DL838: Creative Music Production Professional Project Michael Brennan

Creating A Short Video to Understand the Impact of Music in a Visual Piece on the Viewer

26th April 2024

Timm Jeschawitz

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Signature of Candidate

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Abstract

This project aimed to create an audiovisual piece which would elicit an emotional impact when viewed. This impact was measured, and the data analysed. Conducting research into the field of cinematography, sound, and film was vital, establishing an understanding of them, and how they interact in the world of film. The process was carried out over the course of three main phases: pre-production, production, and post-production, each one bearing equal worth to the overall project. The project concluded that the audiovisual piece elicited an emotional response, after a viewing session was conducted among a subject group. The project shows that the potential for further study in this field is wide ranging and there are numerous angles to approach a similar study from, possibly involving neuroscience, contrasting videos, or an inclusion of experts in the study.

Introduction

The aim of the research project was to create a short visual piece to understand and measure the emotional impact of the music written and produced for the piece. An audiovisual piece was created that aimed to elicit an emotional response in a subject group, thus proving that the objective of creating an impact had been achieved. The research question this posited was, "Can music create an emotional impact on the viewer of a visual piece?". In attempting to answer this research question, key goals for undertaking the project were established, the first of which was to conduct research into the existing literature, analysing and criticising theoretical, practical, and creative work in the field of study. Research focused on themes and techniques within film sound and cinematography including The Role of Sound and Music in Visual Media, Diegesis, Leitmotif, and Emotional Response to Sound in Film. In forming an understanding of these themes, they could subsequently be used as a platform for each action taken in the creative process. Additionally visual techniques such as camera framing and visual effects were used to enhance the aesthetic of the video to make a higher quality viewing experience.

This understanding of literature in the field facilitated the creation of a methodology which reflected the needs of the project and the sequence of events that took place for a successful completion. The methodology, while chronological in order, had elements that overlapped with each other and some that remained constant throughout the process of production. This was a necessity due to the changing nature of editing and musical synchronisation. Weekly meetings were held with the project mentor to analyse progress and to keep the project on track. The methods spanned across the three main stages of production; pre-production (research, storyboarding, script writing, and musical drafts), production (shooting footage), and post-production (editing footage and finalising the video visually and with audio).

The project concluded with a viewing session among a subject group to gauge the effectiveness of the original intent to elicit an emotional response and whether an impactful message was conveyed to the viewer.

This project provided a platform for the analysis of a human response to sound and visuals which, given the significant growth of mass visual media in the modern age, is particularly relevant and worthy of study. From a business perspective, "businesses rely on visual communication to effectively connect with their customers because visuals are appealing,

clear and facilitate the transmission of messages. In our daily lives, we encounter various animations, infographics and other visual tools that stand out amidst a large amount of content." (Berlin School of Business and Innovation)

The thesis is structurally divided into the following chapters: Introduction, Literature Review, Methodology, Analysis, Discussion, Conclusion and Bibliography.

The literature review is arranged thematically. An analysis and critique of each resource in the field of study established its suitability and relevance to the project. The literature review consists of five themes that fit into the context of the project's parameters. The purpose of the literature review is to establish context, and gain a technical awareness, which in turn inspired the flow of methods for the projects undertaking.

The methodology section outlines the methods that comprised the project work. It followed on from the information ascertained in the literature review, using this knowledge to implement a semi-chronological sequence of events that allowed the project to flow. The methodology served as a blueprint and a strategy that connected the theoretical insights from the literature review with the practical application of creating a film-based project.

Analysis of the results and process took place in the Analysis chapter, gauging the effectiveness of the emotional impact which was noted as the key aim of the project at the beginning of the process. The Discussion chapter revisits the project, demonstrating learning gained from the process and focuses on skills developed because of its undertaking. Finally a conclusion chapter summarises the thesis, recapping the project outcomes, and looking to the future of research in the field of emotional impact of music in film.

The bibliography chapter lists the references used throughout the interim thesis.

Literature Review

The purpose of this literature review was to develop and enhance the requisite knowledge for the creation of a visual piece that utilised music and used its impact to elicit an emotional response in the viewer. A critical analysis of the research resources in question was significant in allowing for comprehension of their material to take place. The multi-faceted nature of the project means that the sources needed to be in various media formats, from academic journal entries to short form video essays that aided learning. To facilitate adequate investigation, the literature review has been divided thematically, with research resources falling under corresponding themes. The themes that inspired the research resources are The Role of Sound and Music in Visual Media, Diegetic and Non-Diegetic Sound, Emotional Response to Music in Film, Understanding Leitmotif, and Videography and Video-Editing.

The Role of Sound and Music in Visual Media

To conduct a project that created a short visual piece and to evaluate the impact of music and sound within, an understanding of the role these elements in visual media was necessary. A background knowledge of the historical uses and cultural context of sound and music in film was required to further understand the themes outlined after The Role of Sound and Music in Visual Media. In understanding this role played by sound and music, the knowledge ascertained provided for the effective implementation of their parameters. To define the role of music in film, Film Music: A Very Short Introduction states:

"it establishes setting; it creates atmosphere; it calls attention to elements; it reinforces or foreshadows narrative developments; it gives meaning to a character's actions or translates their thoughts; and it creates emotion" (Kalinak).

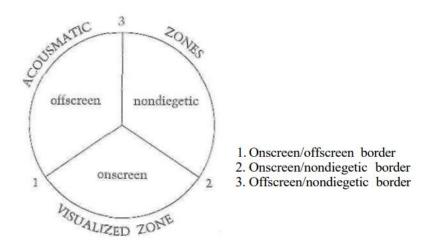
Another source which posits the question of sounds role in film and its importance is an article on IPR College of Creative Arts in Minneapolis' website. Firstly, the source explains what kind of sound is in film, dividing it into three categories: human voices, music, and sound effects. The language used is clear, concise, and effective in developing an understanding of the main factors of film sound. For example, in explaining the role of music in film, the source argues that "the music in the film helps drive the story forward, allowing the audience to anticipate what is going to happen, evoke an emotional response, or simply

help the audience transition between scenes" (Rothstein). Both sources have discussed sound's role in film, which is a necessity to aiding the progression of the project in question.

Diegetic and Non-Diegetic Sound

The words diegetic and non-diegetic emanate from the word "diegesis", which in the case of film means the world of the film and everything in it. A deeper look at the meaning of the word reveals ancient Greek origins. In ancient Greece, diegesis was the act of telling a story and how the narrator presented it (StudioBinder 00:51-02:04). In film, diegetic and non-diegetic sound are terms that explain the presentation of sound in the film world. Diegetic meaning that it is of the film world, the characters within can hear these sounds, for example music being played by characters. Non-diegetic means that the sound exists to the audience but not necessarily to the characters, the film score for example.

According to Michel Chion's book Audio-Vision: Sound on Screen, film sound exists within the boundaries set by the following diagram (Chion et al.).

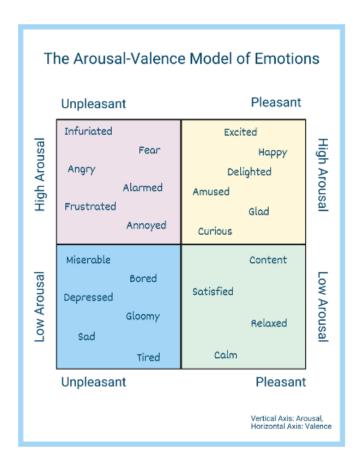


In an explanation of the diagram, which is divided into three zones, the visualized zone, and two acousmatic zones, a video essay, "Ultimate Guide to Diegetic vs. Non-Diegetic Sound – Definitions, Examples, and How to Break the Rules" by StudioBinder's YouTube channel categorises all sound and music heard in film. The acousmatic zones cover sounds which can be heard, but the source of which are not visible. They are offscreen sounds which belong to the diegesis of the film world and non-diegetic sounds, sounds which do not exist within the

characters world, for example, the film score. The third zone is the visualized zone which consists of onscreen diegetic sounds, the source of which are visible to the viewer and exist in the character's world (StudioBinder 02:04-03:05). A comprehension of the diagram's zones, and the differences between each zone, was imperative for the creation of a visual piece which aimed to manipulate the characteristics of diegetic and non-diegetic sound to bear an impact on the viewer. The sources analysed for the understanding of diegetic and non-diegetic sound were comprehensible and to-the-point. Focused sources are a requisite for the execution of a multi-faceted project as such, given the visual and audio elements to it.

Emotional Response to Music in Film

To elicit an emotional response in the viewer of the project's visual piece, there was a substantial requirement to understanding emotional response in the context of music in film. While there may be a subjective psychological bias in a viewer's emotional response, the aim of this project was to arouse a general common emotional impact, rather than focusing on individual-specific triggers. An entry in the journal of the Audio Engineering Society shows a report into a study done in which emotional response was measured in music alone, film and music combined, and film alone. This was done to gauge the emotional response in each and to compare results against one another (Wei et al.). A method used to measure emotional response is the Valence/Arousal model, an example of which seen below.



As per the Neurodivergent Insights website:

"The Arousal-Valence Matrix is a visual aid that can help with identifying emotions. This tool plots emotions on a graph with arousal and valence axes. Arousal refers to the intensity of the emotion, while valence refers to whether the emotion is positive of negative." ('How to Use Arousal-Valence Model')

The qualitative research done in the journal entry by Chaoyang Wei et al., used an online emotion annotation interface to record the emotional response of subjects. This interface consisted of an audio/video playback engine beside a two-dimensional Valence/Arousal model graph.

"The interface enables participants to rate emotions by clicking with the mouse in the VA space at a given time while watching/listening to a media clip. Illustrative mood tags are displayed under the VA space to facilitate the understanding of the VA space." (Wei et al.)

Using this method facilitated the researchers understanding of the subjects' emotions over different types of music, a variety of visual scenes, and a combination of both. Overall, this source provides a keen insight into possible methodologies and how to conduct an experiment analysing emotional response in film/music. It provides charts and graphs which illustrate key findings and results which can be compared to the results of this study. It also gives an example of how a study in a similar field can be carried out.

These sources allowed for a comprehension of the emotional connotations to film sound and music. They provided information on collecting data for emotional response and impact, while giving a context to the background of emotional arousal in film music.

Understanding Leitmotif

A video essay by StudioBinder with the title "What is a Leitmotif — 4 Ways to Tell a Story with Film Music" adequately and proficiently explains Leitmotif and how it is used in film music and sound. The source details that Leitmotif is a musical technique that has existed for centuries. A leitmotif is a short, recurring musical phrase. In film, leitmotifs can be tied to characters, settings, emotions, or ideas. The word originates from the German "Leit" meaning "leading" or "guiding" - and "motiv", or in English "motif", which is a significant part of a song or melody that ties a piece together and can build emphasis in parts of a song or melody. (StudioBinder) The term was coined by the music critic Friedrich Wilhelm Jähns. Jähns used to term to describe the musical patterns of composer Carl Maria von Weber, however, the term has become most associated with the work of Richard Wagner. The source uses Wagner's "The Ride of the Valkyries" to demonstrate his abundant use of leitmotif in what it claims is his magnum opus, "Der Ring des Nibelungen". In the opening sequences of this video essay the viewer has become aware of historic context of the leitmotif, the origins of the word, and one of its most famous uses. Further examination of the source revealed the way modern film uses leitmotif to cue or draw the audience's attention to a character, setting, emotion or idea. The video uses multiple examples from cinema to demonstrate how leitmotif can be used in the four categories. This source is a succinct account of Leitmotif, providing cultural and historical context and displaying how it has been used in film music.

Videography and Video-Editing

To develop the relevant skills required for videography and video-editing, Blackmagic Design's web lessons on using the video editing software Da Vinci Resolve were essential. This source has numerous video lessons and downloadable tutorials which aided the learning of video-editing and how to piece together music and sound over captured and edited footage (*DaVinci Resolve 18 – Training | Blackmagic Design*). In addition to the Blackmagic Design web lessons, the StudioBinder YouTube channel offers numerous video lessons that delve into various aspects of videography in a concise, easily accessible, comprehensible manner (StudioBinder).

The research resources reviewed allowed for the project to develop in the necessary direction and contained the indispensable material that bred the knowledge required for carrying out a thorough investigation into the projects background. Given there are multiple facets to consider, such as the context of film music and sound, emotional response, musical techniques in film, and the creation of a visual piece, each theme served as a key pillar for the evolution of the project. The literature review gathered the information that was pertinent to setting up a plan for the overall project, something that will be outlined in the following section of the interim thesis, the methodology.

Methodology

To conduct a project which researched similar endeavours in the field of creating a visual piece using musical impact a series of planned methods to execute chronologically was vital. The main methods took place in this order, however, given the nature of editing and constant revisiting of visual and audio drafts, some of the methods were revisited and some were constant throughout the entire production process. The research undertaken in the literature review gave insight into the stages that took place under the process of the methodology. It was essential that the projects aim was prioritised when developing the methods. The key aim of the project was to use music to garner an emotional impact, this was the deciding factor behind every step of the project's development. Below are the lists of methods, labelled "Method 1", "Method 2" etc., which formed the sequence necessary to carry out the practical element of the project.

Method 1

The establishment of a **timeline** from the beginning of the calendar year 2024 to the submission of the overall project thesis outlined a plan of action for the writing, producing, and recording of the music, pre-production, production and post-production stages of the visual piece, and the gathering and analysis of the data that measured the impact of music in video. Throughout the course of this timeline, regular mentor meetings were held to keep track of the production process, to view video drafts, to submit progress into a production log, and to generate ideas that would all benefit the final product. The production log meant that weekly progress could be reviewed for the week past and forecast for the week ahead. Timing constraints and timeliness in terms of organisation were factors whose importance could not be overstated. The timeline helped keep the project on course for a timely, focussed completion that maximised the potential for detailed analysis of results. However, given the expansive nature of the project and the multitude of steps/tasks required to complete it, a greater time margin for cleaning up loose ends and ensuring that enough time was left for analysis should have been considered.

Method 2

The music and sound for the video's score was written, recorded, and produced using the Digital Audio Workstation Ableton Live. Music and sound took inspiration from and were continually influenced by the findings and re-assessing of the literature review's research resources. Ableton Live offers numerous creative advantages that aided the workflow and allowed inspiration to take place in the creation of music and sound for the piece. It has a session view and an arrangement view which enables experimentation of different musical ideas, facilitating the ability to find the desired sound for a particular scene. Ableton Live has powerful midi capabilities, excelling in midi manipulation. It offers a wide range of tools that benefit the composer in the creation of nuanced and expressive compositions, ideal for scoring film music and sound. Its audio processing units are extensive and high quality, offering a range of effects from equalization to reverb, delay, and compression. It has tempo and time-warping capabilities which were imperative in synchronising music with visual elements. One of the most important creative benefits Ableton Live has to offer is its integration with video. It supports video playback within the software, allowing composers to synchronize directly with video and streamline the creative process by providing visual cues as a reference.

As it became apparent that constant changes would have to be made to the musical score and soundscape to fit different video edits, the above became increasingly more beneficial. The chopping and changing of visual scenes due to editing meant that numerous music file drafts had to be similarly altered to synchronise with the part of the visual story that the score intended them for. While each stage of the methodology took place chronologically, some steps were necessary to revisit to progress to the next major stage of the production.

Method 3

Familiarising with and using **film equipment** available for the project was critical in the preproduction and production stages of the filming process of the projects visual piece. Among the equipment used for filming was a Sony A6600 camera. This is a 24.2-megapixel camera which allows for 4K ultra high-definition video recording at 24/30 frames per second, resulting in high quality videos suitable for film recording. It is a robust camera with built-in stabilisation, long battery life, and a magnesium alloy body equipped with weather sealing. Along with the camera, other filming equipment included a G-Prime 18–55-millimetre lens, continuous lights with soft box, a Tripod, a Zhiyun-Tech Crane Gimbal, an Edelkrone camera slider, and a Parrot Drone. The equipment available provided for diverse and high-quality video scenes to accompany the music and sound of the score, with the aim of maximising the viewing experience for the project.

Following on from the familiarisation of the appropriate film gear, multiple shoot days were organised to match a carefully planned storyboard and script. Different camera techniques were utilised to best represent the desired mood of the visual narrative. Each day yielded more video files that were subsequently edited together in the next stage of production.

Method 4

For the purposes of post-production, **Da Vinci Resolve 18.6.4**, a video editing and processing software was utilised. Compatible with Windows 10 and MacOS, Da Vinci Resolve offers a wealth of advantageous features that helped the completion of post-production of the visual piece. These include colour-grading tools that allow users to achieve high quality colour correction, which create visually and aesthetically satisfying looks for film. Da Vinci Resolve includes a Fairlight Audio suite which allows for level-control, mixing and mastering within the one software, which will compliment the use of Ableton Live in the production of music and film. It features a full suite of professional editing tools including a cut page for quick edits, a full page for timeline edits and a Fusion page which enable the use of advanced visual effects. Some more of the extensive list of features include, but are not limited to multicamera editing, visual effects, hardware acceleration, and format compatibility. The abundance of high quality, cost-effective features and streamlined workflow of Da Vinci Resolve made it a cornerstone of the post-production process.

The editing and post-production process interacted with the music production process as multiple drafts had to be edited to suit the desired narrative and to maximise the story's potential. Initially the visuals were to be edited entirely in colour, however, to display the difference in reality the character found themselves in, a black and white colour-grade filter

was used to visually express a reality or time shift, a technique often used in film. The ability to manipulate the character's reality was possible in a visual and audio sense and contributed to a heightened emotional experience for the viewer.

Method 5

A **viewing session** among a subject group, who self-recorded their emotional responses to the video on Arousal-Valence models, was conducted. Participants took part in the subject group both online and in-person viewing. They were instructed on how to record their responses before viewing. The results were analysed to measure the general emotional responses and the impact of the response to the music, sound, and the visual piece. This enabled a result to be determined on the success of the original intent of the production and project.

The methodology section of the interim thesis followed on from the literature review with each method carefully selected to extract the maximum potential from the project. The timeline of events drew on each of the subsequent methods to create a flow that maximised creativity. The technical parameters of the methodology contain information on selected hardware and software that gave rise to the creation of a project worthy of study and execution. The methodology was set in a chronological order, to inform the flow of the timeline.

Analysis

To analyse the effectiveness of the visual piece and its desired intention to elicit an emotional response, a subject group was presented with the visual piece both online and in-person where suitable. The participants were provided with details on how to log their responses using the Arousal-Valence model. To note key points in the video, participants were provided with a timecode and instructed to make note on the Arousal-Valence model of the times at which the emotion was felt. This method of obtaining data allowed for the inference that music played a key role in arousing emotion in moments when it was dynamically busier. In contrast to this, the moments in the video when music was not the main driving force for the story, emotional arousal was less intense.

Results

Data collected from the subject group showed a variety of interesting results. It showed a contrast between two key moments in the story's narrative. In the story there are two distinct settings which the protagonist plays the centre role in.

The visual piece opens with the character in a morose setting, appearing despondent and in a black and white gloomy surrounding. The music at this instance compliments the setting and the characters apparent mood. The subject group in general sympathised with this by recording negative emotions of medium arousal. Some outliers recorded low arousal positive emotions and explained in subsequent discussion that the melodic elements, particularly the violin, lead them to feel there was a degree of hope despite the apparent negative circumstances.

The other of these settings is less serious and portrays a comedic element. During this lighter sequence of scenes, chaotic music plays that is noticeably disjunct from the norm established in the opening black and white sequence, reflecting a reality shift. Participants by and large recorded less intense negative responses at this point. While there was a sense of confusion among the participants of the subject group at this point in the story, the recorded data displayed a more positive emotional reaction to the events occurring on screen. This sequence purposefully takes the viewer from the initially established reality using both musical and visual cues. The visuals involve colour and movement as well as more vibrant lighting, the aim of the musical piece at this stage of the video was to simultaneously invoke an upturn in

positivity of emotional response, while guiding the viewer through to an alternate setting. The viewer should, at this point, be aware a change had occurred in the main characters circumstances.

Finally, the story returns to black and white as the viewer realises that the colour sequence was not part of the characters conscious reality and was rather a hallucination that had occurred because of choking. The music at this point becomes dark and reflective of the tragic nature of the onscreen events. Participants of the subject group showed their strongest empathetical reaction at this point, recording a combination of shock, fear, and sadness. Most of the participants reactions correlated with one another although some outliers found the onscreen visuals humorous.

The results of this subject group analysis show that the initial core objective was met in driving an emotional response through the means of music in a short visual piece. While this objective was met and the results of it recorded in analysis, the thoroughness of the data collected could have been stronger. The data shows a loose connection between the emotional arousal and what happens on screen, however it does not pinpoint the exact component, be it musical or visual, that causes the arousal of an emotion. More investigation into the psychology of film and music would have further supported the notion that music has a deciding influence on the type of emotion felt, regardless of visuals on screen. Using contrasting pieces of music over the same visuals may have bolstered the thesis' in its research or done more to ascertain the strength of sound, visuals, and both in conjunction. Compositionally, the music of the short visual piece would have benefitted from a more theoretical approach to harmony, melody, and film music.

Process

With regards to the process involved in pre-production (research, shot-planning, familiarisation with technology), production and post-production, the equal allocation of time to each of these stages is imperative. During the pre-production phase there was an overreliance on the preparation of the story itself rather than the particulars of the final production and how it would support research. This gave a valuable insight into the importance of time structuring when approaching a production, a skill that was developed as the project progressed. As a result of the re-organisation of time structuring associated with the production, the final piece became an adaptation of the original planned piece. The use of originally planned components such as leitmotif and the manipulation of diegesis was achieved, although their effectiveness in eliciting emotion was not particularly quantifiable. Ultimately, they proved to be of immense benefit for the creation of a film sound piece, however their prevalence in terms of having an emotional impact on a viewer was not fully comprehensible in this format. The viewers reaction to the visual piece was gauged using key moments, these key moments included visuals and therefore it cannot be fully determined if the music worked as an emotional trigger, or whether it worked in fusion with the visuals onscreen.

Analysis of the project was successful to the extent that it concluded that emotional impact had been achieved. However, more in-depth analysis would have further strengthened the initial argument that emotional impact is intrinsically linked to music and sound in film. The possible scope for more thorough analysis could have involved a project that contrasted two different types of music and sound over the same visuals, or even a complete absence of a musical score in one of the identical visuals, measuring reaction of the viewer to each of those.

Discussion

The undertaking of the project gave rise to multiple opportunities to develop skillsets involved with the creation of audio and visuals.

Research skills associated with the understanding of film sound, understanding leitmotif, diegesis, gaining insight into the important role of music in film were all explored and developed because of undertaking the project.

Following on from this bedrock of theoretical understanding, the composition of music occurred. Given this music had to synchronise with and support the story of a visual piece, multiple changes to its structure had to be made. This proved that the ability to adapt sound and visuals to work in harmony with one another, and the technical skills involved with doing so in video editing and music production software were all skills that were tested and developed due to completing an audiovisual production.

The project gave a platform to develop skills in video-editing software. Da Vinci Resolve was the chosen software, it enabled the honing of skills involved with colour-grading techniques, visual effects, and allowed the expansion of skills in video-editing and a familiarisation with the general layout of software in this industry's field.

Working with cameras like the Sony A6600, lighting equipment and other camera equipment such as stabilisers, gimbals, tripods etc. on shoot days, and exploring cinematographic techniques in the weekly scheduled mentor meetings expanded the understanding of creating a visual piece and small-scale film production. Various filming techniques were explored and utilised in the production stage of the project, many of which were established as possible techniques to use during the mentor meetings. This new material proved hugely beneficial and rewarding to both understand and use in the production of this project and going forward to potential future projects akin to this type of project.

The collaborative process and insight gained from working with different people of multidisciplined backgrounds was invaluable in terms of gathering information required and using this information to execute production techniques. Working alongside the mentor in weekly mentor meetings contributed enormously towards this. In addition to this the collaboration with lecturers, fellow students, and actors/assistant filmmakers, all contributed towards the completion of the project.

Along with technical and personal skills came an appreciation for the art of storytelling through the visual means. In the investigation of the different aspects of film sound and visual filming, and how they interact with one another on screen as a final product, a broadened awareness of the strengths of this format of storytelling was obtained.

Regarding the projects aims and objectives, the production of an emotionally engaging audiovisual piece has been achieved. A wider understanding of the processes involved with this too has been unravelled. The project included a multi-faceted approach to filmmaking with the production's main elements, both visual and audio, being executed by a much smaller number of people than would typically be expected of a production team. Despite this personnel limitation, a production which elicited an emotional response on the viewer was created, matching the initial objective of the project.

Recording data based on emotional reaction to the piece was achieved using the Arousal-Valence model. While this stopped short of determining the exact specific component of the piece that caused the emotion on the viewer, an analysis was possible of a combination of factors that contributed to an emotional arousal. The participation of the subject group allowed for an understanding of audience perception to occur in concurrence with the creation of the piece. All these aspects validated the creative decisions that took place throughout the process from start to finish.

The project gives a basis for the understanding of the dual aspects of film and sound and how they interact with each other. It sheds light on each of the thematic pillars used in its creation, such as the use of diegesis, showing how they can be combined to create a piece that reflects their inclusion in the planning process. It provides a starting point for further study in the field of music, film, and emotional impact and adds to existing knowledge in this field.

The undertaking of the project and the collecting of data after completion of production bore numerous practical, technical, and personal benefits. In the creation of an engaging visual narrative, an insight into story writing was achieved. The ability to bring this story to screen and represent it visually and with sound was one that was developed because of pursuing the objectives of the project. It provided a hands-on learning experience, with many practical elements to complete. Before the practical stage of the project could commence it was vital that research into how to execute the practical elements be conducted. Skills that coincide

with researching each on the necessary parameters involved were developed over time, contributing to an understanding of and appreciation for the process of story telling in the visual media. Along with all of this, the aim of composing music that intended to arouse an emotion in the viewer meant that music production and compositional capabilities were tested. The project met its initial objective in this regard, more stringent analysis could have added to its credibility within the scope of understanding emotional impact of music in film.

Conclusion

The project outlined in this thesis aimed to provide a foundation for understanding and learning in relation to the process of creating an audiovisual piece. It aimed to elicit an impact in the viewer in doing so and to measure the type of emotional impact the visuals and audio had. The project was successful in achieving these aims. A wealth of important background knowledge of what it means to plan, produce, and edit an audiovisual piece was gained. From the early stages of pre-production and story writing, music composition, shooting of visuals using cinematographic techniques, right through to editing and post-production analysis, the experience provided many steep learning curves, which will be unquantifiable in their importance going forward beyond the project. Initially the idea was pitched to project coordinators at the beginning of term, though it would be adapted over the course of meetings with the mentor and subsequent classes related to the project and thesis. The core desire to shoot visuals and to create an engaging audiovisual piece was there from the outset. Involving a Celtic Irish mythological story with a modern twist came as a concept as time progressed into the pre-production phase. The visual story is based loosely on the old Irish proverb of The Salmon of Knowledge. The concept of a reality shift was derived from this story, as it ultimately influenced the direction that the story would take, although the project itself has a dark ending, in contrast to the proverb. Once storyboarded and scripted, shooting of the visuals ensued. Upon completion of the production phase, post-production editing could take place with a colour grading and visual effect techniques employed. When a satisfactory final edit of the video was achieved, a subject group was assembled who participated in the Arousal-Valence model survey, in some cases online and in others, inperson. Data was collected from these viewing sessions and observed to conclude that at certain key points in the audiovisual story, emotional impact had occurred in the viewer. Following from this analysis a thesis could be completed with a view to presenting the final findings to the mentor in a presentation that completes the process of the project and thesis.

With more time, resources and a greater budget, several routes of further development could be explored. As alluded to toward the end of the analysis, two visual pieces involving contrasting musical scores and soundscapes could be created to provide comparison in reactions in a subject group. Another possibility would be to include a piece with very minimal sound features to act as a control against bias. More investigation into this would be greatly beneficial to the thoroughness of the study. Beyond this, a greater sample size

including a more diverse group could widen the scope of the study. This could provide significantly deeper insight into the different types of responses across various demographics, simultaneously noting the effect of cultural context. If carrying this project further analytically, neuroscientific methods could be employed to gauge brain response to on-screen audiovisual stimuli. Further investment into the production could heighten the value of the project, enhancing its effectiveness of eliciting emotional impact even more so. More collaboration, including potential interviews with experts in the fields of psychology, film, and music, would further inform the projects theoretical background and provide a more solid foundation to build stronger methodologies and analyses on. With additional resources and support, this project could be elevated to study the emotional resonance music has in film on a much wider scale.

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