

Conveying Emotion Through Film Score; Analysing and Re-imagining Leitmotifs Taken from Hollywood's Classics

6009 MAPA: Music Technology Project

Music Technology BS.c

Alexandre de Figueiredo

Student ID: 10538050

Abstract: Throughout the history of film scoring, there have been musical examples that are associated with certain characters, ideas, or even a state of mind, this is known as a *leitmotif*. In this project, two *leitmotifs* were selected for analysis and recreation, *The Imperial March*, from Star Wars, and *The Pink Panther Theme*, from the Pink Panther franchise. Both iconic themes which part of the reason for it could be the emotional meaning behind each one of them and how well it blends with the overall story of the characters. Conveying emotions through music can be done with certain musical cues or even using the power of association. The latter example refers to how, in films and television, certain musical aspects have been used time and time again in certain genres of films/shows, and have now become associated with the emotions of that genre. With this in mind, the selected tracks were re-imagined and recreated, using Logic Pro, to convey different ideas and emotions than the original versions. The new versions were subsequently presented to two professionals of the film industry to get feedback and understand if the recreation was successful.

Keywords: *leitmotif*; musical aspects; conveying emotion.

Table of Contents

TABLE OF FIGURES	4
1.0 - INTRODUCTION	5
1.1 - Choice of Software	6
1.2 - LEITMOTIF	6
2.0 - THE IMPERIAL MARCH	7
2.1 - INTRO	7
2.2 - MAIN MELODY	8
3.0 - THE PINK PANTHER THEME	9
4.0 - EMOTIONAL COMMUNICATION THROUGH MUSICAL CUES	10
5.0 - METHODOLOGIES	11
5.1 - The Re-imagining	11
5.2 - Measuring Success – Interviews	11
6.0 - RE-IMAGINING THE IMPERIAL MARCH	12
6.1 - Initial Settings	12
6.2 - Creating, Altering, and Producing	12
7.0 - RE-IMAGINING THE PINK PANTHER THEME	13
7.1 - Initial Settings	13
7.2 - Creating, Altering, and Producing	14
8.0 - RESULTS	15
8.1 - Third-Party Feedback - Interviews	15
8.2 - The Imperial March	15
8.3 - The Pink Panther Theme	16
9.0 - FINAL DISCUSSION AND CLOSING THOUGHTS	17
REFERENCES	18
IMAGE REFERENCES	19
APPENDIX	20
FILMMAKER TRANSLATED INTERVIEW QUESTIONS	20
SCORE COMPOSER TRANSLATED INTERVIEWS QUESTIONS	21

Table of Figures

Figure 1 - Musical notation of the rhytm	7
Figure 2 - Musical notation of each idea of the main melody	8
Figure 3 - Musical notation of the Pink Panther Theme	9
Figure 4 - Hi-hats pattern	13
Figure 5 - Flanger plug-in	14

1.0 - Introduction

This project is designed to showcase the ability of film score to induce the viewer certain feelings that can be inline or in contrast with the actual visual scene. The objective is to recreate tracks that have clear emotional meaning, to convey different feelings and emotions, these could be similar to the original or completely different. To do this, two popular film themes were selected, *The Imperial March* by John Williams, and *The Pink Panther Theme* by Henry Mancini. The former was composed as a *leitmotif* for the character Darth Vader (Anakin Skywalker), the main antagonist of the original *Star Wars* trilogy. The latter was the theme of the 1963 film, *The Pink Panther*, later becoming a staple of the franchise as a whole.

The themes will be analysed to identify: the points that stand out the most, the emotions and feelings they convey to the listener, the correlation between the tracks and the characters themselves, and finally, be recreated with another array of feelings in mind, where the necessary changes shall be made to convey those feelings and emotions. To analyse the success of this recreation, two people involved in the film industry will give their feedback regarding the track. These will be a filmmaker and a sound designer who is also a score composer.

Research involving studies about musical cues and their correlation to feelings and emotions experienced by people while listening to music shall be made. This research will make use of published information in books and peer-reviewed journals. This information will be compiled, summarised, and presented in this project as a basis for the recreation of the track. Following this stage, the aforementioned musical cues should be applied, the best way possible, when producing the tracks, to not only convey different feelings than the originals but also maintain part of their identity, keeping them identifiable.

One could expect this project to focus solely on harmonies and scales, but that will not be the case. When producing the tracks, the producer will take into account the instrumentalization necessary to help convey the intended feelings and emotions.

1.1 - Choice of Software

The production of the new versions will be entirely done by MIDI (Musical Instrument Digital Interface). The software chosen for this was Logic Pro X. Logic was chosen, not only because of the easy accessibility to it by the student conducting this research but also due to it being fairly intuitive in terms of MIDI writing and editing. The default presets are also considered some of the best in the market (Wang, 2020). Additionally, popular film composers, John Powell and Henry Jackman have proven several times that Logic can be used to create great film scores. Other DAWs (Digital Audio Workstations) were considered, namely Pro Tools, Cubase, and Nuendo.

Cubase is possibly the one with the best reputation in terms of film music, in part because it is the DAW used by Hans Zimmer (Buchanan, 2020). Also, the possibility of hosting multiple movie clips and wrap the tempo around film markers, make Cubase very attractive for film scoring (Buchanan, 2020). Hans Zimmer also considers that Cubase's flexibility is a huge point in why he uses the software in the first place (Zimmer, Wallfisch, Fleming, & Mazzaro, 2019).

The audio industry-standard software, Pro Tools, while very good for recording and mixing, still lacks in comparison to other DAWs in terms of MIDI functionalities (Wang, 2020). Cubase and Nuendo, both by Steinberg, have some useful features and are widely used for film score production or just production in general. However, they are not as intuitive as Logic and due to the timeframe of the project, familiarity and intuitiveness are a must. These accompanied by the previous points mentioned, make it clear that Logic is the best option for this project.

1.2 - Leitmotif

A *leitmotif* is a theme that is repeated throughout a piece of work (for example: opera, play, film) and is used to describe a character, idea, or state of mind (Paulus, 2000). "A leitmotif is a musical idea that becomes associated with a noun: a person, a place, a thing, or an idea, an emotional state or an activity" (Rothbart, 2012). The concept itself dates to the end of the 19th century, but the idea appeared earlier in human history (Paulus, 2000).

There are times where a *leitmotif* transcends the piece or film where it was used and becomes associated with ideas that are not limited to the film. A good example of it would be, another piece by John Williams, the *Jaws* theme. The theme is, in such a way, part of the western culture (Rothbart, 2012) that people, who did not see the film, would recognize the theme associated with the great white shark. There are other examples of such things happening with other themes. Take, for example, Mark Snow's *The X-Files* theme, now a staple of mysteries and paranormal activity, partially due to a resurgence in *pop* culture such as YouTube videos. Or even Lalo Schifrin's *Mission Impossible* theme, a theme that most people would recognize and associate with espionage and covert operations.

2.0 - The Imperial March

As stated before, *The Imperial March* is a *leitmotif* written by **John Williams** to accompany the character Darth Vader (Anakin Skywalker), the perceived main antagonist of the original *Star Wars* trilogy and the father of the protagonist. The theme debuted in the second film, *Star Wars: The Empire Strikes Back*, also known as Episode V. The track itself has a militant feel to it, that "[...] suggests discipline and order" (Louderback, 2018), and can be felt in the first few seconds of the track and continues throughout. It conveys a feeling of authoritarianism, power, and aggression, but also a certain complexity, that correlates well with the character it follows. Despite Vader being an antagonist, the character is not truly evil and the theme conveys exactly that (Paulus, 2000).

2.1 - Intro

The rhythm is one of, if not the main component responsible for the militant feel the track has. A simple 4/4 signature that feels like it gets progressively faster throughout the measure because it starts with a single note on the first beat and then adds triplet patterns on the other three (Burns, 2016).



Figure 1 - Musical notation of the rhytm

The second and third beats start with a single note but are then followed by this fast triplet pattern, which does not stop when moving from the third to the fourth, where the pattern is then reversed, starting with the triplet and then stopping with the single note. This creates a motion that gives it its militaristic sound and sense of constant movement (Richards, 2013).

The instruments playing the part are near the bottom of their range, giving the sound a dark colour (Richards, 2013). The first chord heard in the track is a minor, which sets up the dark tone of the *motif* and the character it accompanies (Burns, 2016). After the first two measures, a note is added to the chord creating a dissonance that "evokes the harshness and terror of Vader's and the Empire's ways" (Richards, 2013).

2.2 - Main Melody

The rhythm of the main melody emphasizes the strong beats of the metronome giving the march a sense of confidence (Richards, 2013) and unwavering power, like nothing would be able to stand in its path of destruction and conquest. It is a dotted eight-note rhythm, somewhat similar to a funeral march (Louderback, 2018). Similar to the intro, the instruments here are playing in a mid to low register keeping the menacing feel of the intro (Richards, 2013; Burns, 2016). Additionally, the brass instruments give it a sense of military might (Richards, 2013; Burns, 2016). The harmony is almost completely composed of minor chords, further expressing the dark tonality of the march (Richards, 2013; Burns, 2016). It also uses a distorted version of the I-IV-V-I chord progression where the IV and the V are a semitone up (Richards, 2013; Burns, 2016), this, somewhat, subtle alteration along with the minor chords give the impression of an abnormal evil (Richards, 2013).

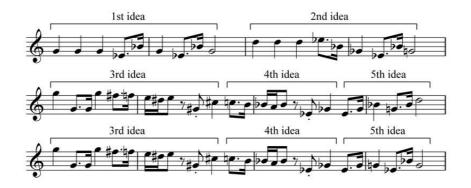


Figure 4 - Musical notation of each idea of the main melody

Both Richards (2013) and Burns (2016) state that, the melody can be broken down into five ideas. In the first idea, the melody leaps downwards after the first three beats, suggesting a negative influence (Richards, 2013). Even though it then rises, it immediately goes down again. The second is rhythmically similar to the first, but it starts at a higher point and then falls again, giving it more impact (Richards, 2013). The third idea starts from an even higher point and goes down gradually, continuing through the fourth idea (Richards, 2013). However, it does not completely fall, as it is picked up in the fifth idea (Richards, 2013). The second time it reaches the fifth idea, the melody ends in the same note as it started, giving it a feeling of finality (Richards, 2013).

3.0 - The Pink Panther Theme

The theme was written by **Henry Mancini** for the 1963 film, *The Pink Panther*. It was written to accompany the cartoon character, that was a pink panther, during the opening credits of the film. The theme later became a staple of the whole franchise, even becoming the opening for *The Pink Panther Show*, a series of animated shorts, produced between 1969 and 1978. The track itself has a certain mysterious almost 'sneaky' feel to it, also conveying a certain degree of mischief, like a child playing tricks. When hearing the theme, one can be sure someone is up to no good, but cannot take it fully serious because it seems so playful. One of the great aspects of this track is the fact it was not written to be intentionally comedic "[t]he '*Pink Panther* Theme,' though witty in itself, is not a joke, not a novelty number" (Caps, 2012), this way avoiding redundancy.



Figure 7 - Musical notation of the Pink Panther Theme

The theme has suffered alterations throughout the years. The original starts with a suspended chord by the piano, accompanied by a tapping triangle dictating the tempo (Caps, 2012) (and, in some versions, the rhythm of the theme, this being the traditional swing driving beat). In the fourth bar of the piece, appears a combination of instruments (a low piano, a vibraphone, two basses, and a guitar) playing the main *motif*. Ascending and then descending unresolved "[t]his creates, most efficiently, the suspense of a detective story while also making fun of it" (Caps, 2012), which represents the movie perfectly. When transitioning from the 12th to the 13th bar we hear the tenor saxophone, played by Plas Johnson, moving up in parallel fifths (Caps, 2012). The melody played by

the saxophone is what gives it the somewhat 'sneaky' feel. It feels like a playful burglar walking and being mindful of his steps, as to not alert anyone. This feel blends perfectly with the comedic aspect of the detective story that is the film.

4.0 - Emotional Communication Through Musical Cues

A plethora of studies has been conducted to analyse and understand how people perceive music and certain musical cues, and how it correlates to the emotions they feel while listening to a musical piece. Many studies have concluded that similarly to speech, acoustic features such as pitch height, tempo, and intensity convey emotional information to the listener (Quinto, Thompson, & Keating, 2013).

Tuomas Eerola, Anders Friberg, and Roberto Bresin (2013) conducted a study to determine which aspects of music contribute to the expression of emotion, by manipulating six primary musical cues: mode, tempo, dynamics, articulation, timbre, and register. Simply put, the research was carried through by manipulating these cues and then making the listeners rate each musical example according to four perceived emotional characters: happy, sad, peaceful, and scary.

Eerola, Friberg, and Bresnin (2013) found that in most cases:

- Music examples considered scary, by the listeners, presented: slower tempo, a high dynamic range, minor mode, and a lower register;
- Music examples considered happy, by the listeners, presented: fast tempo, lower dynamic range, bright sounds, major mode, and mid-range register;
- Music examples considered sad, by the listeners, presented: slow tempo, medium dynamic range, minor mode, medium (not bright nor dark) sounds, and mid-range register;
- Music examples considered peaceful, by the listeners, presented: slow tempo, lower dynamic range, major mode, dark sounds, and high register.

Moreover, they were able to conclude that dynamics heavily impact scary and peaceful emotions, but have a weak role in happy and sad emotions. "For instance, dynamics significantly contributes to scary emotions [...] but has little impact on happy and sad [...]" (Eerola, Friberg, & Bresnin, 2013). Additionally, mode has a strong influence over perceived happiness and sadness, and mode and

tempo are particularly influential in perceived sadness. Other studies have found similar results in some regards, and, in others, provide additional information. Quinto, Thompson, and Keating (2013), for example, found that similarly to Eerola, Friberg, and Bresnin (2013), negative emotions (anger, sadness, fear) are correlated with a minor mode, and that anger is associated with a lower pitch.

There are also some aspects that one can ascertain through film scores, particularly scary/horror films or even thrillers. In those cases, is notorious that the melodies tend to be in a higher pitch and often played by string instruments (Science Buddies, 2014). There are cases where people consider certain musical aspects scary and/or creepy because those aspects have been used plenty of times in horror films (Amsen, 2017). Plenty of those, however, are used often in films because the human brain perceives them as unpleasant. People have also found that distortion tends to be associated with negative emotions (Blumstein, 2012). Furthermore, dissonance also evokes certain negative emotions. The 'Devil's Interval' (augmented 4th), especially, is worth noting (Amsen, 2017).

5.0 - Methodologies

5.1 - The Re-imagining

The re-imagining is to be done following the information from the above-mentioned studies, as well as trends or usual practices of the film industry when it comes to scoring. As previously mentioned, the production will be entirely done using synthesised/virtual instruments in Logic Pro. The reason for using only virtual instruments is mostly due to the timeframe of the project. The use of these instruments allows for a quicker workflow by the student/researcher.

5.2 - Measuring Success – Interviews

Two interviews are to be done to evaluate whether or not the project was successful. The people interviewed are going to be a filmmaker, who not only works as a film director, but also film producer and scriptwriter, and a score composer, who also works as a sound designer and producer. The themes will be presented to them without revealing their respective titles.

The questions are divided into three different groups: general questions, questions regarding the *Imperial March*, and questions regarding the *Pink Panther Theme*.

- General Questions where the aim is to find if both themes were successfully
 identified; if they kept their essence and they are still recognisable.
- Imperial March where the aim is to find how they perceived the new version compared to the original; how familiar they are with the franchise to better understand their perspective; if they perceived the intended ideas that the theme is supposed to convey.
- Pink Panther Theme where the aim is to find how they perceived the new version compared to the original; how familiar they are with the franchise to better understand their perspective; if they perceived the intended ideas that the theme is supposed to convey.

6.0 - Re-Imagining The Imperial March

6.1 - Initial Settings

The original track marches to a tempo of around 104 bpm (beats per minute) in a 4/4 time signature. In this track, it was decided to aim for the opposite side of the spectrum, in terms of core feelings and emotions. With the original being mostly dark and almost evil sounding, the re-imagining was set to be happy and somewhat childish sounding.

6.2 - Creating, Altering, and Producing

According to the previously mentioned studies, happy-sounding music tends to have a fast tempo. The tempo of the new version was accordingly set to 120 bpm. The rhythm of the melody was altered to make it 'bouncy' and happier sounding while maintaining some of the original feels to it, the same can be said about the harmony. The rhythmic pattern of the intro was altered in a way that incorporates snare rolls. This was done for the track to start with more energy than the original. The whole rhythmic section performed by the drums is fairly simple, the so-called four on the floor kick, leading the way and driving the theme forward. The snare on the twos and fours (backbeat) and a hi-hats pattern that, likewise the melodic rhythm, was meant to make the whole thing bounce. The pattern is composed of two 16th notes followed by an 8th with the open hi-hat, this pattern is repeated with each beat of the measure. The intro is played three times throughout the piece, the part acts as the intro, the middle section break, and the ending of the piece. In the latter two, the snare shares the same rhythmic pattern as the original theme. The main melody is played by a

marimba and a high pitch plucking synthesizer. These were selected not only due to their high pitch nature but also because of the toy-like sound they produce together, to be reminiscent of a childish toy.

The whole piece makes use of different horns and, at times, whole brass sections. The intro and its subsequent repetitions, particularly, are where more things are happening. Tenor saxophone, trombone, trumpet, tuba, and Logic's Studio Horns all play in the intro. All of them contributing to a parade marching band feel. The trumpet is playing a major third, changing the minor mode of the original to a happier major mode, compared to the rest who are all playing the root of the chord. In the remainder of the piece, fewer horns are playing, giving some space for to melody to shine. In terms of harmony, the piece stays fairly neutral, the chords tend to be power chords, with some exceptions where a major third is played. This was done to maintain the original melody, which is played to G minor.



Figure 10 - Hi-hats pattern

There are also small details in the intro played by whistles, more specifically, a whistler instrument, a Celtic tin whistle, and a toy train whistle sample. This was inspired by $tabanka^1$ parties where whistles and conchs are used similarly. In terms of mixing, there is not much worth noting. The reverbs are relatively small and short, except for the reverb that includes every other track, to keep the instruments from feeling disjointed.

7.0 - Re-Imagining The Pink Panther Theme

7.1 - Initial Settings

The original theme's tempo is set at around 116 bpm and it is a 4/4 time signature. Contrary to how the previous *leitmotif* was approached, it was decided that this one would be steered deeper to the same side of the spectrum it is already on, instead of the opposite side, as was the case for *The*

¹ A traditional music genre and cultural manifestation from Cape Verde

Imperial March. The new version of the theme was to be somewhat scary and disturbing, giving the feeling of a haunted environment and a sense of building tension.

7.2 - Creating, Altering, and Producing

With the intended feelings in mind, the tempo was slowed down to 64 BPM, as per the indication of the previously mentioned studies. The main melody was, this time, played by the piano, and rhythmic alterations were made as seen fit for the tempo and intended emotions that were to be conveyed by the piece. There is a double bass playing the root of the harmony throughout the theme, to reach the lower register found to be one of the characteristics of scary musical examples. A rhythmic synth was included as well, for the same purpose, and the *Phat FX* plug-in was added to further reach into that lower register as well as to have some LFO (Low-Frequency Oscillator) rumbling. A cello tremolo was added to the last cycle of the first part to build tension and give the part a certain shakiness, akin to a character shanking with fear, this cello also appears in the second part and at the end of the theme, all with the same intentions. Also, in the middle section of the first part, there is a subtle violin accompanying two prolonged notes of the piano melody. This was done following the 'tradition' of scary/creepy soundtracks, as a way to build tension.

When the theme repeats the first part, the piano melody is now accompanied by a pair of cellos and a pair of violins, with one of each entering together and the other two following soon after. Similar to the previously mentioned violin, this was a way to build tension and tap into people's association of strings with horror movies.



Figure 13 - Flanger plug-in

The rhythmic section is composed of taiko drums, a bass drum, timpani, a tam-tam², and drum cymbals. The taiko drums, the bass drum, and the timpani are executing a rhythmic pattern that accentuates the first and third beats of each measure. The drum cymbals are only doing the crescendo at the start of the theme, and, as for the tam-tam, it is accentuating some of the beginnings and endings of the melodic cycles. Not much was done in terms of mixing, at least not creatively-wise. One of the things worth noting would be the use of an ensemble plug-in and a flanger plug-in, on an auxiliary track receiving the piano melody and the strings melody. This was done to create a certain disturbing feeling by modulating the sound of the melody and playing both the modulated and non-modulated melodies together. The piano melody is going through an echo plug-in followed by a reverb, this to drive in the 'creepiness' of the theme, again a technique common in horror films. For similar reasons, you can only hear the reverb of the cymbals in the crescendo at the start of the piece.

8.0 - Results

8.1 - Third-Party Feedback - Interviews

In general, the filmmaker found both pieces easy to identify, as they kept their essence and both only showed their most recognisable parts. The score composer, on the other hand, could recognise them, but not fully identify them. This was maybe due to less familiarity with both franchises.

8.2 - The Imperial March

The filmmaker, who admitted to being fairly familiarized with the *Star Wars* universe, described this version of the *Imperial March* as video game-like and happy. The image she had on her mind while listening was that of march with plenty of people and a lot of moving around, somewhat similar to a parade and reminiscent of the 2012 Walt Disney Pictures animated film, *Wreck-It Ralph*. Similarly, the score composer also described it as reminiscent of an American parade or even a carnival parade. Highlighting the heavy contrast in his mind between the happy and upbeat nature of this version compared to the dark imminent danger feeling of the original. Furthermore, the score composer agreed that the marimba added a subtle hint of a toy-like sound.

² An instrument that is similar to the gong, but has no definite pitch

Despite maintaining the essence, what makes the theme recognisable, the filmmaker found that the new version was too different to be included in the *Star Wars* films, although could be part of the *Lego Star Wars* games. Adding to the previous point, she mentioned that if she had to design a scene to use the new version, that it would be something along the lines of having a protagonist lost in the middle of a parade or *tabanka* party.

Overall, the re-imagining of *The Imperial March* was well received. However, with a few details that could be improved. These were: the quality of the samples, namely the marimba and the brass instruments, and the spatiality, in other words, the panning and the reverb. It was mentioned that the track presented a fairly central image that could be widened with better panning and a slight increase in reverberation.

8.3 - The Pink Panther Theme

The interviewed score composer, who is somewhat familiar with the *Pink Panther* films and the animated version, described this version as mysterious, dark, and tense. The filmmaker shared the same opinion, adding that the tension it builds is reminiscent of the "bomb under the table", a technique used to build suspense, where the audience has more information about the characters on screen. The filmmaker also mentioned that this version was not so different as to be impossible to incorporate it in the original franchise, although she added that it would have to, at some point, revert to the 'sneaky playful' feel of the original. She further explained that she could imagine the theme in a *noir* film, a psychological thriller, something similar to Hitchcock's famous works. The score composer, on the other hand, saw it more of a 'haunted foggy woods' type of scene.

Overall, the re-imagining of *The Pink Panther Theme* was well received, even better than the previous theme of this project. The only things that were mentioned that could be improved were the percussion, where the suggestion of using tubular bells and/or glockenspiel appeared. Compared to the *Imperial March*, the samples were of better quality, the use of panning and reverbs was also better.

9.0 - Final Discussion and Closing Thoughts

Based on the feedback received in the interviews, the project was mostly a success. Both interviewees were able to understand and identify, to a certain degree, the ideas, feelings, and emotions that were chosen as the basis/core of the new version of each theme. Despite having some disparity between the more image-based perspective of the filmmaker and the sound-based perspective of the score composer, both shared fairly similar opinions of the new versions. All of this was accomplished while maintaining as much of the essence of the original theme as possible. Both pieces present key features for conveying the intended feelings. The new version of The Imperial March is an upbeat, happy piece that highlights higher pitches and mid-high frequencies. The new Pink Panther Theme, on the other hand, showcases the duality of the terror-inducing lowend, with the coldness of high frequencies, really driving in the dark haunted feeling that was the objective for this particular track. However, one could consider The Imperial March the weakest of the two. Technically speaking, it lacks sample quality, stereo width, and arrangement. Plenty of components of the brass section are doing either the same thing or something just slightly different when they could have more variety to it. The Pink Panther Theme, on the other hand, while still having some arrangements aspects that could be improved, is indubitably superior, and the interviewees seemed to agree. The one thing that sticks out in this piece, is the almost constant pulsing of the percussion, that pushes for a climax that never ends up happening. Perhaps, this could be addressed by making those pulses less constant.

The research stage of the project faced some challenges. Studies, regarding emotion and musical cues, with pertinent information, were laborious to find. Most studies found, dealt with more quantitative information, they were somewhat too detailed for what was needed for this project. Furthermore, because the information seemed to be lacking, it was decided that film scoring customs would also be taken into consideration, which proved to be the right call. Realistically speaking, it is something that should have been done from the very start, given the nature of the project. All things considered; the project achieved what it had set out to. The original tracks were analysed and the emotional meaning behind them was identified. The new versions successfully conveyed different feelings and emotions through those tracks, and the feelings and emotions were, for the most part, successfully recognised and identified by professionals working in the industry. All of this while still being recognisable even after all the alterations that were done.

References

- Amsen, E. (2017, October 28). What makes scary music scary? Retrieved from Easter Blot: https://easternblot.medium.com/what-makes-scary-music-scary-125751198aa7 accessed on 2021, March 25th
- Blumstein, D. (2012, December 14). *The Sound of Fear: Dan Blumstein at TEDx UCLA*. Retrieved from YouTube: https://www.youtube.com/watch?v=HQQmFocLDng accessed on 2021, April 23rd
- Buchanan, J. (2020, March 26). Sound for the screen: A practical masterclass on soundtracking for film and television. Retrieved from MusicTech:

 https://www.musictech.net/guides/essential-guide/masterclass-soundtracking-film-television/accessed on 2021, March 29th
- Burns, A. (2016, December 8). *John Williams 'The Imperial March': A Real Scene Stealer!* Retrieved from Classicalexburn: https://classicalexburns.com/2016/12/08/john-williams-the-imperial-march/ accessed on 2021, March 30th
- Caps, J. (2012). 5. Blake Edwards and the High Times. In J. Caps, *Henry Mancini: Reinventing Film Music* (pp. 62-84). University of Illinois Press.
- Eerola, T., Friberg, A., & Bresnin, R. (2013, July 30). Emotional expression in music: contribution, linearity, and additivity of primary musical cues. *Expression of emotion in music and vocal communication*, pp. 7-18.
- EQUIPBOARD. (n.d.). *John Powell*. Retrieved from EQUIPBOARD: https://equipboard.com/pros/john-powell accessed on 2021, March 29th
- Louderback, K. (2018, January 16). *BEETHOVEN AND STAR WARS PART 2: THE FUNERAL IMPERIAL MARCH*. Retrieved from A Pianist's Musings:

 https://pianistmusings.com/2018/01/16/beethoven-and-star-wars-part-2-the-funeral-imperial-march/ accessed on 2021, March 25th
- Paulus, I. (2000, December). Williams versus Wagner or an Attempt at Linking Musical Epics.

 International Review of the Aesthetics and Sociology of Music, pp. 153-184.
- Quinto, L., Thompson, W. F., & Keating, F. L. (2013, April 24). Emotional communication in speech and music: the role of melodic and rhythmic contrasts. *Expression of emotion in music and vocal communication*, pp. 220-227.

- Richards, M. (2013, March 16). *John Williams Themes, Part 3 of 6: The Imperial March (Darth Vader's Theme)*. Retrieved from Film Music Notes: https://www.filmmusicnotes.com/john-williams-themes-part-3-of-6-the-imperial-march-darth-vaders-theme/ accessed on 2021,

 March 25th
- Rothbart, P. (2012). A Word about Leitmotif. In P. Rothbart, *The Synergy of Film and Music: Sight and Sound in Five Hollywood Films* (pp. 14-15). Scarecrow Press.
- Science Buddies. (2014, October 30). *Spooky Science: The Sounds of Halloween*. Retrieved from Scientific American: https://www.scientificamerican.com/article/spooky-science-the-sounds-of-halloween/ accessed on 2021, April 23rd
- Wang, M. (2020, January 15). The Ultimate DAW Roundup: All of the Best DAWs for Music Production, Compared! Retrieved from SonicScoop: https://sonicscoop.com/2020/01/15/the-ultimate-daw-roundup-for-music-production-all-the-best-daws-compared/2/ accessed on 2021, March 29th
- Zimmer, H., Wallfisch, B., Fleming, D., & Mazzaro, S. (2019, October 30). *Round Table with Hans Zimmer, Dave Fleming, Ben Wallfisch, and Steve Mazzaro | Steinberg Spotlights.* Retrieved from YouTube: https://www.youtube.com/watch?v=junPw10YYBY accessed on 2021, March 29th

Image References

- Figure 1 Musical notation of the rhytm
- Richards, M. (2013, March 16). *John Williams Themes, Part 3 of 6: The Imperial March (Darth Vader's Theme)*. Retrieved from Film Music Notes: https://www.filmmusicnotes.com/john-williams-themes-part-3-of-6-the-imperial-march-darth-vaders-theme/ accessed on 2021, April 28th
- Figure 2 Musical notation of each idea of the main melody
- Richards, M. (2013, March 16). *John Williams Themes, Part 3 of 6: The Imperial March (Darth Vader's Theme)*. Retrieved from Film Music Notes: https://www.filmmusicnotes.com/john-williams-themes-part-3-of-6-the-imperial-march-darth-vaders-theme/ accessed on 2021, April 28th
- Figure 3 Musical notation of the Pink Panther Theme

Appendix

Filmmaker Translated Interview Questions

Both Themes

- 1. Were you able to identify both themes?
- 2. Do you think they lost their essence, that what makes them recognisable?
- 3. Were you expecting the rest of the themes?

Theme 1 - The Imperial March

- 1. How familiarized are you with the Star Wars universe?
- 2. (Show theme again) How would you describe this version of the theme?
- 3. (Explain the intended emotions) Do you think it accomplished that?
- 4. (Show original if necessary) How would you describe the original version of the theme?
- 5. Are you able imagine a scene of the franchise where this version fits?
- 6. Would you be able to incorporate this version in an existing/hypothetical film?
- 7. Do you have any comments, criticising, something you think could be improved or was not well executed?

Theme 2 - The Pink Panther Theme

- 1. How familiarized are you with the *Pink Panther* franchise?
- 2. (Show theme again) How would you describe this version of the theme?
- 3. (Explain the intended emotions) Do you think it accomplished that?
- 4. (Show original if necessary) How would you describe the original version of the theme?
- 5. Do you think this version could be utilised in the franchise?
- 6. Would you be able to incorporate this version in an existing/hypothetical film?
- 7. At last, do you have any comments, criticising, something you think could be improved or was not well executed?

Score Composer Translated Interviews Questions

Both Themes

- 1. Were you able to identify both themes?
- 2. Do think they lost their essence, that which makes them recognisable?
- 3. Were you expecting the rest of the themes?
- 4. In your opinion, how much does the mix weight, in comparison to producing, when creating a musical piece with the intention of conveying specific feelings?

Theme 1 – The Imperial March

- 1. How familiarized are you with the Star Wars universe?
- 2. (Show theme) How would you describe this version of the theme?
- 3. (Explain the intended emotions) Do you think it accomplished that?
- 4. When you think of creating "happy" musical pieces, what is it that comes to mind in terms of tempo, dynamics, and instrumentalization?
- 5. (Show original if necessary) How would you describe the original version?
- 6. Can you imagine a scene of the franchise where this version would fit?
- 7. What visuals come to your mind when you listen to this version?
- 8. Do you have any comments, criticising, something you think could be improved or was not well executed?

Theme 2 - The Pink Panther Theme

- 1. How familiarized are you with the *Pink Panther* franchise?
- 2. (Show theme) How would you describe this version of the theme?
- 3. (Explain the intended emotions) Do you think it accomplished that?
- 4. When you think of creating "scary" musical pieces, what is it that comes to mind in terms of tempo, dynamics, and instrumentalization?
- 5. (Show original if necessary) How would you describe the original version?
- 6. Can you imagine a scene of the franchise where this version would fit?
- 7. What visuals come to your mind when you listen to this version?
- 8. At last, do you have any comments, criticising, something you think could be improved or was not well executed?