Arthur says, "I think it's Mal," a synth pad covers the transition from this music to more of Old Souls. In this part of Old Souls, Hans has taken a high melody line and mixed it with some low, pulsing, percussion.

The fourth time that Old Souls is used happens when Cobb and Saito are talking to Yusuf to test the dream solution. During this time, there's some general ambience going on until they start to sleep under the effects of the dream solution. Some high horn-clusters fade in covering the transition to the Old Souls melody

being played by the piano as the movie cuts to Cobb watching Moll as they lay down together to die in their dream by being run over by a train (at 43:45). This is very brief but once again draws an obvious connection between this theme and Cobb and Mal.

After this the movie continues to where Ariadne shows Cobb her totem, a device used to distinguish dreams from reality, that she's created at 48:44 and she asks Cobb if the totems are his idea. This whole time a separate theme has been playing, and immediately following his response, "No, they were Mal's idea" the string melody of Old Souls comes into the mix. Here it's also important to note that Hans has a lot of his themes in the same keys so that transitions are really easy between one and another. Old Souls transitions out this time by another string swell which seems to have been taken from another place, as all the Old Souls material is sonically the same and finite in this way as a result. So when a theme has played its role, he has to have something with which to keep the music going.

Next, at 01:15:35, while the whole crew is dreaming to do their final operation inside Robert Fischer's mind, Ariadne asks Cobb when he was in Limbo, and Old Souls starts to play. This is the longest revelation of the theme and it plays out using segments of what is heard on the soundtrack. The first segment features the guitar playing the theme, with the harmony changed by a bass string voice to fit the context of the movie. This then transitions to a later part of the track where the melody is played by high strings. This once again plays verbatim like the track, with

all of the same synths and sound design. This occurs for minutes until the action intensifies when they start to argue and Cobb explains how Mal plotted to kill herself so that Cobb would be forced to kill himself too. Hans has taken the name of this track for the soundtrack from Cobb's quote during this sequence, "to become Old Souls thrown back into youth..." which is also why the correlation between this theme and Cobb and Mal is so apparent.

The last time Old Souls is used happens during the finale. At the two-hour mark, Cobb and Ariadne have followed the now-dead Fischer into Limbo to save him so that he can experience inception one level above. As they finally find Mal inside of Limbo, the pad from the very beginning of the Old Souls track starts playing like before. This time, elements of the theme that was playing right before this are mixed into it, which allows for a transition back to that theme which plays for the action of the dreams on the two levels above theirs. When the movie cuts back to the truck falling off of the bridge in slow motion in the dream three levels above, the music snaps back to the Old Souls pad and synths as played verbatim on the soundtrack. Since Old Souls starts as a pad, it works for the slow motion truck still flying over the edge because it's a smooth, homogenous sound, like the truck, which is flying smoothly in the air at this point. This is right before it cuts back to Cobb and Moll.

Paradox

Moving on, another important theme is called Paradox on the soundtrack. Paradox is part of several tracks on the soundtrack: it's part of the last part of the first piece, Half-Remembered Dream, the last part of Dream Within a Dream, and the last part of the Paradox track which is the same thing as the other major theme, called Time from the movie. This theme features extremely high strings played in a four-note sequence like Old Souls and like some of the other themes in the movie. This theme is also correlated to Cobb and Mal's relationship, though it has more to do with the idea that Mal had chosen to forget while they were both in Limbo, which was that they were dreaming. In the movie, to forget this fact she locks away her totem in a safe, hidden in the world she and Cobb build.

Paradox



Time Harmonization

9 Am Em G D Am Cmaj7 G D

A piano accompaniment for the Time theme. The top staff is in treble clef and contains a melody of notes: G4, A4, B4, C#5, D5, E5, F#5, G#5. The bottom staff is in bass clef and contains chords: Am, Em, G, D, Am, Cmaj7, G, D. The chords are aligned with the notes above them.

Dream Within a Dream Harmonization

17 Am Em Gm Dm Am⁹ Cm(maj7) Gm⁹ Dm(maj7)

A piano accompaniment for the Dream Within a Dream theme. The top staff is in treble clef and contains a melody of notes: G4, A4, B4, C#5, D5, E5, F#5, G#5. The bottom staff is in bass clef and contains chords: Am, Em, Gm, Dm, Am⁹, Cm(maj7), Gm⁹, Dm(maj7). The chords are aligned with the notes above them.

Paradox first shows up when Cobb uses Mal's totem to see if he's awake or not, as her totem is a dreidel, which is supposed to never stop spinning during a dream, where it would simply fall over eventually in real life. This rendition of the theme at 33:55 is the more resolved version of this theme. It's a four-chord pattern, but during the movie the resolved version is saved for less-tense moments. Time, on the soundtrack, is the most resolved form of this piece, where all the chord resolutions are clear and are major. In the piece named Paradox, the chord resolutions are dissonant and less clear, which sets up a useful contrast for the plot. Also, this theme very deliberately starts exactly when he spins the dreidel here, which helps illuminate what its meaning.

The second time this theme is used occurs at 55:00 when Ariadne is exploring Cobb's dreams after she finds him dreaming in the warehouse late at night. She hops into his dream using the machine to find Cobb visiting a sort of "dream prison" that he's constructed to hide his memories of Mal while he deals with them. Christopher Nolan has done something brilliant here in that he uses Ariadne's character to reveal to the audience Cobb's backstory. Ariadne is quite rebellious in nature, and by hastily running past Cobb to see the rest of his prison, much like she hastily started to edit one of the first dreams she architected when Cobb told her not to, she explores the depths of Cobb's subconscious, allowing the audience inside of his mind to get a better picture of what's going on and to move the story forward. In this way, the plot of Inception is "about itself" in such a way

that it does not plainly present to the audience what is going on, but instead uses elements of itself to reveal the rest of itself, so that everything has a purpose, no “fourth-walls” are broken, and the world is completely internal. Hans has done the same with his music, which will be even more clear not only as this Paradox theme is more investigated, but as we venture into two of the other themes, One Simple Idea, and Mombasa. The Paradox theme first occurs at 55:00 for 30 seconds before it’s interrupted by a very loud percussive hit when Ariadne is noticed spying on Cobb and Mal and their heads turn quickly to look at her. This is then replaced by pads and pulsing synths.

At 58:53, Ariadne steps on broken glass, as she’s now entered Cobb’s memory of Mal framing him so that he can’t return to the United States. Hans brilliantly takes the sound trail of the high-pitched glass ringing and extends it for a whopping 7 seconds as he turns it into similar-sounding synths to start a cue using the music of Paradox, until Mal becomes violent towards Ariadne and Cobb and Hans brings in brass stings for scare effect.

This theme is not seen again until 01:20:47 during the last dream sequence. Ariadne asks Cobb about his experience in Limbo and it’s going through the sequence that reveals Mal’s trap to frame Cobb. The moment that Mal starts the phrase that the audience hears repeatedly, which Cobb and Mal used to calm each other when they died by the train running over them to escape from Limbo, “You’re waiting for a train. The train that will take you far away. You know where you hope

this train will take you. You can't know for sure, but it doesn't matter, because you'll be together." This cue transitions when she jumps off of the ledge to her death. It's also important here to notice that Christopher Nolan plants his ideas before he explains them. In the paragraph above this one, which occurs 20 minutes before this, Chris Nolan revealed this scene that had already happened, but he doesn't explain it until later. He does this over and over and over in the movie. In the very first sequence of the movie, he takes the clip from the end, which is of Cobb finding Saito in Limbo, who is now very old and then he transitions that clip as if it were some kind of hallucination to the present, which was Cobb and Arthur trying to steal from younger Saito the businessman. In the same way, Hans does the same with his music, revealing themes like Old Souls and Paradox, the latter occurring very briefly at the very beginning, before Hans shows the audience what these themes mean.

Christopher Nolan doesn't even fully explain Mal's death until the one of the last times Paradox is used at 02:04:56, when Cobb and Ariadne have found Mal in Limbo and the last point has been told, that Cobb performed inception on Mal, causing her to think that her world isn't real. It cuts to the train about to run over both of them before they escape from Limbo as Cobb tells Mal "the train speech". When they wake up finally, Paradox is playing.

An important feature of this theme occurs around 1:56:45. This is the Paradox theme that is included as part of Dream Within a Dream on the soundtrack. Here, there essentially lives the same piece as Time, except it's an un-resolving

version. This was used for the sequence where Cobb and Ariadne walk through the world that Cobb and Mal constructed together when they were first in Limbo. However, since the story hasn't met its resolution yet, neither does the music. The music instead sounds mostly resolved, and heroic, but the seventh and eighth chords (see above) have tensions inside of them that stop it from feeling at peace. This continues throughout all of the action scenes of this sequence until 1:59:40 when it calms down. This is important because it can be noted that Hans uses dissonance to serve dramatic functions, mirroring the tension and resolution of a film.

The last time the Paradox theme is used is at 02:13:00 where the whole crew wakes up from the final dream, having succeeded at performing inception on Robert Fischer. Here it finally becomes Time, which is the heroic-sounding version of the piece, which features lots of brass and strings, which play a happier version of the theme. Every chord sequence except for one and possibly two resolves this time as the movie is wrapped up and Cobb is finally able to return to America to see his children. This switches back and forth between Time and the beginning of the Paradox track and back to Time all the way until the credits start.

One Simple Idea

One relatively simple theme in the film that isn't attached to anything heavy is called One Simple Idea. This theme appears during generic action sequences and

more usually as the explanation, architecting, and planning theme. The entirety of this theme is more stored in its sonic composition, and it's very clearly evident that it was dropped into certain places in the movie in almost its entirety.

The first place this was done is very early in the movie, at 6:57. Here, Hans uses it for a generic action cue while Cobb infiltrates Saito's mind to steal some documents. The same guitar riff, synths, and percussion are heard here as the soundtrack and it lasts throughout the whole operation until Cobb is discovered where Hans makes an immediate musical change when the lights are flipped on, mirroring the drama. Here again, Hans is showing his skills concerning following the plot musically.

One Simple Idea Guitar Riff



The second time One Simple Idea shows up, it is once again dropped into place with the whole piece running at 24:41. This theme is used here for its more normal function, where Cobb explains the concept of architecting dreams to Ariadne and tests her by first having her draw a maze in one minute that takes him two minutes to solve. This theme continues for an entire minute and a half before the music stops. This musical stop is extremely important, because the effect that Hans creates here is that as Cobb prepares to tell Ariadne that she's dreaming and doesn't

know it, the music stops, causing the audience to sober up attention-wise, which is exactly what the character Ariadne is about to do. This effect is heightened by the now lack of music as she starts to panic.

When the team goes to plan their final dream architecture for the inception of Robert Fischer, One Simple Idea gets dropped in again at 47:23 and plays again just like before with all the same elements until 48:28.

Once again as the team is planning at 51:15 what they're going to do for the last dream, this theme shows up. Here it's dropped with all the same sounds as before, but this time with some new string re-harmonization that lay over the top of the theme. Something important here that will be discussed later is that Hans has taken parts of another theme, from Mombasa, and added them to this cue because elements of the plot here that have come from Mombasa in the movie are present and are being discussed by the characters that joined the team from Mombasa.

At 01:00:46, something very interesting happens. We get the percussion synths from One Simple Idea without the guitar riff. Then an additional synth enters with a new melody. But as the action of this scene, in which Saito tells Cobb that he can make one phone call during the plane to allow him through security, all of a sudden the One Simple Idea guitar riff comes in. From this scene, it's much more obvious that all of these parts exist as separate elements which Hans is mixing up to have more music. This way, the whole film uses very similar elements, which gives it

a more homogenous feeling. This kind of mixing also happens again at 01:28:52 where you only have the guitar part from One Simple Idea and its complete re-harmonization with strings.

Mombasa

The next theme that will be explored is called Mombasa on the soundtrack, with the name given to it because it is primarily the action cue that occurs when Cobb is being chased in Mombasa. This is primarily a theme, however, as shown below:

Mombasa melody:



This theme is what Hans uses to refer back to the geographic location of Mombasa after the characters leave the place. Later in the movie, when all of the characters from Mombasa are present, Hans will pull elements of this theme back up within the mix of whatever is going on to allude to these characters' origin.

The main body of this theme happens at 37:14. What's curious here is that the cuts of the movie all fall on beat with the piece, which means that the movie editors must have had a temporary music track that they were using for editing

purposes and that Hans matched the tempo of this track so that all the scenes are cut at the same rate as the music. Hans is also proving to be a master of entry and exit with his cues, as this long cue ends with a string sustain that fades out under crowd noise. He does this kind of thing a lot, hiding the entrances and exits of his music under the sound effects.

Before this cue even happens, however, at 35:05 Hans introduces some of the synth sounds and the melody that will show up in the next cue, which again make it seem like he created the piece of music in advance, and since he knew where it was going, he alluded to it in advance.

Later, at 41:22 Hans begins mixing in elements of Mombasa under Old Souls. This happens because Ariadne and Arthur were having a conversation where Arthur explains the condition of Cobb's relationship with Mal, but the camera cuts back to Mombasa, where Cobb is currently. Hans doesn't stop Old Souls playing here and manages to create some continuity between the two scenes while also acknowledging the change between the scenes by hitting the Mombasa elements as soon as the scene changes.

Another example of this, yet extremely subtle, is that Hans mixes in the low string melody of Mombasa (precisely 1:08 on the soundtrack for Inception) into One Simple Idea, which has been playing since 47:25. This would be because the one who is explaining the mission, hence One Simple Idea is playing, is Eames, who has

joined the team from Mombasa, so the audience receives a sort of hint of the Mombasa theme inside of the usual planning or dream-architecting theme.

This theme is mixed in several more times at 52:11, when the Mombasa characters are discussing the dream that they're architecting, over One Simple Idea again but re-harmonized. It's also used at 53:45 again in the strings over a sort of re-pitched One Simple Idea again. At this point, the characters are discussing the plan to intercept Robert Fischer mid-flight. It's not clear here whether this is the same One Simple Idea but with transposed audio, as it could be possible that they recorded two separate versions, just in case they needed to use it in several keys.

Just like One Simple Idea had been repurposed at the beginning of the movie to be an action sequence cue, Mombasa gets used a second time for a different action cue at 01:22:16 as the characters are trapped inside of a warehouse inside of Fischer's dream and have to fight off his subconscious. This cue is also long like the major cue that happens in the actual city of Mombasa.

Lastly for this theme, at 1:33:30, Ariadne and Arthur are talking about Yusuf, the chemist, waking them up from the level of the dream that they're in. Hans very cleverly sneaks in the Mombasa theme because the characters are talking about the chemist from Mombasa.

528491

The last theme we will explore is called 528491. This name is derived from the number that Cobb forces Robert Fischer Jr. to make up when they kidnap him in his dream. 528491 is more of a texture than a melodic theme, so it's much more difficult both to remember and to recognize when it's being used.

Hans does perhaps the most dramatically clever thing with this theme than the others that have been explored in this paper. This theme is used more towards the second half of the movie after the hour mark simply because the number hasn't even been invented yet, however he first puts the theme in a place where no one might recognize it, which is the very first time that we see Robert Fischer Sr. laying in his sickbed at 46:10. This happens when Eames is told to use his connections when the team is planning their final dream inception. Eames secures himself a position as one of Robert Fischer Jr.'s staff members and is able to both sit in a meeting he has and to look into the room when it's opened to see Robert Fischer Sr. interact with Robert Fischer Jr.

This all happens very quickly, but the amazing thing that Christopher Nolan achieves here is that he shows Robert Fischer Sr. knocking over a picture that Robert Fischer Jr. has placed beside his bed. On the picture is Robert Fischer Jr. holding a paper windmill as a kid. This is important because in the final dream, in order to create inception of the idea that Robert Fischer Jr. shouldn't try and be like

his dad, Eames places the paper kite that he saw in the picture inside of the drawer beside his dad on top of a new will. This is a brilliant storytelling detail that is very difficult to see because it's fast.

Hans places 528491 here first because it has to do with the second half of the story and with the final inception, as when Robert Fischer Jr. puts the number 528491 into the wall, he will be able to access a room which is the very copy of this room the audience sees in order to receive the inception.

This theme is used again at 1:53:50 because at this point, their hopes of inception just died when Robert Fischer is killed by Mal. Ariadne comes up with the idea that if they follow him into limbo, they can save him and still perform inception. It makes sense that since their hope for inception becomes alive again, this theme would be pulled into the mix as it relates closely to the very event of inception in Fischer's mind.

Lastly, when Robert Fischer is revived and enters the final chamber at 02:09:13, at first the music stops. Hans Zimmer in this movie uses no music for big plot points of revelation and also for scary scenes like when Ariadne visits Cobb in his "dream prison". But here the very beginning of the 528491 theme starts playing, bringing the theme full circle, since its establishment an hour and 23 minutes ago.

In summation, Hans Zimmer has masterfully woven the score to follow this epic tale of Christopher Nolan's. It is clear after analyzing five of the themes present in the movie, that music editing has been done to reuse the material which creates a more homogenous product, as it creates a pool of sounds that are similar in nature, and even are in the same couple of keys so that transitions are easy. It's worth noting as well, that in the credits, there are four separate music editors that are given credit on the movie. Also, each of these themes are set up and referred back to, which even helps sow them into the minds of the audience subconsciously and gives each of them meaning.

Finally, here's a list of the music credits from the movie:

Music by Hans Zimmer

Supervising Music Editor – Alex Gibson

Music Editor – Ryan Rubin

Assistant Music Editors – Peter Oso Snell, Mike Higham

Score Produced and Additional Music by Lorne Balfe

Ambient Music Design – Mel Wesson

Synth Programming – Hans Zimmer, Howard Scarr

Guitar – Johnny Marr

Orchestrator – Bruce L. Fowler

Orchestra Conducted by – Matt Dunkley

Digital Instrument Design – Mark Wherry

Music Score Consultant – Gavin Greenaway

Score Coordinator – Andrew Zack

Score Recorded by – Geoff Foster

Score Mixed by – Alan Meyerson