



# Avatar Music Analysis

by Xueran Chen

MMus in "Scoring for Film, Television  
and Video games" candidate

2014

## Introduction

The groundbreaking technical and directorial abilities of Director James Cameron can be experienced in his breathtaking visual world of Pandora in "Avatar". This never before seen world is filled with landscapes, creatures, and civilizations that have also never been heard before by audiences.

Bringing to life the sounds of Pandora is not as easy as a normal film. There is a huge music team working day and night for past year, little by little building the sound of Na'vi and their amazing world.

Avatar is my favorite film ever. Now I have time to sit down, watch it hundred times and analysis how James Horner built this amazing music project from scratch.

The first thing I do is analysis cue by cue, what's instrumentation he used and how the music functions in film. Then from my note and transcription, I trying to learn the way he orchestrate the piano version of the cue to a full orchestra music, even adds more non-orchestra instruments. I trying to figure out how he use themes in this film and how he develop them to different cues and function differently. Then I search on Internet about the team's working flow, trying to figure out their workflow and how they cooperate. Also, the amazing and complex production is always worth to learn.

Then I focus on the relationships between cues and try to understand how the

music editor editing the soundtracks. How he use "Repetition", "Using existing music material to create new music" and other editing techniques.

All these analysis and researching makes me have a basic idea about how they bringing to life the sounds of Pandora.

# Table Of Contents

## Introduction

### Part I: Movie Background

- Project information
- Composer's information
- Synopsis

### Part II: Music Analysis

- Overlook of the music
- Three main functions in this film
- Specific Analysis:
  - i) -Orchestration*
  - ii) -Themes*
  - iii) -Development*
  - iv) -Production*
- Music Editing
  - i) -Repetitions*
  - ii) -Using existing music material to create new music*
  - iii) -Source music*

## References

### Full Film Music Analysis Chart

## Part I: Movie Background

- *Project information*

Avatar is an epic science fiction action film directed by James Cameron.

Composer James Horner scored the film; this is his third collaboration with Cameron after *Aliens* and *Titanic*. Horner recorded parts of the score with a small chorus singing in the alien language Na'vi in March 2008. He also worked with Wanda Bryant, an ethnomusicologist, to create a music culture for the alien race.<sup>1</sup>

“Development of Avatar began in 1994, when Cameron wrote an 80-page treatment for the film. Filming was supposed to take place after the completion of Cameron's 1997 film *Titanic*, for a planned release in 1999, but according to Cameron, the necessary technology was not yet available to achieve his vision of the film. Work on the language of the film's extraterrestrial beings began in summer 2005, and Cameron began developing the screenplay and fictional universe in early 2006. Avatar was officially budgeted at \$237 million. Other estimates put the cost between \$280 million and \$310 million for production and at \$150 million for promotion. The film made extensive use of cutting edge motion capture filming techniques, and was released for traditional viewing, 3D viewing (using the RealD 3D, Dolby 3D, XpanD 3D, and IMAX 3D formats), and for "4D" experiences in select South Korean theaters. The stereoscopic

---

<sup>1</sup> Wikipedia, The Free Encyclopedia, [http://en.wikipedia.org/wiki/James\\_Horner](http://en.wikipedia.org/wiki/James_Horner)

filmmaking was touted as a breakthrough in cinematic technology.

the film broke several box office records and became the highest-grossing film of all time, as well as in the United States and Canada, surpassing Titanic, which had held those records for twelve years (and was also directed by Cameron. It also became the first film to gross more than \$2 billion.”<sup>2</sup>

- *Composer's Bio*

“James Roy Horner (born August 14, 1953) is an American composer, conductor, and orchestrator of film music. He has been well known by his beautiful melody line and integration of choral and electronic elements in his music He also using Celtic musical elements in his film score frequently. He has the best selling orchestral film soundtrack of all time- score for the 1997 film Titanic.

Horner was born in Los Angeles, the son of Austrian Jewish immigrants Joan (née Frankel) and Harry Horner, who was a production designer, set designer and occasional film director.

Horner started playing piano at the age of five. His early years were spent in London, where he attended the Royal College of Music. He subsequently attended Verde Valley High School in Sedona, Arizona. He received his bachelor's degree in music from the University of Southern California. After he earned a

---

<sup>2</sup> Wikipedia, The Free Encyclopedia, [http://en.wikipedia.org/wiki/Avatar\\_\(2009\\_film\)](http://en.wikipedia.org/wiki/Avatar_(2009_film))

master's degree he started working on his doctorate at the University of California, Los Angeles, where he studied with Paul Chihara, among others. After several scoring assignments with the American Film Institute in the 1970s, he finished teaching a course in music theory at UCLA and turned to film scoring.

Horner has scored over 100 films, frequently collaborating with directors such as James Cameron, Mel Gibson and Ron Howard.

Horner has won two Academy Awards, two Golden Globe Awards, three Satellite Awards, three Saturn Awards, and has been nominated for three British Academy Film Awards. His body of work is also notable for including the scores to the two highest-grossing films of all time: *Titanic* (1997) and *Avatar* (2009).<sup>3</sup>

- *Synopsis*

*Avatar*, a story happened in 2154, tells about human start “Avatar” plans to get the recourse from planet “Pandora”.

In the future, advanced technics make outside space not mysterious for human anymore. Pandora-- a planet has trees taller than 900 feet, mountains flouting in the air, millions kinds of plants and animals. However, what makes human extremely exciting is not because of the possibility of life could happen on the planet, but the precious ores which worth 2 millions per kilogram.

In order to get those resources from Pandora, “Avatar” plans starts. To

---

<sup>3</sup> Wikipedia, The Free Encyclopedia, [http://en.wikipedia.org/wiki/James\\_Horner](http://en.wikipedia.org/wiki/James_Horner)

facilitate their work, the humans use a link system that projects a person's consciousness into a hybrid of humans and Pandora's indigenous humanoids, the Na'vi. This human-Na'vi hybrid – a fully living, breathing body that resembles the Na'vi but possesses the individual human's thoughts, feelings and personality – is known as an "avatar."

Jake Sully, the hero in this story, offered the chance to control an Avatar body made by his brother's DNA. In his new avatar form, this former Marine who confined to a wheelchair could once again stand up. He is given a mission to infiltrate the Na'vi, who have become a major obstacle to mining the precious ore, and then tell them to leave after get trust by those people.

In the laboratory, Jake opens his eyes and saw his blue toes. He starts to do research with Grace's team in the deep jungle. Once they are in the jungle, Jake meets some trouble and separated from his team. Navi's princess Neytiri saved him and brought him to her tribe. It brings a whole new level to Jake to understand those people and the planet. He starts to learn the ways of living from Navi's people and becoming one of them.

While Jake begins to bond with the native tribe, he quickly falls in love with the people, the forest, and Neytiri. Unfortunately, Jake has to take a stand since the restless Colonel moves forward and plans to destroy the beautiful world on this planet. After Grace's death, Jake decides to call all the clans on Pandora to come together and starts a epic war for save this planet.

## **Part II: Music Analysis**



- *Overlook of the music*

Personal speaking, I think the music working very efficient in this film.

Functionally, they mainly work in three functions: Create atmosphere, give emotion to scene, and underline score. Of course the music also works as many other functions, such as connecting scenes, revealing character's unspoken thought in some part of the film. For example, The beginning music give audience a feeling about the big forest picture and give audience a sense about what kind of place and environment the story happened in. Function as giving location, period and concept of the story. But those three main functions appear the most. Musically, the soundtracks are very beautiful. James Honor applies electronic music elements to orchestra music perfectly in this film. Some soundtrack such as "Jake's first flight", has really beautiful melody line and amazing arrangement, many people also enjoy listening the soundtracks alone. Technically, "Avatar" is a huge project; the music is a very big project, too. In a video on Internet, James Horner and his team members talked about their workflow, how they cooperated and glued their things together. Compare to normal film music project, this one is definitely more complex.

- *Three main functions in this film*

### ***Create atmosphere***

This is a very important function of music for this film. Using music create acoustic feeling about the whole new environment in this film is challenging, but James did a great job of this point.

The first example would be at beginning (00:00:54-00:03:58) when it cuts to the space. The music creates a boundless and vacuum atmosphere to the picture, extends the environment out of the picture.

The most important example of this function would be soundtrack "Pure spirits of the forest". (00:37:07-00:39:35) There is no hit point or emotion in the music, the music really well functions as "creates an atmosphere". This cue is very subtle and beautiful, it perfectly blend in to the amazing pretty world of the night in jungle, makes the environment even more fantastic than picture. When Jake starts to notice the environment, music come in with picture, becomes one part of the environment.

The third example would be the cue every time they talking in the meeting room. The music is just a soft low synth pad and some small electronic sounds, but it adds a clean, cold, high- technique feeling to the environment very well. This cue appears almost every time they talking in the meeting room of the human base. It creates such difference between beautiful nature environment

and cold, iron human base.

### ***Give emotion to scene (commenting)***

This function appears very often in films generally. So, it works a lot in this film, too. The basic idea of this function is using music rendering a mood to the scene, give emotional information to audience about what's the story going on. For instant, in this film, the most obvious cue of this function is "The distraction of Hometree". (01:44:33- 01:48:16) when Hometree down, Na'vi people's crying and shouting, the music creates a tragedy mood to the scene. Then, when it cuts to Na'vi people immigrating, the music gives a sad and hopeless feeling to the picture.

The next important example would be "Become one of the people". The music is so touching and moving, just makes you to cry when Jake going through the ceremony that he finally won his position among the people, becoming one of Na'vi (01:19:35-01:24:36). The music emphasizing the emotion in the picture, and rendering a very touching mood to bring audiences tear, and it works really efficient.

Then, the moment when Jake gives his speech to Na'vi people, music raise audience's emotion again and again, cheering everyone. This cue "Gathering all the Na'vi clans for battle" is one of my favorites, because this cue works so well. Every time I watching this part of the film I feel so

moving and cheering, then I find that it's the music makes me feel that way.

### ***Underline score***

Underline score, another very common and important function in film music. Underline score contain a big range of functions, most important two are "underline action" and "underline audience reaction".

A very good example of underline action in this film would be the cue "Chasing" (00:27:08-00:31:05). Jake leaves his team and start play with the big rolling flower. Suddenly all flowers closed and a big animal appear. The big animal run back to its grope, but the real danger appears, the giant tiger. Then the tiger start chasing him. The first part of the score functions as enhance audience reaction by underlining the situation. The second part is a very tension and fast cue (the chasing part). Function as an underline action score. With many hit point. Create a tension feeling and underline the chasing action.

Another example would be cue "Neytiri fighting with Quaritch", Music start with Neytiri riding fast, fast percussion underline her fast riding speed. Quaritch is going to destroy Jake's lab. At that moment, Neytiri appears and stopped him. During the fight, her tiger killed by Quaritch. Music underlined the fighting with many hit point and a very tension

feeling.

Then, underline audience reaction is a little bit different. I will say cue "Viper wolves attack" (00:32:08-00:36:21) is a good example. Music starts when the viper watching Jake. Then the viper is going to kill Jake.

Suddenly, a seed of soul tree floats in sight and stops on her arrow. At first, percussions give a feeling of dangerous to audience. And then the strings crescendo is create a tension emotion for the viper attacking. When the soul seed appear, music change and tell audience that situation is changing, she will not attack him. Music dragging audience reaction all the time and enhance their feeling.

- Specific Analysis:

### ***Orchestration***

“Once the music has been written, it must then be arranged or orchestrated in order for the ensemble to be able to perform it. The nature and level of orchestration varies from project to project and composer to composer, but in its basic form the orchestrator's job is to take the music written by the composer and "flesh it out" into instrument-specific sheet music for each member of the orchestra to perform.”<sup>4</sup>

James Honor is a piano player. Usually, he find motive and write music on piano, then orchestrates it to a full orchestra; sometimes he also directly write orchestra on paper. In this project, he is the main orchestrator; team with Nicholas Dodd, Jon Kull, J.A.C. Redford and Gary K. Thomas doing the orchestration together.

He has already improvised and composed few scenes by piano before any thing been written. While he composing, he think about he will adds more non-orchestra instruments play non-orchestrally later. After finished the orchestra part, they dubbed some synth and sample drum on the orchestra music.

For example, James wrote this piano piece first (p 2-1). Then he

---

<sup>4</sup> Samuel Adler (1982, 1989, 2002): The Study of Orchestration.

orchestrates it to the orchestra version (p 2-2) and records it.

The image displays three systems of piano sheet music for the piece 'Jake's first flight (part) - piano version'. Each system consists of a grand staff with a treble and bass clef. The key signature is three sharps (F#, C#, G#). The first system begins with a treble clef and a bass clef, featuring a melody in the treble with a triplet and a bass line with a triplet and a dynamic marking of *mp*. The second system continues the melody and bass line with sixteenth-note patterns and a dynamic marking of *p*. The third system concludes the piece with a final chord and a dynamic marking of *p*.

p2-1 Jake's first flight (part) – piano version

Through my analysis, I found that he use piano to get all the important parts of the music such as melody, harmony, tempo, rhythm and main background movement.

In this example, part of one of the most beautiful sound track “Jake’s first flight”, we could see he written down all harp’s movement, which is the main background movement. Then, in the piano version, we cloud also find the melody and harmony, which played by strings later in orchestra version.

Then things that haven’t written in the piano version are male voice, piccolo and percussion. The voice and piccolo are just effects, outside the main body of the music. The percussion is one important part of the music. As a composer, we all know that if we already have the tempo, time signature and rhythm, we could dub some percussion or drum on the track easily. So I think, he already has how the percussion plays in mind. After orchestration, he records the percussion and dubs it on the orchestra.



# Jake's first flight (part)

James Horner  
transcribed by Xueran Chen

♩ = 70

Piccolo

Cymbals

Percussions

Harp

Piano

Voice

Violin I

Violin II

Viola

Violoncello

Contrabass

4

Picc.

Cym.

Congas

Hp.

Pno.

Voice

Vln. I

Vln. II

Vla.

Vc.

Cb.

Wu

Wa

Copyright © Xueran Chen 2014

## Themes

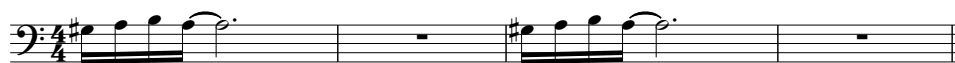
“In music, a theme is the material, usually a recognizable melody, upon which part or all of a composition is based.”<sup>5</sup>

James Horner used several themes for this movie, they appear in different kinds of scenes, work as different functions. Those are three themes that he used a lot in this film. There are other themes like “become one of the people” theme, “Jake’s first flight” theme and so on, but they are not been used so often than these three.

### Main Theme



### Tragedy Theme



### Victory Theme



---

<sup>5</sup> Drabkin, William (2001). "Theme". The New Grove Dictionary of Music and Musicians, second edition, edited by Stanley Sadie and John Tyrrell. London: Macmillan Publishers.

## *Development*

“In classical music, musical development is a process by which a musical idea is communicated in the course of a composition. It refers to the transformation and restatement of initial material, and is often contrasted with musical variation, which is a slightly different means to the same end. Development is carried out upon portions of material treated in many different presentations and combinations at a time, while variation depends upon one type of presentation at a time. In this process, certain central ideas are repeated in different contexts or in altered form so that the mind of the listener consciously or unconsciously compares the various incarnations of these ideas.”<sup>6</sup>

James Horner developing themes in different ways; rendering different color to the melodies to achieve different functions of the music. There are tons of different developments James did. I will choose few examples from them and explain how I understand his developments.

### *Main Theme Development*

The “main theme” has been used everywhere in the film, a big percentage of music are using the main theme. Here are two example of the development of main theme.

---

<sup>6</sup> Benward & Saker (2009), *Music in Theory and Practice: Volume II*, p.138-39. Eighth Edition. ISBN 978-0-07-310188-0.

The first main theme development is when after Neytiri teaching Jake about what is an Ikran and start flying with it. When Neytiri start to fly, the music change big and glorious which function as creates a mood that indicates audience “this is really awesome!” The music using the main theme, but develop to be very freedom, has the feeling of flying.

### Main Theme development 1

♩ = 152

The musical score consists of four staves of music. The first staff shows a melodic line with a tempo marking of ♩ = 152. The second staff begins at measure 10 and features a melodic line with a key signature change to one flat. The third staff begins at measure 19 and shows a complex texture with multiple voices and a key signature change to two flats. The fourth staff begins at measure 28 and continues the complex texture with various time signatures including 5/4, 3/4, and 4/4.

The second example would be soundtrack “become one of the people”. The music starts with the song’s theme. When Neytiri and Jake swim in a river during a beautiful night, music turns to main theme but develops into a very subtle and romantic way.

### Main Theme development 2

♩ = 133

13

25 *f*

37

### *Victor Theme Development*

The first example of developments of “Victor Theme” would be part of cue “Attack! Warriors!” When Jake diving to attack the enemy, brasses play the victor theme out. This development gives the melody a lot of energy and power.

### Victor Theme development 1

♩ = 126

*f*

This theme melody could also add magnificent feeling to scene by the following development. Jake following Neytiri to see her Ikran, this theme punching in when it cuts to the image of the huge Hometree.



### ***Production***

James Horner said that Avatar has been one of the most challenging projects he has ever been involved with, and he has never worked so closely with a group of musicians as he did on this film. They spent past year doing the mockup, editing the music as he writing and orchestrating the music each day. As the music develop with the film together, it allowed them give Cameron a facsimile of what his music sounded like against his film.

Avatar music team is definitely a huge music team. Their works can be defined into six subjects: composing, orchestrating, recording, mixing, editing and sound design (music). There are tons of great musicians involved in this project. James said he could never have accomplished

creating and producing almost 3 hours music without their unique and astonishing talents.

There are three main persons in this project: James Horner (composer/orchestrator/conductor) Simon Rhodes (music mixer / music recordist) and Simon Franglen (electronic music arranger)

To compose for this huge project, traditional method of composing seems unreliable. James Horner took on a more experimental approach with this project than he normally would. "I didn't rely on a written score for large parts of the film," he says. "Instead, I improvised much of the score against the picture. There was no orchestra involved until the end — just me playing the parts into the film, using an electronic instrument or a piano. I find myself trying to move slowly away from writing conventional orchestral music, incorporating other instruments into my scores that don't necessarily play orchestral music." He uses Sibelius to notate what he has written and gets it to the copyists. Which makes the work clearer. After finished a cue, he will send score and sequence to Franglen.

After they generate a tempo map from Horner's cues, Simon Franglen mocks up the non-synthetic elements (which will be later replaced by the orchestra), and then uses a range of plug-ins to lay down the score's electronic and rhythmic elements to achieve the otherworldly textures of Horner's vision. Franglen also using BFD2 and other virtual instruments

working in this project instead of 2 tons of equipment's, which he normally would. After his arrange, he leave the session to Rhodes.

Scoring mixer Simon Rhodes using protocols blending the score's synthetic and orchestral elements. "Because of the way James is working, much of what he's creating is being recorded, but not written down," says Rhodes. So, we know that some parts of the music may improvise by musicians instead of written down note by note. Because there are too many tracks (more than 450 tracks in a 9 minutes cue), they use three Pro Tools machines locked by Satellite Link and synced to picture through Video Satellite LE. So they won't worry about the huge amount of track numbers and size. Then, to make this mixing possible and easier, Rhodes mixes the project in 5.1 surrounds on a big console instead of directly mixing in protocols.

This is the basic idea of how this big team rolling. Of course, the real situation should be much more complex.



- Music Editing

In film music, the concept of music editing is slightly different from any other music production process.

The role of the Music Editor in film has certainly changed over the time. Computer technology and software development has blown the doors open for what is possible when it comes to editing music. 50 years ago they didn't have access to the movie on video or hard drives so after the music spotting session the music editor would do a scene by scene breakdown or "timing notes" In today's world they have the film at their fingertips through digital media and can lock in sync to a vast array of synthesized sounds, making the timing notes superfluous for the composer, although the music editor might still keep rough notes to keep track of subsequent changes in the film as the post-production process continues.

The music editor will monitor the completion of the score and attend all recording sessions. When editing changes take place that affect scoring, it's his task to keep the composer informed and make the appropriate revisions to the cue breakdown. The music editor may run the cueing system, which the conductor uses to maintain visual and audio sync while recording. Once the music is recorded the music editor will synchronize

the tracks with the picture and may be responsible for editing cues to accommodate changes made in the film after scoring. After the final mix or dubbing process is complete, he or she will be responsible for delivering cue sheets used for calculating royalties.

Jim Henrikson is the main music in this film. He has since built a long and distinguished career. From Willow in 1988, he has faithfully worked with James Horner.

In Avatar project, instead of let the composer writes 3 hours new music, music editing will not only reducing composer's work but also makes the music more efficient and creates some connection between scenes that have relationships. The most obvious editing job we can see are "repetition" and "using existed material to create new music".

### ***Repetitions***

One of the most effective ways of editing is "repetition", which means reusing an existed cue in another place in the film. This method would reduce composer's work by reducing the length of the music he or she should write. The repeating music would also create some connections between scenes. This technique has been used in TV serials very often, since it's impossible to create so much new music to satisfied TV shows.

Composers and music editors always using the same music repeating or edit it to fit the new scene.

In this project, Jim Henrikson use this technique several times to reducing James Horner's work and also achieve other functions.

For example, He put the soundtrack "Pure spirits of the forest" at (00:08:17-00:09:40), when Jake follow Norm go into the lab, and saw his avatar there. This track is originally write for (00:37:07-00:47:22), when the pure spirits of forest landing coming from the air and landing on Jake's body. Creates a purely beautiful, subtle and fantastic feeling to the scene. I think the Jim inserted this cue here after every important cues finished by James. He put here for three reasons. First, this scene is the first time Jake saw a avatar. And the music should add a fantastic feeling to how amazing is this thing. Then, it creates a connection between when he saw this body first time and when he uses this body travel in another beautiful world. Third, the music here fit the picture very well and enhanced audience's feeling.

Another example would be the cue "Report to the colonel", used in (00:50:08- 00:51:00) and (00:54:03- 00:54:35). These two scenes both are about Jake talking with Quaritch in human base meeting room.

Instrumentations are low, deep, dark synthesizer pad combine with some high pitch soft electronic textures. It creates a clean, cold, high- technique

feeling to the environment. So, since the two scenes are at same place and same characters, Jim repeating the same cue to add the continuity to them.

Every times when the night jungle scene appears. (01:03:15- 01:03:45)& (01:21:35- 01:21:50) the music is very gentle and romantic, harp play arpeggios, strings play harmony and flues play the theme melody. It represents a beautiful jungle night in another world. Adding fantastic feeling to the scenes. Also, because these two scenes are both describe romantic experiences Jake had with Neytiri, the music connects them together and creates a romantic mood.

There are more repetitions of music in this film, and all of them have good reasons and work perfectly.

### *Using existing music material to create new music*

The concept is similar to repetition. First, is to create connections and recall emotions. Second, to avoid writing and recording additional music. The difference is this technique is using existing steams or single instruments to create a new cue through editing.

For instant, (01:32:20- 01:33:36) Music comes in while Grace talking about the amazing world of the trees. Strings play very soft, using the melody of pure spirit. It's the same recording from the track "pure spirit". But in this scene, the music editor only use the strings steam. This music

has been made in order to describe the subtle and beautiful world which Grace talking about. Recall the picture of amazing avatar world to audience's imagination. Add imagine through music to give audience imagination about what Grace talking about.

The most important example would be the cue "Distraction of Hometree" has been used twice at (01:46:45- 01:48:44) & (02:17:36-02:19:12). The materials are the same, but different arrangement and mixing. They both have the same string background, brass tragedy melody, and percussions. At (01:46:45- 01:48:44), starts with a woodwind solo, then more than two women vocal singing at the same time. At (02:17:36-02:19:12), the music starts with brass play tragedy theme melody for many times. Then, the female vocal comes in, but only one voice. Both cues represent Na'vi' people's tragedy, losing the war and people are dying. The editor use the same material to makes two cue sounds very similar, creates connections between them. And recall the tragedy image last time Na'vi people had. I think these two cues are the best using of this technique in this film.

There are much more example of this technique in this film. Using existing music material to create new music would not only save time and money, but also achieve great effect.

### ***Source music***

Source music refers to music in a film that is part of the fictional setting and so, presumably, is heard by the characters. It can be background music or be produced by characters themselves as part of the plot. The opposite of source music is underscoring, which is music heard by the viewer (or player), intended to comment on or highlight the action, but is not to be understood as part of the "reality" of the fictional setting.

In movie Avatar, because of the period and location of the story is in another completely different world, and the source music should be part of the fictional setting, something original from Pandora. It couldn't be the normal instrumentation and the things that they don't have in that planet.

To achieve this goal, James Horner found that, Na'vi people always singing. So choir would be the most important instrument in source music. Then, we could see, at (01:55:33- 01:55:57), Na'vi people are chanting and singing in choir. This is very typical source music; the sound is one part of the setting, produced by the people in pictures.

Then at (01:22:41- 01:23:05), when Jake connecting the tree of soul, audience could hear the source music of ancient Na'vi people are singing.

Another great example would be at (00:47:21- 00:48:35), the native music sung and played by Na'vi people. In the music, except the voice, there is also some percussion.

The idea of source music in this film is to create Na'vi people's native music and songs. It's a big challenge but James Horner did really great job.

## References

Richard Davis (May 1, 2010), *Complete Guide to Film Scoring: The Art and Business of Writing Music for Movies and TV*

Fred Karlin, Rayburn Wright and John Williams (Jan 10, 2004), *On the Track: A Guide to Contemporary Film Scoring*

Benward, Bruce, and Marilyn Nadine Saker (2009). *Music in Theory and Practice, eighth edition, vol. 2. Boston: McGraw-Hill. ISBN 978-0-07-310188-0.*

Rushton, Julia (2001). "Subject Group". *The New Grove Dictionary of Music and Musicians, second edition, edited by Stanley Sadie and John Tyrrell. London: Macmillan Publishers.*

Benward & Saker (2009), *Music in Theory and Practice: Volume II, p.138-39. Eighth Edition. ISBN 978-0-07-310188-0.*

James Horner, *Avatar's Soundtrack Album.*

Learn Na'vi Community, <http://forum.learnnavi.org>

Wikipedia, <http://www.wikipedia.org>

Avid's website, [www.avid.com](http://www.avid.com)



## Full Film Music Analysis Chart

Time	Track Name	Scene Description	Music Description	Comment
00:00:25 - 00:07:55	“You don’t dream in cryo…” (In CD)	The music start with all Black, then a big first-person perspective flight scene with narrating. This scene is ended by a human eyes open. Then the story begin, Jack is in a space airplane and already sleeping for 6 years. Space picture and black-suit people scene appears alternatively. With the reading, all these picture tell audience how Jake came to Pandora and why. Finally, the space airplane arrived Pandora, and music fades out while the colonel speak about Pandora rules.	Start with percussion, the music and scene is really like Tarzan’s beginning and use the same approach in music. Music suddenly changes when the eyes open. In this part of music, main instruments are percussion, brass, soul like soprano, and a little bit strings. Slow tempo, no rhythm, percussion mainly using for hit point with the cuts. At about “00:03:58”, rhythmic percussion and strings arpeggios came in and music become faster and rhythmic in order to add more tension to the landing scene and many picture of huge machines. Change again when they get off of the plane. Music has more electronic sounds loops and the emotion is a little dark. Fade out when colonel speak about Pandora rules.	The beginning music give audience a feeling about the big forest picture and give audience a sense about what kind of place and environment the story happened in. So it function as an “Evocation of a physical setting and location”. After that the second part of the music (00:00:54-00:03:58) is function as “Creation a physical atmosphere” which is playing in space. Then the next part of music (00: 03:58-00:04:45) is more like a “underline score” that give tension to the landing scene. Finally, the last part (00:05:09-end) is again function as “Creation of a physical atmosphere”. Huge machines, vehicles, troops and weapons.
00:08:17 - 00:09:40	Pure spirits of the forest ( <a href="#">repetition</a> )	Jake follow Norm go into the lab, and saw his avatar there.	It’s the same music form soundtrack “Pure spirits of the forest.” Coming in when Jake see the avatar. Main instrument are pads, some small pitched percussions and fviolin solo. Fade out when the monologue come in.	I think this cue was insert by the editor after all important music finished, because the music is just cut from another cue. And its function is creates a mystery atmosphere for the avatar.

00:14:01 - 00:19:35	Jake into his Avatar world (In CD)	Music start when cut to the scientists cleaning the container. Then a lab scene and Jake is ready to go in his avatar body. Launching and connecting. Jake wake up in the avatar body, feels really good. Then he run out the clinic rudely. After a short running, he stopped and saw Grace and started talking. Finally, the cue fade out when he sleep.	Start with strings, then change to harp, string legato with flute solo while Jake said "zero". When Jake begins get into the machine, the music start to change. Instrumentation becomes a oboe solo, then, going more bright by harp melody. Strings staccato and horns coming in. The music rising and rising, finally, strings tremolos lead music to another part. This part at first is quite and soft, and indicates that they are now in the avatar world. When Jake feels very good about his new body, percussion coming in. High flute short notes indicate his naughty. He starts to break things and music becoming more and more tension. Chaos woodwinds, crescendo strings, and chromatic low piano notes create a tension and rude feeling. After he run out of the clinic, music change more bright. Harp and strings with a little brass textures play <b>theme</b> melody with rhythmic percussion. After a hit point, music becoming soft again. Harp, strings, horn solo, and triangle. Fade out ending.	00:14:01-00:14:24, from cleaning the container to Grace operate the machine, music function as connect between several scene. From 00:14:25, after Jake said "Zero", music change, and the function change to "Suggesting unspoken thoughts of the character", suggesting Grace's surprise and wonder a about if he can link the avatar successfully. Then from 00:15:17, they start to link, music just "Underlining the situation" very honest, and tell the audience that the data is good and he will eventually linking successfully. And then from 00:16:48, Jake feels really good with his new body and begin a scene that running out of the clinic rudely, the music begin to function as an "Underlining action", then music change when he run out of the clinic, music still underlining action but added Jake's happy mood into it. This part ending when him stop running. Finally, the music becomes very soft and create a mood of relaxing.
00:23:56 - 00:24:41	Flying above the Jungle (not in CD. edit from CD track "Viper wolves Attack" 2:06)	Music start when Jack into the Machine. (only percussions). Next cut is they are in the play and flaying in beautiful forest. (A helicopter effect sound suddenly up may give the chance to change the music.) Music fades out when they down the jungle.	Start with percussions, pushed by a cymbal then change to strings chords. (It's a edited track, with addition Drum track on original track Viper wolves attack. And have the same scene with the Original track witch is the helicopter flying above the jungle. )	Music with a feel of speed, big and wide feeling. Express the cool flying experience and amazing beautiful world properly.
00:26:12 - 00:26:30	Walking in Jungle,(Not in CD)	They are walking in the jungle.	A very short and low volume big reverb Flute solo and a little bit percussion. (Audience will not notice it as a music)	The music is just coming in after Jake's unnecessary alert. So, it creates a relax feeling, and also a jungle atmosphere.

00:27:08 - 00:31:05	Chasing (Not in CD)	Jake leaves his team and start play with the big rolling flower. Suddenly all flowers closed and a big animal appear. Then dialog with Grace. Big guy turn back and Then big tiger appear. Start chasing! Chasing end with he fall into the water.	Start with a pad and low flute (indicate the environment) Cymbal, percussions and brass come in when he see the big animal. Brass play legato at low register creates a dangerous atmosphere. Then when Jake talk to the monster, instrumentation change to only a dark pad. Makes the scene seems even more dangerous. When Grace says “Run! Definitely run!” a very strong chasing music starts. Rhythmic percussion, low brass legato and high brass short notes shining with woodwinds. Music ends with a string tremolo and crescendo.	The first part of the score functions as enhance audience reaction by underlining the situation. The second part is a very tension and fast cue(the chasing part). Function as an underline action score. With many hit point. Create a tension feeling. A strings rising ends the cue.
00:32:08 - 00:36:21	Viper wolves attack part1 (In CD, bonus track)	Music start when Viper watching Jake. Then viper preparing to attack. Suddenly a flying seed floating in sight and stop on her arrow. The viper surprised, stop attacking and run away. Next cut is the helicopter flying above the forest. Grace’s team is looking for Jake.	Start by a percussion, then a strings crescendo stopped at the high point. Then music change to soft strings legato and harmonics. Then low string and horn come in to give a transition. 33:11, the music is edited, with a very obvious disconnection. Then 33:15 there is a disconnection about reverb of the music. So, this part of the music is edit by other existing music. After the dialogue, strings and brass ensemble chords rid the scene off.	Frist part of music is function as “Portray emotion”, Percussion give a feeling of dangerous to audience. And then the strings crescendo is create a tension emotion for the viper attacking. When the soul seed appear, music change and tell audience that situation is changing, she will not attack him. Brass coming before cut in order to connect the two scenes. Then the music appears which is the same melody with the helicopter scene because the scene is the same.
	wolves attack part2	In the night, Jake is trying to make a fire. Some wolves are following him. He successes make a torch and through the light he see all the wolves. Then start fighting, after several rounds he is pulled down by a wolf and the Viper appear, save and help him fight with the wolves. When all the wolves run away, the music fades out.	When cut to night jungle. Music become dark; build by a deep and dark pad. When he saw those dogs, music becomes a “Japanese Bushido” style, built by flutes, vocal, low strings and percussions, create a dangerous feeling. When start to fight, music change to a fighting cue, still with a Japanese feeling, with strong percussions play in a faster tempo, and flutes play out of tune. Stop when wolves gone.	When Jake walking in the darkness, the music gives this scene a dark and scary atmosphere, indicates there are something dangerous out of sight. When start fighting, music underlining action. It follows the picture very tight. Music ends when the fight stops.

00:37:07 - 00:47:22	Pure spirits of the forest (In CD)	<p>Music start when Jack notices how beautiful the world is. The environment is very beautiful. The woman is pray for the dead animal. When she finished, she left him. Jake tried to stop her and thank her, but got a bunch. Then they started to talk. After talk the scene became more childlike. He trying to follow her and behaved like a baby following an older sister. When they on the wood bridge, she told him to go back, at this moment, the secret tree's seed appear and change her mind. She is leading him to her camp. On the road, Jake got a sudden attack by the native people. And the woman protects him and talk with them. Finally they bring him to the camp. When they arrive the camp, the leader who is her father at first decides to kill him. Then the mother appears and asks him a series questions, then change everybody mind, decide to let him stay.</p>	<p>Music begins very subtle, a long strings legato, pad, harp and light pitched percussions. It sounds really beautiful and subtle. While Jake saying "why save me?" the music goes down and strings play a soft melody, making a transition. Then it turns to a childlike, naughty music. Marimba, flute and pitched percussion give a relaxing and naughty sense. After that, it's turns back to a beautiful and subtle music. Because the scene is more pure and tender, the main instrument is legato high strings. Then she changes her mind, music become positive and brighter. To do this, the composer use harp, strings, little percussion, faster tempo and brighter chord. Suddenly music change because of the attack. Big percussions, effects, low string movements (<b>this part doesn't contain in the CD track</b>). Then they bring him to the camp. <b>Low brass playing the a very recognizable melody</b> that is very powerful and dark, combine with big percussion and string effect articulations, create a powerful and dangerous feeling. This part of the music stopped when she talk to her father. Music change, main instrument is voice, combines with pad and percussion single hits, creates a mystery, dark and tension feeling.</p>	<p>The first part of the music is very subtle and beautiful, I think James Horner just want use this to create a very beautiful background blinding with the beautiful environment. (create a atmosphere). at about 00:39:35, the music change, become a childlike and naughty music, which make audience relax and indicate that now the situation is Jake is like a child following the older sister and what they talk now is not serious anymore (create a mood). 00:40:17 Jake become serious and tell her that he really needs her help, so the naughty music fades out. Suddenly, the secret tree's seed come, the music change to beautiful and subtle again, indicate that the situation is positive and those things is beautiful. At 00:41:57, the music change, indicate the woman is change her mind and music continue describe a positive and beautiful scene. 00:42:20, music suddenly changes again, because Navi's attack. Music becomes dark and dangerous, functions as creates a mood. From 00:43:30, also function as connect several scenes. And music stops at 00:43:41 when the women talk to her father. Then another Japanese Bushido style music start, and create a mood that Jake is in a dangerous situation that he may be killed. Then music changed when mother appears. And now the music also function as "Revealing psychological make up" of the mother who is mystery and psychic.</p>
00:47:21 - 00:48:35	Dinner in the camp (not in CD)	<p>Jake goes in to the place where everybody having dinner, after dinner, they go to the place for sleep. Music fades out when he get back to the human worlds.</p>	<p>The first part is "source music", like an African native song built by human voices and percussions. Second part music changes, percussion, flute and relax tempo really give a jungle night feeling.</p>	<p>First part is source music; director just want it sounds like it's come from the group of people. And the second part is function as "create atmosphere". The music created a peace night jungle feeling.</p>

00:50:08 - 00:51:00	Report to the colonel (not in CD)	Jake talking with the colonel and the boss. Music comes in when they talk about destroying “Blue monkeys” home. It fades out when cut to the lab.	High Synthesizer combine with low strings orchestra textures.	Create a dark mood when they talk about to destroy “Blue monkeys” home. And also the synthesizer sounds create a high-tech environment.
00:51:48 - 00:53:35	Learn riding horse (not in CD)	Jake is learning riding horse with Neytiri, Music ends when Tsutey comes.	Big reverb flutes with vibraphone. Pad comes in when banding, then strings chord crescendo when Jake fall down. And low brass-like synthesizer and big percussions come in when Tsutey appears. They start talking, music stops.	Main function of this short cue is to create an atmosphere of the big natural environment.
00:54:03 - 00:54:35	Report to the colonel (not in CD) same track with 50:08	Jake is reporting to the colonel and the boss. Max saw it and the scientist’s team is preparing to move to Hallelujah Mountains.	High Synthesizer combine with low strings orchestra textures.	Creating mood and atmosphere.
00:55:03 - 00:56:27	Flying to Hallelujah Mountains (not in CD)	Music comes in before the first scene, the helicopter flying heads to the Hallelujah Mountains. It cuts to they are talking in the helicopter that the radar is not working and they can’t see anything also because the clouds covers their vision. Suddenly, they get into the Hallelujah Mountains area, the clouds disappears and they see the amazing landscape and astonishing. Then finally they landed at a base on a mountain’s top.	Timpani rolling coming before the flying cut. And then brass ensemble plays the <b>Hallelujah Mountain’s Theme melody</b> . Then high strings crescendo and low strings staccato. When they saw the mountains, strings and brass play <b>Flying Theme</b> together. Music changes key down when cut to they arrive the landing place. It fades out after landing.	The first part of the music is very short and has 2 functions. One, is to connect two different scenes. Two, is create a magnificent atmosphere. And the second part of the music also has two functions, which is from their vision is covered by clouds to they go through the clouds see the amazing landscape and landing on the mountain. The first is physical function that creates a big and magnificent atmosphere. But beside this, there is another important function, to indicate that the picture they see is unbelievable amazing and they are astonishing. (Create a mood)
00:57:06 - 00:57:55	In Hallelujah Lab (not in CD)	Music come in when Jake looking the pictures of Grace’s school. Then there is a reading to explain what is Jake thinking now. Then the picture cut to a big tree and Neytiri going to show Jake her Ikran.	Music separate to two parts. Frist part is soft strings legato with soft horn solo. (same melody with “pure spirit”) The second part, brasses play the <b>Victor Theme</b> (appear at 2:21:03). Then fades out by strings	The first part of the music is function as creates a mood that Jake feels sorry to Grace. The second part of the music is mainly function as “connect scenes”, science the timpani rolling coming before the cut to the huge tree. This technic James Honor used a lot in this movies. To build a smooth bridge from a small scene to a big scene. And also, the following music is sound very big, indicates that the environment is huge.

00:58:23 - 00:59:59	Pandora [from 1:39 in the track]	Neytiri's Ikran appears and she teaches something about this amazing bird to Jake.	Music separate to two parts. First part fades in when Ikran appears. It starts with only pad, and then a big reverb flute solo come in (edited part, appears somewhere else), give a big space feeling. The second part of the music starts when Neytiri start to flying. It introduced by a timpani rolling crescendo and cymbal. Then strings play the theme melody and flute play some following melody and effects. Music fades out when cut to lab scene.	The first part of the music is just for creates a big environment for the scene. When Neytiri start to fly, the music change big and glorious which function as creates a mood that indicates audience "this is really awesome!" (Maybe underline audience reaction?)
01:00:16 - 01:05:09	Part 1,2:  Becoming one of the people (In CD)  Part 3,4:  The bioluminescence of the night (In CD)	Music comes in before the cut from lab to learning scene. In this cue, first part is a lot of scenes of Jake learning in the forest. The second part is he learning the skills that fall on the leaves. Then music change to part 3, which is a happy scene that Grace's school opens again. Then, part four, Some night scene in forest with Neytiri and in the lab. This part describes the relationship between Jake and Neytiri, Jake and Grace becomes better and better. Then it goes to the last part, which is the scene Jake hunting with Neytiri and made a clean kill. Then music fades out while Neytiri saying: "You are ready."	This is a long cue. The music divides to 5 parts. The first part comes in before the learning scene. Harp plays the movement and flutes play the theme song melody, strings play secondary melody. Then when they running, percussion comes in and strings play main melody. And it goes back to former organization when the scene changes back to quite scene. Part 3, the music is following the actor's movement. Harp and string describe Neytiri's smooth and smart movements. Brass gives a push to indicate Jake's courage. And then pitched and un-pitched percussions describe Jake's stupid movement. Music goes back to the main melody. Harp play arpeggios, strings play harmony and flutes play melody. Then music changes to another part, transport by a world music style choir. This part is the music is very quiet and beautiful. Harp still plays arpeggios, mallets instrument and woodwinds play melody together softly. Then the last part of the music is a flute piece, with a little percussion as effect.	This whole cue is always function as connects scenes and it created a community between scenes. The first part of the music (01:00:16-01:02:10) mainly functions as connects several scenes and a gives a mood of the passion feeling that learning in this magnificent, amazing and beautiful environment. And the second part of music, from Neytiri falls on the big leaves to Jake falls on the ground and stands up (01:02:11-01:02:45). This part of the music was written for underlining actions. Then the third part of the music begins, which is a happy music. It gives a happy mood to the scene and also connects scenes. Music smoothly go to next part, the subtle and beautiful music describes the relationship between Jake and Neytiri, Jake and Grace becomes better and better. And music underlined Grace and Neytiri's cares to Jake. From 01:04:25, when the scene cut to Jake hunting, music smoothly changes to next part. This part of the music not function as connects scenes any more, it mainly just creates a big jungle atmosphere and secondary create a mood of hunting.

01:05:10 - 01:07:58	Climbing up "Iknimaya - The Path To Heaven" (In CD)	Music comes in right after the last cue when cut to the mountain scene. Jake and 3 others all the way go to the cliff where they capture the Ikrans. Finally they reach there and see the amazing picture of the landscape. Then Neytiri comes and then Jake will go first to capture his Ikrans.	This cue has a big, glory feeling. James mainly using the major, add9 chords for harmony; Slow steadily tempo; The main melody is performed mainly by choir, which is very important to get the glory feeling. And also steadily percussion, low brass and low strings give it a strong bass part. Flute comes out as solo at some part, gives a big natural environment feeling. At the end, in order to get a elevation to describes a feeling that seeing the amazing landscape. James used a transpose from D to E to approach this effect.	The cue is mainly function as "Create mood", and at the end it function as "underline the expected reaction of audience. And I separate it in two parts because of the different moods it creates. The first part, from music begins till before they reach the cliff. This is the main part of the cue. It creates a feeling that they are doing something glory and honor. The second part is starts from when they see the amazing picture at the cliff. Music becomes very bright and big. It enhances the feeling of the amazing picture and makes it more amazing.
01:08:45 - 01:12:03	Capturing the Ikrans	Music fades in when Jake walks in the Ikrans' area. He begins to find the Ikrans who chooses him too. When he finds one that chose him, he starts to fight. And finally he wins the fight, bonds his Ikrans and has his first flight.	Main part of this cue is underlines the action. In order to underline the intensive fighting. The composer used fast tempo percussions and electronic elements to establish the main framework. And add some strings and woodwinds as effects. In the quiet part, when Jake wins the fight, the composer used strings pad to fit the relax scene. Then fast percussion comes in again when he first flight.	I separate the music into two part because the different functions. The first part, from the beginning of the music to Jake start to fight. This part of the music mainly function as creates an nervous mood for this scene. When Jake starts to fight, music becomes a underlining-action-score.
01:12:03 - 01:16:09	1: Jake's first flight  2: Great Leonopteryx	Music comes in right after Jake's Ikrans flying straight. He is very happy and exciting about the first flight. Neytiri feeling really happy when she saw he has done it. They start to fly together and then Neytiri shows Jake the soul tree. Scene cuts to Jake's group talking about soul tree. Grace is explaining how the soul tree is amazing and secret. Finally, it cuts to a chasing scene that Jake and Neytiri escaping from a Toruk.	Musically, I separate this cue in 3 parts. The first part is steadily tempo and very musical. Choir performs the fly theme melody. Strings and harp play harmony. Sometimes flute solo also affords the melody. This part uses a Lydian mode in E. The second part is from when Neytiri shows Jake the tree of soul to when they start to escape from the Toruk. This part is a soft piece and play mainly by string in low dynamic. Brass comes in only before the transpose to next part. Then the third part is a chasing scene. The music is a typical action score, fast tempo percussion with some strings trills.	The first part of the music is function as create a mood that indicate this scene is very positive. Add a joyful and magnificent feeling to this scene. The second part of the music is to revealing the mystery characteristic of the soul tree. Then the third part is obvious a underline action score, to underline the chasing scene, and create a intensive feeling.

01:16:40 - 01:17:44	Story of Toruk Macto	Music comes in when the Toruk flies away. Neytiri is talking about Toruk and Toruk Macto in the camp.	The music is mainly the same melody repeat again and again by the low strings. And flute plays as a secondary melody. Music has a powerful and deep feeling.	This cue's function is to revealing the powerful and sacred characteristic of Toruk.
01:17:52 - 01:18:44	Back to reality	Jake wakes up in the machine and feeling sad, because he thinks the life in Avatar world is the real life. And he realizes 3 month passed, the time colonel gives him is run off. Then scene cut to he talking with the colonel. Music fades out.	This cues is a sad piece. Piano and violin solo play the <b>theme melody</b> (not exactly the same) but in minor scale and very solo tempo. Then horns play the melody and fades out.	This cue is very obvious functions as creates a sad mood to the scene.
01:19:35 - 01:24:36	Become one of the people	Jake speaks with the colonel. The colonel tells him that he can go home tonight and has his new leg. He refuses and tell him he has to finish the ceremony. Music comes in when Jake says, "I have to finish this." Then it cuts to the ceremony. After the ceremony. Neytiri bring him to the tree of voices and let Jake hear the trees. Finally they choose each other as lover and mated there.	The first part, strings coming first and then the brass comes in, gives a movable and sad mood. When cut to the ceremony, the flute solo lead the music changes and it gives a jungle feeling. Then the strings and brass rise and end when it cut to the moon. After the first piece music fades out, the second piece of music fades in. This is a romantic piece. (the same with the one before when they learning)Harp, mallets and pad give a subtle and beautiful atmosphere. Then harp and mallets fade out, left pad and flute solo play softly when they talking. Finally, string rise play the <b>theme melody</b> when they making love. Music fades out when Jake wake up in the machine.	This cue is separates to 5 parts. Parts 1-3 and 5 are psychological function. And part 4 is physical function. The first part, from Jake says, "I go to finish this..." to before cut to the ceremony. The music is creates a moveable and a little sad mood. It indicates that Jake is doing something moveable. Then the second part, music still function as "creates a mood". But here the mood is more moveable and also ceremonious. Then part three, from cut to the night scene to Neytiri says, "come on," creates a beautiful sense to the scene. Part four, they start talking, is functions as creates a physical atmosphere of the scene. And also when they listen the tree, inserted a piece of source music. Then the final part, from when they kiss to the music ends, is to create a romantic mood.
01:25:10 - 01:28:07	Scorched earth (In CD)	Music comes in when Neytiri wakes up and saw the big machine is destroying their voice trees. Then Jake wakes up and try to stop the machine, he breaks the camera of it and run away. Music fades out when the bad guy analysis the pictures.	Fast tempo percussions, forte brass and strings trill and tremolo. Low brass and low strings play the movements. High brass and high strings play the melodies. There are also choir and a flute-like rhythm loop in the music.	This cue is very obvious made for creates a intensive mood for the scene. To add tension to the pictures.



01:28:10 - 00:31:35	Angry of the people (not in CD)	Music comes in when the colonel find out the person who breaks the machine is Jake. Then it cuts to the people are preparing the war. Jake and Neytiri come back, and Tsutey fight with Jake because he mated with Neytiri. After the fight, Jake try to tell the people the reason they come to them, but the colonel cut the link and he fails. Music fades out when they talking in the control center.	Music comes in as an electronic pad. And then brass and percussion give the power to create a war preparing feeling. And then a underline music comes several times when they fight and when the colonel breaks in the linking room, which built by flute solo, fast percussion and brass. When Jake speaking, strings come in. The soft music makes a movable and sad mood to the scene. The last part of the music, strings and brass play legato and fades out.	This cue is mainly functions as a underline score. It's underlines several fights and troops rudely break into the connecting room. And music changes to very low or left only a pad in order to keep continuity of the music and the mood. The last part of the music which is when Jake and Grace have been taken to the control center, strings and brass play legato and fades out, indicates that that is something not going well.
01:32:20 - 01:33:36	Pure spirit (edited)	Music comes in while Grace talking about the amazing world of the trees. Fades out when Quaritch showing the video.	When Grace talking about the trees on Pandora. Strings playing very soft of the melody of pure spirit. <a href="#">The same recording of the track "pure spirit"</a> . But in this scene, the music editor only use the strings steam.	This music has been made in order to describe the subtle and beautiful world which Grace talking about. Recall the picture of amazing avatar world to audience's imagination.
01:33:36 - 01:36:05	Telling the truth(not in CD)	Then the colonel find out Jake's video log and shows it to them. Parker finally agrees with the colonel and they will hit the Hometree. Then it cuts to Jake talking with Grace in the lab. Judy comes in and told them the troops going to hit the Hometree. Grace is very shocked and run to Parker to convince him let them talk to the Navi's people to evacuate them. Finally he agrees, Jake and Grace is going to talk to them.	The music here is a soft but dark background, low strings pad sustain until the cut to Parker's office. Then a deep synthesizer replaces the previous basses, low strings play legato with horns softly. Then percussion come in, hit the point of Judy running into the lab. Music become tension. Strings running, flute play melody. When it cuts to next scene, Brass play louder, low brass moving low in background, strings float up to play the melody. Finally, when they start to launching, string play the <a href="#">Theme melody</a> .	The soft pad gives a deep and dark atmosphere to the scene. Then the music starts to function as underline the situation when Judy come in. Percussions and running string gives a alert mood. Then music rise when they going to talk to Parker. Finally the theme melody gives audience hope.

01:36:05 - 01:37:55	Telling the truth(not in CD)	Jake and Neytiri run down from the stair and talk to the Mother and Father. He tells them that human will come here soon; hit the Hometree and the truth why he come here to learn. They are very shocked and angry. Neytiri crying and despairing. Jake and Grace have been banded. The Navi's people going to fight with the human.	Flute playing some effect sounds above a soft and deep synthesizer pad, creates a jungle feeling. Then a choir sing a sustain note very far, flute fades out, music become serious. When strings start to play theme melody ( a minor variation), the music creates a sad mood.	The first part of the music is mainly function as create an jungle atmosphere. The suddenly instruments change creates a feeling of location changes from the lab to the jungle. The second part of the music is obviously to gives a sad mood to the scene.
01:37:55 - 01:42:58	Attacking the Hometree (not in CD)	After banded Jake and Grace, it cuts to the human air troops. Navi's people are preparing to fight. Then the troops arrive at the front of the Hometree, and shoot the gas into Hometree, evacuating the people inside. Navi's start shooting the aircrafts, but the arrows are so powerless that cannot event hurt one of the aircrafts. After the first round fighting, human changes to the fire missiles and firing the Hometree. Navi's people cannot defend this devastating attack and begin to escape. Moat release Jake and Grace. Finally, humans give the final attack to the Hometree and destroyed it.	Musically, I separate this big part of the cue to 6 small parts. The first part is from it cuts to the air troops scene to when they arrive and stop in front of the Hometree. It's very typical epic war scene music. This cue appear a lot in this film, I call this "war cue" Fast tempo percussion loops, strings play 16 <sup>th</sup> and 8 <sup>th</sup> notes in fortissimo, big choir and low brass play high dynamic notes follow the rhythm. At next part, brass and strings play lower and slower, in order to give next part more power. Then the third part starts when they begin fighting. This part built by the fast high string and percussion which is a little chaos and powerless. When human open fire, the music transpose to next part. Low brass comes in play whole note in big dynamic, and strings play more tidy and powerful. Music is much powerful than the last part. When it cuts to Moat (Mother), music goes down lead by a flute solo. This is the 5 <sup>th</sup> part of the music; strings and brass play tremolos and trills to following the story. Finally, the music becomes very powerful and tragedy. Strings and brass together playing the long notes in minor and diminish harmonies.	This big part of the music is mainly an underline action score. The first part of the music indicates that war is coming and the air troops are really powerful. Second part has the psychological function revealing that this scene is like a short calm before the storm. When Navi's people firing, the music is not powerful but chaos, it describes the powerless attack of the Navi's people. When human troops firing, music becomes really powerful, indicates that the missiles are devastating and the power of the human troops is too much bigger than the Navi's. Then the 5 <sup>th</sup> part of the music is trying to deceive audience that Moat is going to kill Jake. After she release Jake, music also gives a release. The last part of this cue is when human troops give the final attack to the home tree. The music becomes devastating and tragedy.

01:43:02 - 01:48:16	The destruction of Hometree (in CD)  Shutting down Grace's lab	Music comes in when Hometree begins falling. People running from the tree, and some of them die under the tree. When Hometree fully down, everyone is shocked and despair. They crying, feel extremely sad and hopeless. Then it cuts to Neytiri found his father is dying. The father give his bow to Neytiri and tells her to protect Navi's people. Jake comes, Neytiri cry and shouts at him, "get away and never come back!" Then it cuts to the control center. They pull the trigger to stop Jake and Grace's link. Finally, it's a scene that Navi's people emigrating to somewhere else in despair.	I will talk about these two cues together because there is nearly no gap between them; and also the emotion in music is continually. I divide the first cue into two parts. When Hometree start falling, synth pad comes in first, and low strings and choir follow. They rise and rise until the tree fully down on the ground. Then, second part of the music comes in. <b>Brass play the tragedy theme melody</b> , low strings play legato background and high strings moving in minor scale. After the troops left, music go down and flute lead soft strings to a transition for next part. The second cue (Shutting down Grace's lab) built mainly by soprano, strings, percussions and solo woodwind. They play freely in slow tempo and big reverb. The women voice really point out the color of the sad scene. Percussion makes the tragedy feeling stronger.	The first part of the cue, The destruction of Hometree, has both psychological and physical functions that are creating a destroying, horrible feeling to the scene and underline the action people running from the falling Hometree. The second part of this cue is pretty obvious functions as creates a disaster and tragedy mood to the scene. Finally, the next cue is sad and hopeless. It becomes part of the atmosphere; Express the despair and sadness of Navi's people properly. And this mood goes through the scenes both in human's control center and Navi's emigration.
01:48:17 - 01:50:59	Escape from Hellgate (In CD)	A shoot to Jake's team is screw in a chamber. Trudy pretends a delivery staff delivering the food. She stunned the soldier and let Max release the team from the chamber. They start running from the control center to the aircraft. While Trudy starting the engine, a officer find there is a situation and told the colonel. Right after knows this, he grab a gun, run out of the room and start shooting them. Finally, they escaping successful, music fades out.	Music start with very soft and low pad combines with soft horn solo. After Trudy takes out the gun, high strings harmonics crescendo, then rhythmic piano and percussion loop come in, lead music into the next part. The second part is mainly repeating percussion loops, and mallets built the main structure. Strings play the melody. When they get out of the gate, strings fade out. Quaritch starts fire, brass come in and rising with strings together in order to create an intensive feeling music.	Functionally, I separate this cue into three parts. At the beginning, when Trudy comes in the room, the music is function as "setting up an audience for a subsequent surprise". The quiet and low music seems like calm but feels little bit unstable; preparing the surprise for next part. Then when Trudy hit the soldier, music transpose to the second part, underline score, it underline their actions while escaping from the control center. Then when the colonel starts to fire, music goes into part three, which function as creates an intensive mood to the scene.
01:51:29 - 01:53:25	Moving to deep inside the jungle (not in CD)	Music comes in after Grace says, "it doesn't matter. I'm fine." They use the aircraft hanging the lab move into the deep forest. Jake injects a medicine for Grace and talking with her. Then, they reach the soul tree	Musically, I separate this cue into two parts. The first part is a rhythmic music combines with percussion loops, brass and flute effect sounds. When they reach the soul tree area, the music turns into the second part. Big reverb women voice and strings creates a mystery and sad	These two parts of the cue both function as create atmospheres. The first part of the music creates a deep jungle atmosphere. And also the percussion and rhythm loops give a speed feeling indicates that they are moving fast into the forest. The second part of the music creates

		area, and land. Music fades out.	feeling in the music.	a mystery atmosphere to the secret place.
01:54:07 - 01:55:30	Great Leonoptryx (In CD)	Jake linked his Avatar and wake up in the destroyed place. He looking and walking at this bleak world. Suddenly his Ikran comes and they begin to fly. It cuts to they flying in the sky and they preparing capture the Great Leonoptryx. Music fades out when Jake falls on its back.	I divide this cue into two parts. To describes a desolate field, and bleak atmosphere, alto flute solo and low women voice sings freely with big reverb. Then percussion comes in as a transition. Finally, when they fly, brass and strings come in and combine with fast tempo percussions.	The first part of the music is really fit the color of the scene which is bleak and desolate. And give a lonely feeling to the scene. When Jake talks, music turns into the transition and finally changes to the second part when Ikran fly. The second part of the music gives a heroic and positive feeling to the scene.
01:55:33 - 01:55:55	Praying song (not in CD)	Navi's people is praying in front of the tree of soul.	A ceremonious praying choir.	Source music.
01:56:56 - 01:58:39	Toruk Mactol coming (not in CD)	Navi's people are praying in front of the tree of soul. Suddenly, a big dragon appears in the air. They are extremely scared and shouting. Then, Jake gets off from the Toruk. People shocked by this scene. They can't believe he is Toruk Mactol. Neytiri tell him she not afraid anymore. And Tsutey will help Jake saving their people.	Musically, I would like to divide this cue into three parts. Frist part ends when Jake gets off from the big dragon. Brass play <b>Toruk Mactol theme melody</b> and big percussion create a very powerful music at first, then music go down, transposes to the next part. Strings playing sustain background, and hold it at there for a very long time, until he finishes talking with Neytiri. flute solo play the <b>praying song melody</b> , adding warmth to the scene. Finally, strings start moving softly.	The function of this cue is really subtle. I would say, when Jake comes down from the sky, the music at the very beginning is dark and scare, which is following with the director's idea want to add a scaring emotion to this scene. It suddenly changes when we see Jake. The music becomes glorious and powerful. Then the next part of the music revealing the surprise feeling of Navi's people. Finally music point the scene is touching and positive.
01:58:39 - 02:01:10	Healing ceremony (In CD)	Navi's people sitting on the ground and preparing praying. Jake carrying Grace here and lay her in front of the tree of soul. People start praying ceremony. After ceremony, Grace wakes up and tells Jake, she with Eywa, and she is real. Then she dead.	Soft pads and soprano sings in big reverb before they pray. When they start pray, music becomes ceremonious and mystery. Bass male voice chanting, big percussion, soprano, strings and choir playing rhythmically. After praying, everything stopped but just left pads and flute solo play <b>theme melody</b> . Finally, strings and a violin solo fit the scene of Grace's dying.	Source music. Indicates people are singing and chanting. And we can also see the big single percussion hit is following the light from the ground. After ceremony, The music creates a sad mood to Grace dying scene.

<p>02:01:12 - 02:05:34</p>	<p>Gathering all the Na'vi clans for battle (in CD)</p>	<p>After Grace's death. Jake stuck into sad. After a while thinking, he begins his speech to Navi's people. And Tsutey helps him with translating. These powerful words give a lot of morale to the people. It goes like, "The sky people sent us a message, that they can take whatever they want. And no one can stop them. We will send them a message: you ride out as fast as the wind can carry you... They can't take whatever they want, This is our land!" People strongly agree and support him. They shout with full of confidence. Then Jake goes his Toruk with Neytiri. People following him. Then, it follows a lot of scene of gathering other clans. Music ends when it cuts to the colonel's speech.</p>	<p>Strings, pads and violin solo continue playing like the end of last cue. When Jake thinking. Music goes dark, low brass and horn solo replaced strings and harp. When he starts speaking, strings come in playing softly and slowly. They rise and rise. Cymbal and timpani's rolling crescendo and lead to another part. Music becomes rhythmic. Rhythmic percussions, brass, choir come in and play faster and faster. Everything is raising follow the speech and people's emotion. When it rise to the peak when Jake running with Neytiri to his Toruk, music goes down a little bit. And start rise again, reach another peak when his Toruk gives the powerful pose. Percussion and choir still going faster until people ride on there Ikran and flying. Music turns not rhythmic. Brass and strings legato come in replaced percussions and choir. It gives a little ending before the cut to riders scene. When it cuts, another part of music goes. It's a rhythmic epic music mainly built by full orchestra, choir and repeating percussions loops. It's sounds very powerful, positive and epic.</p>	<p>Every time I watch this part of the movie, I was really moved and touched by it! And then I think carefully what makes me moved is the music. So, this part of the music is really important to the scene and works very well. Functionally, I separate this cue into four parts. The first part, from Grace's dead to Jake close his eyes, creates a continuity with the last cue; drag scene back to the reality. When Jake closes his eyes, second part start. It reveals the unspoken thought of Jake; Describe what Jake is thinking. Then Jake begins his speech; Music goes to next part. The third part of the music is really important, it holding audience emotion tightly with the words he gives. Emotion rises and rises, pushed and enhanced by the music. After his speech, music still keeps curving the emotion's wave until the cut of riders' scene. Finally it goes to part four, which has several functions: the two main functions of this part of the music are connecting several scenes, create continuity between them; and add momentum and speed to the pictures.</p>
<p>02:05:54 - 02:06:54</p>	<p>Colonel's attacking plan (not in CD)</p>	<p>The colonel is giving a speech to people in human base, which is about to attack the tree of soul by bomber. People strongly agree and they start preparing the weapons.</p>	<p>Music sneaks in when the colonel speaking. A synth pad banding and changing, and also some electronic effect sounds. With the people's emotions rising, strings rising slowly and percussions play louder and louder. It ends when it cuts to Jake's team.</p>	<p>This cue function as create a dark emotion to the scene. It tells audience that what happened now is sinister.</p>
<p>02:06:57 - 02:08:41</p>	<p>Jake's defending plan</p>	<p>Jake's team getting information from Max about colonel's plan. They shocked and then start to talking and making plans.</p>	<p>The music is very soft and unnoticeable. Or technically. Electronic pads and effect sounds makes the music feels like it just part of the environment. This part of the music sounds like edited by drag several steams from other parts of the music.</p>	<p><b>(Not sure)</b> This cue is mainly function as a physical environment inside the lab deep in forest.</p>

02:08:13 - 02:09:59	Ask help from Eywa	Jake talking in front of the tree of soul. He is praying for help from Eywa. Neytiri comes and tells Jake that Eywa probably will not help him.	In this cue, the music is soft and almost unnoticeable. An electronic pad sustain in the low section. Soft strings and low brass come in later. Playing legato softly, give a feeling of warmth.	This cue mainly function as creates the physical environment for the scene. And add warmth to the atmosphere. And also give some emotional support to what Jake saying.
02:10:01 - 02:12:53	War [part 1] (in CD)	Music comes in when it cuts to the helicopter. Human team is departing the base. Hundred of aircrafts is heading to the war. They cross the forest to reach the tree of soul. Then it cuts to Navi's team. They are flying in the mountains, heading to the place where they going to assault human team. It cuts to human team again. Ground team is landing. Hundreds of soldier get off the airplane. Then they sneaking into the forest. The colonel speaking in radio and tells the soldier preparing to drop the bomber. Music ends when it cuts to the scene Navi's team saw human team.	Musically, I separate this cue into four parts. In first part, marching snare, brass and powerful choir play in fast tempo (about 127). Brass and choir play alternatively and rhythmically. Strings always following the choir or the snare. When it goes to part two, music turns less rhythmically and softer. Choir sings legatos in low dynamic smoothly. Strings and brass play legato together. And more major chord gives a brighter color to the music. Then it changes back to the human marching theme, which is part three. This part is similar to the first part since they both presenting the same thing, human marching army. Choir, snare and staccato brass create a marching sense. But what's different in this part is that the chord and color of this part are darker. Finally it goes to the fourth part, which music goes down and becomes quieter and lower. Percussion and electronic loops, strings and brass' soft legato create a sneaking feeling.	James Horner creates different themes for human team and Navi's team. The music is more function physically in this cue. The composer captures all the action of every scene carefully and uses music to enhance them. At the beginning, music is sounds like a March, which is exactly what human team's marching action. They it cuts to Navi's team, the composer use legato strings and brass instead of staccato choir make it sound more bright and fit the action of their flying. Using string and trumpet play the "become one of them" theme melody. Then it cut back to human. Besides army marching feeling, music adds more dark emotion to commentary that those are the bad guys, indicates they are going to destroy. Then music turns low and quiet to fit the sneak movement of the ground team.

02:12:55	War [part 2] (in CD)	<p>Human air team fly in Navi's sight. Human ground team found movement get closer and holding position. Suddenly, it cuts to Navi's riders running towards Human. Jake's team calling another waiting team. After all teams follows, they begin to fight. At first, Navi's team is very brave and kills many. After few round, human starts fight back. Navi's ground team can't fight air raid, start to escape. And Navi's air force also suffering heavy hurt. Unexpectedly, Dragon found Jake and begins to attack him. At this critical moment, Trudy appears and comes to save Jack. After several rounds fights between Trudy and the colonel, she hit and finally killed by the missile. Then it cuts to Neytiri. She is escaping from a helicopter's attacking. While she looking back, a robot shoot her from the ground. She falls down and Seze dead. Music fades out.</p>	<p>This cue begins with bowing mallets, which give quiet but unstable sounds. Then when it cuts to riders, full orchestra and choir suddenly start playing rhythmically. Then music changes every key hit point. [Please reference the number in next column]. 1, music becomes tighter; All instruments go together. Low strings play the same rhythm with Percussion. Brass playing counter melody with choir. 2, More rhythmic percussions come in and sounds more speed. Strings tremolo follows and adds more intensive feeling. 3, Brass jump out and play powerful. 4, Brass play Navi's team's theme melody. 5, high brass jump out and play fast notes, give tension to music. Using "victor theme" melody. 7, Single powerful 4<sup>th</sup> notes hit the points that Tsutey and Neytiri shooting. Then strings play legato fit the overview of the sky area. 10, choir comes in with big power, play alternatively with brass. And percussion hit 8<sup>th</sup> notes very hard. 11, music transposes one step higher to give more strength. 13, Go back to tonal, stable and full orchestra play unison. 14, strings leading the music, playing "become one of them" theme melody very slow. 15, brass jump out and play strong staccatos, raising the tension. 16, brass and strings play victor theme together. Music turns bright. 17, music goes back last part. 18, choir double with strings. 19, several same notes play by strings and choir together to emphasize the hit. 20, Strings and brass play "become one of them" theme melody very slow and hit the point when she get shot, music change. 21&amp;22, brass play unchanged notes emphasize Neytiri's movement.</p>	<p>The first part of this cue is functions as "setting up audience for a subsequent surprise. It's like a clam before the storm, makes the first attacking feels more powerful. When it cuts to riders, music suddenly changes big and fast. From here, it becomes function as underlining action. There are several very important hit point that lead music to change. 1, [02:13:38] when it cuts to Jake. 2, [02:13:48] when the east coast team following. 3, [02:14:05] When it cuts to riders again. 4, [02:41:42] When Jake diving. 5, When Jake grab one helicopter. 6, When the aircraft crashing. 7, then it hit the point when it cuts to Tsutey and the point he shoot a soldier in the aircraft. 9, when Neytiri shoot a soldier. 10, [02:1501] when Dragon starts firing. "War cue" starts 11, [02:15:18] when Jake thronging a aircraft and when it crashing. 13, [02:15:30] when it cuts to the scene that several Ikran hunter flying toward the big plane. 14, [02:15:40] When Jake's friend fall from the horse. 15, [02:16:07] when Jake saw Dragon. 16, [02:16:32] When Trudy appearing. And this part of the music also function as 'revealing audience reaction.' Audience feel encouraged when they see Trudy coming and saving Jake. 17, [02:16:41] when Dragon start firing. 18, when Trudy starts firing. 18, When Dragon shooting missiles 19, Trudy's plane hit. 20, [02:17:14] when it cuts to Neytiri escaping from a attacking. 21, when Neytiri hit. 22, [02:17:32] When she stop rolling. The music stop. All these hit point are keys to lead music going.</p>
----------	----------------------	---	---	---

02:17:35 - 02:19:13	War [part 3] (in CD) Edited from “The destruction of the Hometree”	Many scenes of Navi’s team member dying or hurting. Seze is dead. A firing horse running. Tsutey hit and falling down from the air. Trudy hit and dead... Music ends when it cuts to Jake.	Brasses play tragedy melody, high strings moving in minor, raising and elevating. Women vocal singing freely in minor. Bass drum do single hit. And cymbal crescendo.	This cue creates a sad and tragedy mood, and tells audience that these scenes are negative. Navi’s team is losing the war now. The same music with the scene of destruction of Hometree. So, it transfers the same emotion to the scene.
02:19:14 - 02:20:35	Losing the war (Not in CD)	Jake calls team members but no one responds. Human team is heading to the tree of soul and ready to drop the bomber. Neytiri is about to sacrifices herself because there are too many enemies very close to her. Music stop when a human soldier find a movement on radar.	First part: strings doubling on brass. Second part: Low strings and brasses. Third part: Strings, brass and percussion. When Neytiri is about to shoot, strings rise and rise. Finally stop at the peak when the soldier see the movements on radar.	Functionally, I divide this cue into three parts. The first part is revealing that Navi’s team is losing the war, gives a bleak feeling to the scene. When it cuts to human. The music change dark and dangerous, that indicates Navi’s situation is very dangerous. When Neytiri talk to Jake, music changes again. It functions as “underlining the expected reaction of a audience”. It underlining the emotion line of the situation.
02:20:52 - 02:22:24	Turning table (not in CD)	Music start when a lot of huge animal running from the forest. They start to kill enemies. Then Neytiri realized that Eywa has heard Jake. It cuts to the air battle scene. Thousands of Ikranas are attacking enemies. Jake encouraged by the picture and begins to fight again. Then music goes to next part.	Musically, I separate this big part into two small parts. First part: Trumpets play a marching melody first. Then horns start playing the victor theme melody combine with some marching snare. When it cuts to the scene that thousands of Ikranas coming from the mountains. Choir and strings play the melody changing the color, then brass go on. String fast not and low brasses give support. Hit the point when the big tiger appear, low brass and low strings suddenly play diminished chord just to changing the plot. Then strings play legato resolve the melody to major, slow tempo, touching moment.	Creates a positive mood. The positive theme melody coming again. Indicates now the situation is good. Good guys are turning the table! When the big tiger appear, the music dragging audience emotion, tension and questioning. Then, the resolved chord creates a touching feeling to the scene.



02:22:25 - 02:24:42	Stop them drop the boom (not in CD)	Quaritch decides to drop the boom now. Then they heading to the tree od soul. Jake jump on the boom plane and using grenades destroyed the plane's engine. Then the boom plane fall and exploded. After that, Jake heading to the leading ship and trying to do the same thing. Colonel notices his plan and wants to stop him. The music changes to next cue when the	Low brass play legato when the colonel talking. Jake fly in to view, the "war cue" starts. Brass play main melody, choir strings supporting. Then the music repeating. James Horner also adds some hit point musically.	When colonel talking, music giving the dark and scary meaning to the remark. Then Jake coming, music hit this point and give a strong characteristic to Jake. After that, music function as underline score, underlining the action and adding tension to the scene.
02:24:42 - 02:25:42	Falling from the sky (not in CD)	Jake and colonel's ship both falling from sky. The drop on big leaves and back to ground safely. The ship destroyed but Quaritch clamed into a big machine and jumped out before the ship destroyed. He survived also. Then music fades out.	Strings fast short run, low brass ensemble, snare building the main body. Some parts strings and brass crescendo effect also very effective.	This cue function as underline actions. Strings running and brass long notes emphasized the falling feeling. Snare and trumpet and tension to the picture.
02:25:51 - 02:27:05	Neytiri fighting with Quaritch	Music start with Neytiri riding fast. Quaritch is going to destroy Jake's lab. At that moment, Neytiri appears and stopped him. During the fight, her tiger killed by Quaritch. Music stopped.	Percussion come in when it cuts to Neytiri. Then brass play tritone, string playing background.	Underline action with a lot of hit points.
02:27:29 - 02:28:35	Jake fighting with Quaritch	Music start when they start fighting, ends when Quaritch through his protective shell.	The instrumentation and orchestration are almost the same with last cue. Instruments reduce and tempo slow down while the machine leaking air and stop working.	Underline action with a lot of hit points.
02:28:38 - 00:30:36	Death of Quaritch (in CD)	After Quaritch talking, he break the window of the launching room. Jake trying to stop, but caught by him. When the colonel about to kill him. Neytiri shot Quaritch by arrow. Then he is down, music out.	Music beginning with strings. Then after Quaritch said "time to wake up" music change back to fighting cue. Instrumentation is similar to last cue. Brass play in fullground, strings and percussion supporting as background. When Neytiri shooting, Instrumentation change to string and choir play legato. It change to next cue when Quaritch down.	First part music play soft and give a sad mood to what Quaritch saying. Then it starts function as underlining action again. Brass slowing down to hit the movement of Quaritch.

02:30:37 - 00:33:36	The ending (not in CD)	Neytiri can't wake up Jake's Avatar body. She knows something, then running to the launching room. At this time, Jake already stopped breathing. She jump into the room and put the oxygen mask on his face. He starts breathing and coming back to life again. It cuts to human beings leaving Pandora. Then Jake doing his last video in the lab.	Cello and bass first come in. then high strings play the melody. (he use this a lot) Then, when Jake stop breathing, music turn to a tragedy cue. Brass plays the tragedy theme melody, woman vocal singing in the fullground. Then strings and woodwinds play the theme melody (variation) very soft, give touching ground music. Then timpani and cymbal roll lead music to a familiar melody (appear before when the same picture shows, the big dragon flying towards the sun). This melody played by horn and strings. Then music color changes again when it cuts to Jake setting in the lab. Violin solo play the melody, strings play background.	Music starts sad and a little bit tension, because Jake is dying. Then music become a tragedy cue, cheating audience Jake is dead. Then it becomes a romantic cue when Jake comes back to life. When it cuts to next scene, music gives a ending feeling. Round up the film. Then it cuts to the lab, music changing color, but still gives a ending feeling.
02:33:47 - 02:35:23	Jake's ceremony (not the CD)	Jake's changing body ceremony. Navi's people are praying and singing. Suddenly they stop; Neytiri kissed Jake's human body's eyes. Then he wakes up in another body. Cuts to credits.	Rhythmic percussion and brass as background. Choirs sing the melody at fullground. Then oboe solo plays the theme melody. Strings and brass crescendo, percussion comes in again. Connecting to the theme song "I See You" (edited from Jake's first flight)	First part of the cue is source music. The praying song. Then the music underlines the audience reaction.
02:35:23 - 02:38:11	I See You (in the CD)	Credits	Soundtrack	Credits
02:38:11 - End	First Flight (in the CD)	Credits	Soundtrack	Credits