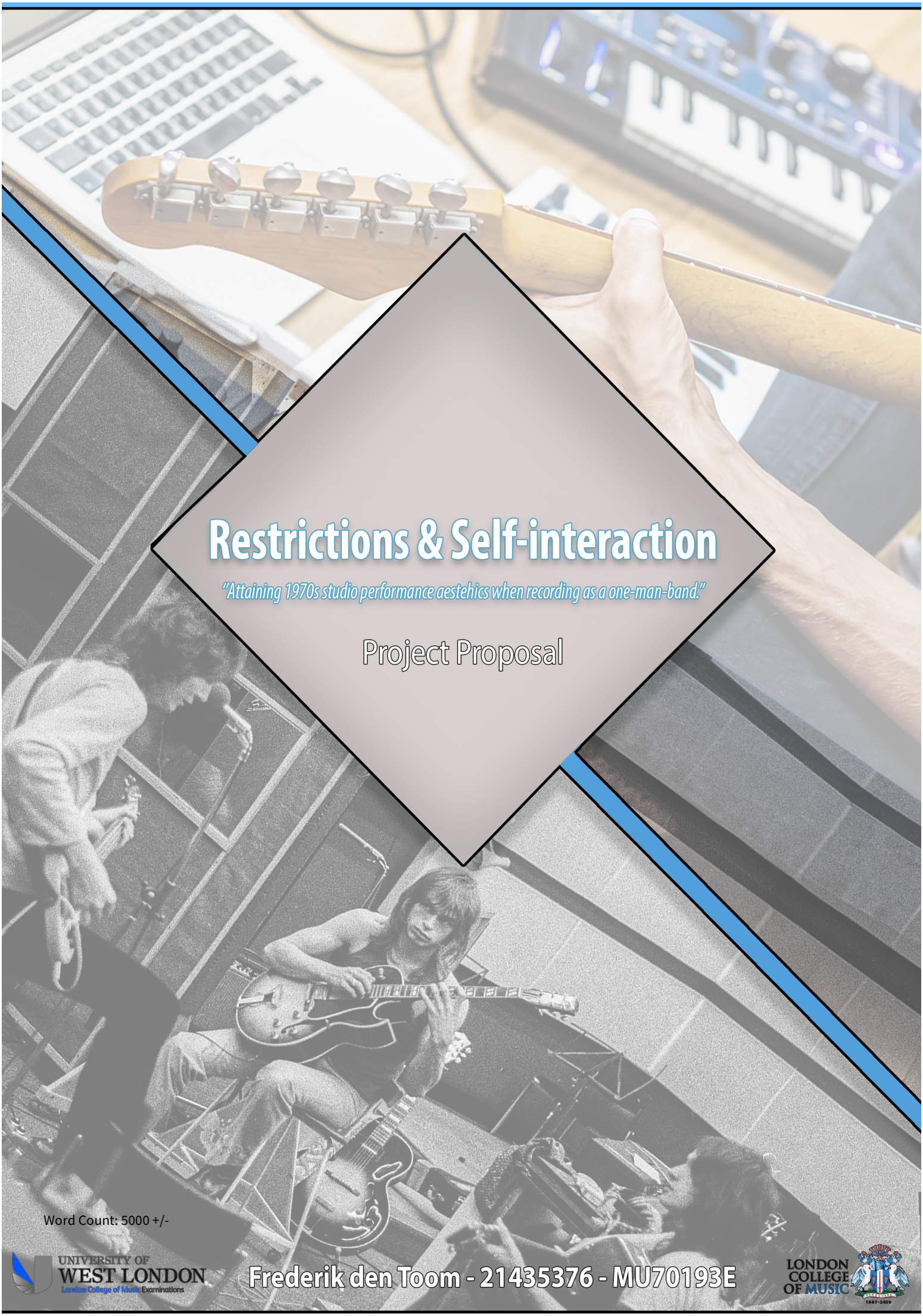

Restrictions & Self-interaction

"Attaining 1970s studio performance aestehics when recording as a one-man-band."

Project Proposal

Word Count: 5000 +/-

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Abstract

This proposal sought to provide motivations for the development of novel recording methods that challenge established contemporary overdubbing practices. (Dubbed the ‘Nedmoot’ method). It investigated techniques for influencing the sonic characteristics of one-man-band overdub-based recordings, herein aiming to make them sound like organic group performances. This was achieved through reviewing published literature, and carrying out preliminary practical research. To illustrate what characteristics and aesthetic artefacts inherent in group performances are ‘desired’ (with 1970s records as goal aesthetic), a comparative analysis of Led Zeppelin and Greta van Fleet was conducted. Additionally, the influence of analog limitations on performance was also considered. Based on this data, ‘digital restrictions’ were proposed in order to replicate these. Next to this, methods proposed in my Research Methods (A2) presentation were further developed, based on relevant feedback from tutors. This led to the creation of a more sophisticated interactivity interface that better facilitates communication through time. Finally a long term planning was created, and appropriate methods for data collection and evaluation in this autoethnographic study were proposed.

Index

Introduction

Not uncommon in the world of music production, many engineers and producers are often active on 'both sides of the glass'. Steven Wilson is an inspirational example in this regard; being a self-produced composer who often arranges and plays the majority of instruments on recordings himself (for instance *Insurgentes*, 2008). Herein he uses the studio environment as an instrument, to facilitate the layering of overdubs, creating ''*imaginary*'' performances that couldn't have existed in real space and time (Steven Wilson HQ, n.d.).
This method of working, especially given the level of creative control, is often *desired*, but in light of the on-going Covis-19 crisis can be *required*. This is because group performances are prohibited or deemed unsafe, especially in poorly ventilated studio environments (Li et al., 2020).
Fortunately, modern recording technology makes the process of creating a layered performance through overdubbing relatively simple, at least when compared to analog practices (Théberge, 1997). Notwithstanding, depending on aesthetic goals, music can be negatively affected by contemporary recording practices (Leckie in Zak, 2001; Zagorski-Thomas, 2014).

When recording Rock compositions through overdubs as a one-man-band in the past, I have continually struggled to successfully attain a 'raw' and 'organic' sound. In part this can be explained by the use of rigid timing constraints like click tracks, which don't allow for the incorporation of complex human temporal fluctuations (Hennig et al., 2014). Unfortunately, recording entire arrangements alone in free time has proven difficult in my experience, as there is a lack of inter-agent communication. This same issue also complicates deeper interaction and improvisation, both important elements in Rock (Malvinni, 2013; Brackett, 2020).

Regarding the above mentioned, Monson (1996) states: *''In an improvisational situation, it is important to remember that there are always musical personalities interacting, not merely instruments or pitches or rhythms''*.

Therefore, building on previous research and experiments I conducted for Research Methods (A2); this project seeks to develop methods that allow for improved communication through time between one person. Herein I will propose techniques that allow for free time overdubbing and the general attainment of a more 'organic' sound, using 1970s Rock as goal aesthetic. Additionally I will also evaluate the influence of analog workflows on performance aesthetics, based on which 'digital restrictions' will be proposed. The preliminary research and artefacts that are part of this proposal specifically focused on developing an 'interactivity interface', based on tempo and intensity. Important to state is that, although Rock is the main focus, ideas and data can be applied beyond the scope of this project.

Literature Review

In trying to recreate the aesthetic characteristics of a group performance as a one-man-band in the studio, it is important to define what constitutes a group performance, both from an interaction and sensory perception perspective. This helps illustrate the differences that set performance apart from 'construction' (overdubs), and how these differences might be bridged.

Agency of a Performance

Upon scratching the surface of academic creativity analysis, it becomes clear many approaches to understanding performance exist. Zagorski-Thomas (2014) highlights the following approaches specifically: ANT (Latour, 2005), Systems Approach to Creativity (Csikszentmihalyis, 1997), and SCOT (1987), all having different mechanisms, which in turn differ depending on who interprets them. For the purposes of my project, ANT seems to be appropriate, as the actions by actants; musicans, technology, and recording processes, are collectively equally responsible for the sum of a 'musical' network (performance). When playing and improvising, musicians make choices in direct relationship to what other actors (musicians) are doing (Monson, 1996). Herein they create a sense of agency. Opposite to this, when overdubbing, the first recorded layer(s) can't adjust their performance to what hasn't been recorded yet (Zagorski-Thomas, 2014), resulting in a lack of agency.

Metaphors and Pretence

Unlike a live studio recording, a group activity during which involved parties assume specific performance positions, overdubs are often recorded in separate spaces in a seated position. Not only is 'bodily language' an important communication tool (Macdonald, 2005), but studies show that posture has a significant influence on creative performance, suggesting that the adoption of performance metaphors (e.g. standing as if playing live) can have a positive effect (Nuzzo, Andolfi, Antoniettie, 2017; Hao et al., 2017). In turn, adopting metaphors in and of itself can aid 'sensemaking' and help ''conventionalize reality'', in this context pertaining to the fact that conventional group recording is not possible (Patriotta & Brown 2011).

Visual & Auditory Perception

Similar to the aforementioned metaphors, other elements of group performance can also be simulated, using technology to facilitate this. Zagorski-Thomas & Capulet (2017) inspired me to herein adopt an ecological approach to analysing studio group performance, based on Gibson's notions (1979). I already experimented with their idea of using video footage as visual guide for free time overdubbing in a preliminary study, but ascertained that a lack of convincing immersion subverted sufficient engagement. Immersive video however, could offer improved interaction and mitigate this issue (Oh et al., 2020). Herein it would preserve the observer's 'ambient' peripheral vision, although acknowledging it remains a 'pictorial perspective' due to the user's inability to move in virtual space (Gibson, 1979). Important to consider also, is the embodied perspective of the camera. For instance, a drummer sits down whilst guitarist usually stand up when performing, both having different vantage points (Geeves & Sutton, 2014). In this way a visual form of 'functional staging' (Zagorski-Thomas, 2010), could be employed to realistically inform the performance. Notwithstanding traditional headphone monitoring can be used to great effect for

influencing or informing performances, (Zagorski-Thomas, 2011; Williams, 2009); it doesn't provide a realistic representation of 'hybrid sound events' interacting with the acoustics of a space (Gaver, 1993). Moreover, any performer experiences a unique blend of encoded information regarding the environment and events, depending on their location within a space (Gaver, 1993). The invariants registered in an optical or auditory array, and the affordances associated with these, motivate specific actions. An example would be a drummer who plays more dynamically in a large space, as loud hits result in more reverberation. In turn his actions afford other actions from co-performers, and vice versa (Gibson, 1979), herein creating a feedback loop of mutual influence informed by the environment (Geeves & Sutton, 2014). Perhaps the 'special' quality that is often ascribed to 'complete takes' (Hamilton, 2003), can be attributed to this. Of course, similar to immersive video, binaural audio could facilitate more realistic staging, but it doesn't simulate the auditory 'locomotion' perspective of a performer. Therefore, staging previously recorded performances in a space through reamping is more appropriate.
Additionally, this also includes tactile information produced by loud sound sources (e.g. vibration of a bass amp) which change loudness perception, something headphones can't replicate (Merchel & Schwendicke, 2018; Larson, 2015).

Anticipation

As Juslin (1997) suggests, performers' expressive intentions have a significant impact on measured cues in performances. Often signified by dynamic change, timbre, or other factors, these intensions can be hard to decode when no real life interaction is taking place. Similarly, anticipating changes in performance is difficult when overdubbing, yet vital to 'interpersonal coordination' (Heggli et al.,2019). If aforementioned parameters were displayed over a video to aid performance, they could function as a sort of 'graphic score', or 'Large Scale development' map (Monson, 1996; Cage, 1969), aiding performer interaction. This idea brings to mind performance games such as Rocksmith and Guitar Hero, which can be effective learning tools (Miller, 2013), indicating the potential for 'gamification' of performance in this sense.

Research Question

The main research question I have set out to answer throughout my master's project is:

''How can I more closely attain aesthetic elements of 1970s studio performances when recording a full track through overdubbing as a one-man-band''.

In developing techniques that allow for the recreation of elements vital to the chosen goal aesthetic, the following sub-questions helped further define my area of research and ensure more measurable conclusive results. Some of these questions have (in part) been answered in my preliminary study for research methods, as well as the preliminary research and artefacts that accompany this proposal.

- What are the unique aesthetic elements of a (partially) live group studio performance?
- How can aspects of a group performance be replicated?
- How can better self-interaction between one agent through time be facilitated?

Methodology

(See appendix **A** for a detailed methodology deployment illustration.)

As acknowledged in the introduction, my direct motivations for investigating the chosen subject area are experiences from my personal practice as self-produced composer. Herein the justifications for pursuing specific elements within this subject area, as well as the desired outcomes, are very subjective. For this reason I chose to employ an autoethnographic approach, as this allows me to use first person qualitative 'in-process' observations for primary data capture. Notes will be used to record 'performer perspective' observations, from which data will be extracted to evaluate the impact of techniques on the creative process and flow, using the framework of Csikszentmihalyi (1996). Video and audio recordings allow for a review from the 'producer perspective' at a later stage, allowing for the separation of end product quality vs. quality of the recording processes.

An example of a similar approach can be found in *"What Happens in the Cabin . . .": An Arts-Based Autoethnography of Underground Hip Hop Song Making* (Harrison, 2014).

The actual research my methodology will be applied to is the recording of a song in four different ways:

- **Control 1 One-man-band recording**
  The track will be recorded without the help of additional techniques and tools to promote interaction through time. Meaning no click track, and only regular headphone monitoring for overdubbing.

- **Control 2 Live group recording**
  This will serve as control recording, featuring a performance including group communication and interaction in real time. Importantly it will be a one-take recording, for the purposes of comparing it to the other versions.

- **Test 1 Modern Methods**
  This version will not be recorded to a simple, dry click, but employ the best modern tools that are normally used to help 'humanize' studio recordings. Otherwise I would purposefully be favouring my own method. This includes a pre-programmed variable click with a scratch guitar track, as well as a 'rhythmic' click that is accompanied by percussive elements to make it more musical. If mistakes are present, replacing tracks partially is allowed, as well as playlist-based 'comping'.

- **Test 2 The 'Nedmoot' Method**
  This version will be recorded using my proposed methods. This includes: No usage of click tracks, reamping for monitoring, recording and playing along with 360 videos (including an interactivity interface), and 'digital restrictions'. It will be staged in one space.

As stated, one recording will involve other participants, but this recording functions mainly as baseline to compare other results with. I and the other musicians know each other personally, and have been in (video) recorded situations before. Furthermore, I will only be observing my own perspective as ensemble participant, not the others directly. For these reasons most of the issues Thompson & Lashua, B (2014) outline for studio based ethnographic research aren't applicable. Wall (2008) suggests that remaining objective when using an autoethnography as researcher can be difficult. Therefore, in order to ensure academic rigour, the 'Audio Blind Test Tool' will show what recordings I prefer, after which a quantitative analysis will help uncover what 'absolute' elements affect perceived aesthetic value most significantly. This will include consulting secondary sources including academic literature, which will help shed light on the significance and implications of findings. Additionally, I will also be conducting an interview with analog recording expert Pablo van de Poel.

Results

As part of this proposal I conducted further preliminary research, based on personal contemplation as well as feedback I received since submitting my Research Methods A2 presentation. This resulted in the creation of an 'interactivity interface' which promotes communication with past performances when overdubbing. For this I recorded drums and experimented with different 'interaction maps', which I refined based on a feedback cycle between myself as performer (observer) and interface creator. It was based on Juslin's (1997) framework on what is 'encoded' into performance, and what is 'decoded' by the observer. Overall this interface was found to help interaction, giving me as performer a better idea of dynamic content and tempo fluctuations. A full video on the development and details can be seen in appendix **B**.

Furthermore, I used literature and song analysis to more clearly define what aesthetic elements of 1970s studio recordings are desirable in my opinion, and what processes these can be attributed to. For this I used Led Zeppelin's back catalogue (I & II), comparing it to 'When the Curtain Falls' by Greta van Fleet, who are widely regarded as sounding similar to Led Zeppelin (Larson, 2018; Plant, 2018). Herein they provide a good vessel for isolating aesthetic differences based on recording practices alone.
The comparison (document) and its findings can be found in appendix **C**.

Discussion

Because my observations regarding the usage of the interactivity interface suggests it has a beneficial effect on interaction and anticipation, it will be integrated into the existing 360 video concept as an overlay. The comparative analysis of Led Zeppelin and Greta van Fleet resulted in the formation of proposed 'digital restrictions', hoping to simulate a 1970s studio setting, as said environment could positively influence performance. To see these restrictions, view appendix **C**.

Provided with the observational data I have collected so far, as well as the reviewed literature, I can hypothesize that my proposed methods will have a positive effect on the aesthetic values of overdubbed performances. It must be stated however, that the methods have an (as of yet) unidentified impact on the creative performance process. Some effects are not foreseeable, as the

experiments up until this point have been relatively small scale. However, the extensive video and sound editing process between performances is worth mentioning as a negative influence.
For this reason, I can't make inferences regarding the extent of success, as results produced by the 'Nedmoot' method might not match the real group performance in aesthetic quality.

This conclusion is also partially based on findings from Research Methods A2, as the aforementioned experiments built upon that assignment, and are part of the same larger personal research journey. (See appendix **D** for Research Methods A2)

The process of recording using my proposed methods, when examined from an outside perspective, takes on the quality of an installation. In this installation the 'enabler', technology, qualifies as a performer in the network itself, as it configures the activity of the human participant (Zagorski-Thomas, 2014; Auslander, 1999). Ironically, in trying to make a recording sound more 'live' and free of technology, a lot of technology is required. Therefore it could also be argued that the aesthetic values shared by the general Rock audience dictate they wouldn't accept these practices as a method to replace live group recording. On the other hand, Rock has always been facilitated by technology and engineering, as a recorded art form first and foremost (Horning, 2004; Gracyk, 1996; Zak, 2001).

Proposal

Finished Format

The format I will employ to present my final project and artefact(s) is an interactive online webpage, hosted by WIX. Because this method allows for the merging of different media including: my logs, videos, music, data, and results, I can structure them to clearly emphasize and explain the most important facets of my research to the examiners. Herein I hope to provide them with my perspective so they may better understand my motivations and personal reasoning, which is essential given the subjective nature of my research. Through this format I can also attach long-form content that would otherwise be too lengthy, for instance my full interview with Pablo van de Poel in addition to the relevant transcribed sections that will be in my commentary. If allowed, student-examiner communication will also be possible through a comment section. Finally, I will also be able to legally link content by third parties without having to worry about legal rights and permission, an still share the page publicly, for instance when referring to music by inspirational artists

UWL Resources Required

Currently, due to the Covid-19 Pandemic, all of the university's facilities are closed. Even if they were to re-open, I would not be able to access them, as I am in the Netherlands until late September. Fortunately, I have all the facilities I require to record and produce high quality audio and video at home. The only thing I might request is the advice of technicians, in case any problems occur throughout the project, which is possible through Skype.

Other resources required

As I mentioned, subject to Covid-19 related developments, I will employ the help of other musicians for one of my experiments (the baseline organic group performance). Of course appropriate safety preparations will be considered, including mask wearing, sufficient ventilation, disinfection, and social distancing. The only exception to these precautions is the vocalist, who will record her parts in a separate booth, as the projection of saliva and potentially infectious particles can't be avoided.

Ethics

Ahead of the submission of this proposal I have completed the mandatory ethical approval form. I did this after convening with my supervisor, who agreed that my project doesn't require further ethical evaluation from the board.

Copyright

For my final project I won't be using any protected intellectual property. If I do reference material that requires permission to use, linking to wherever it is officially hosted won't infringe on any party's rights. Any musical products that will be published shall be registered using my PRS membership; this includes any potential shared writing credits. By using Distrokid to publish music, their algorithm will automatically detect other unofficial publications of the work and monetize them, or block them entirely.

Weekly Schedule

For a detailed weekly schedule view the Gantt chart in appendix **E**.

Justification and breakdown of 398 hours individual engagement*

When examining the Gantt chart it appears relatively little time has been allocated to pre-production, post-production, and data analysis. Due to the nature of my developed methods, I can only prepare a minimal amount of work beforehand. Normally recording and engineering a session takes a significant amount of time, and in my case I have to record four versions of the same track, of which three by myself. Next to the audio, this also includes video capture for experiment purposes (the video interaction), for data purposes (analysing performance), and for documentation (A3 video). Editing drums into midi for reamping purposes, as well as syncing, editing, and rendering the videos require even more time. This also explains why less time has been planned for the three recordings that don't involve these processes.
Initially I was not involving any other performers, but in the past few weeks travel restrictions and rules were eased, so this became a possibility. This explains why these musicians are only available close to the deadline, seeing this was planned relatively recently.
I will convene with my supervisor about his advice for a possible extension. This is because the deadline for this project is the 4th of September, which doesn't leave much time for data analysis and the general research conclusion stage. I will convene with my supervisor after this hand-in to

ask for advice and guidance regarding this matter. Regardless, I shall endeavour to complete as much work before the 17th.

Escape Routes

Given the inductive nature of my research, there is only informative data, seeing 'negative' and 'positive' outcomes in relation to my 'Nedmoot' method will equally suggest relevant areas for future research and improvement. However, the involvement of performers is subject to covid-19 restrictions, which if reimposed, would not be possible. I have two contingency plans depending on what stage the project is in if was to occur.

- Replacing the group performance by an appropriate existing 1970s recording, herein recording covers of this track and comparing the other three versions with it.

- Isolate elements of the 'Nedmoot' method to further develop and test them on a smaller scale level, not recording an entire song. This would also involve experimentation with different tempos, meters, and stylistic excerpts to define what material might benefit from 'organic' overdubbing methods.

Financial Issues

I will not require any financing as I have all of the resources required in my possession already. The musicians that will be involved are part of my band 'Earthlung', and therefore don't require payment, the song being an idea I composed for this project specifically.

Video

My video will by a short reflexive documentary with an indirect participatory element, as involved musicians could make noteworthy remarks whilst cameras are recording. Because my entire project requires video documentation as part of the methodology, I can use a lot of in-process footage for the A3 video. For the versions of the track that are recorded using traditional methods I will also be documenting the process, for later observation. In addition to this I will also record from an 'outside' perspective, to film the process in its entirety. I have a range of cameras available to effectuate this, so the video can always cut to different perspectives. Because I will be preoccupied with the actual experimentation, I will use tripods and remotes for this, as well as the occasional assistance of my partner. Next to this I will film B-roll by reinacting parts of the process at a later point, as not to distract myself during the experiments. Through narration and a self-interview (filmed) I will reflect back upon the process in a linear fashion after the hand in of A2. Herein I hope to explain my motivations and share the results of the project. This will take place during the weeks between the A2 and A3 hand-in. I have experience as aspiring videographer and am confident I can film and edit everything in the space of two weeks.

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Appendices

A

B (link)

https://1drv.ms/v/s!ArNraO7sMBE3g2_PkRIsyMxz9p4G

C

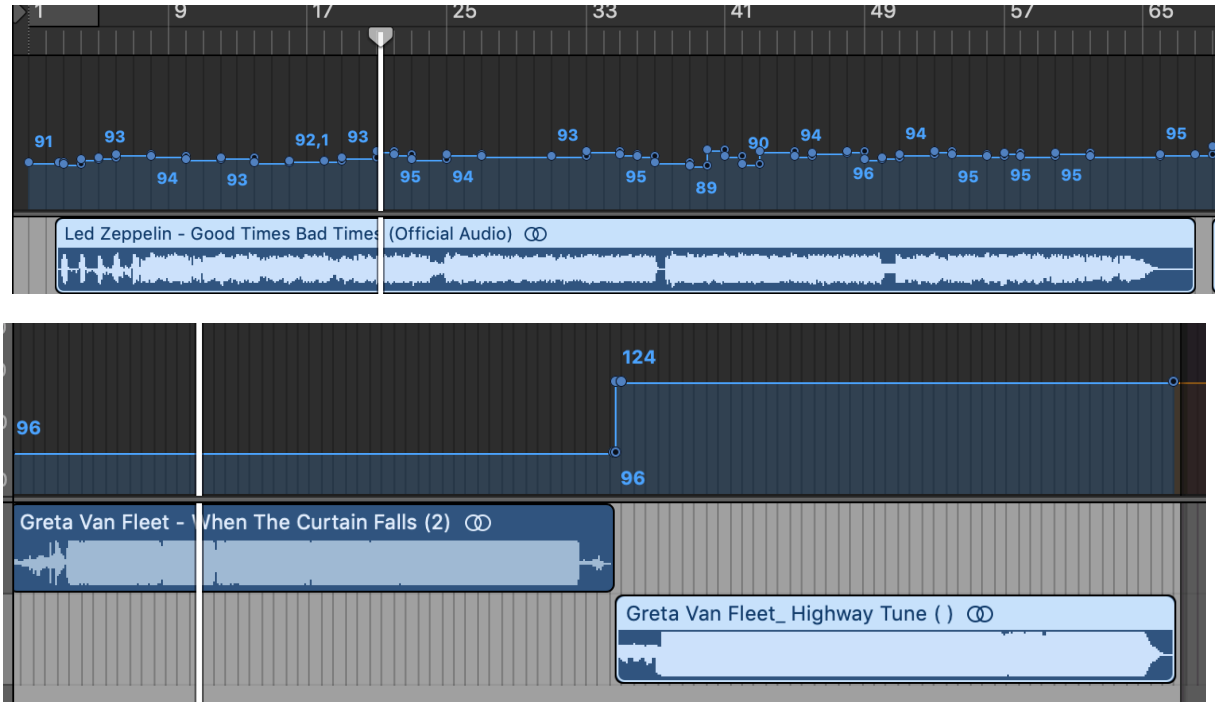
Aesthetic Comparison Led Zeppelin & Greta van Fleet

This comparison is an artefact part of my proposal for the Masters Project (A1). Using song analysis and literature, I have attempted to illustrate the aesthetic differences between Greta van Fleet and Led Zeppelin. Herein I made inferences about what recording practices might have attributed to these differences. Based on this data, the 'digital restriction' found at the end of this appendix (**C**) were developed. I used Led Zeppelin's back catalogue, comparing it to 'When the Curtain Falls' by Greta van Fleet (2018), as I was able to obtain isolated stems for this song.

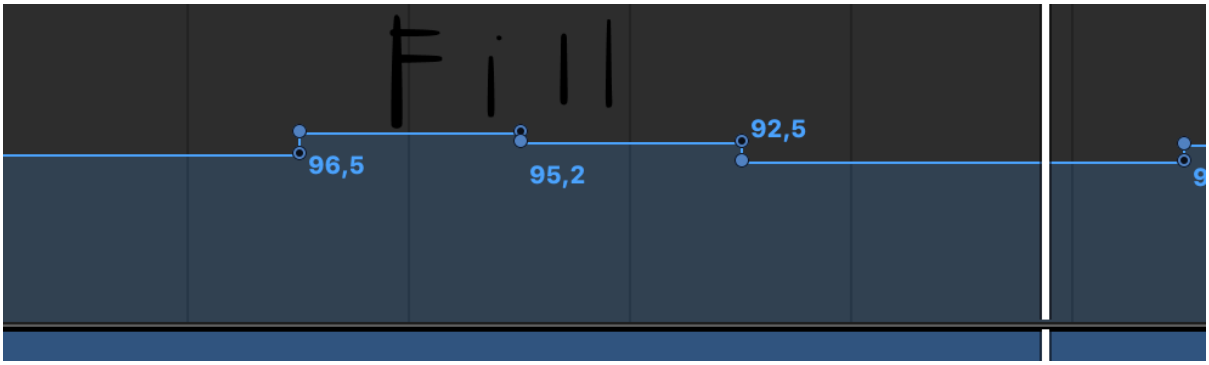
For relevant audio files see this link:
https://1drv.ms/u/s!ArNraO7sMBE3g2Tekd3zCBN3J9BR?e=lOBFeT

Tempo

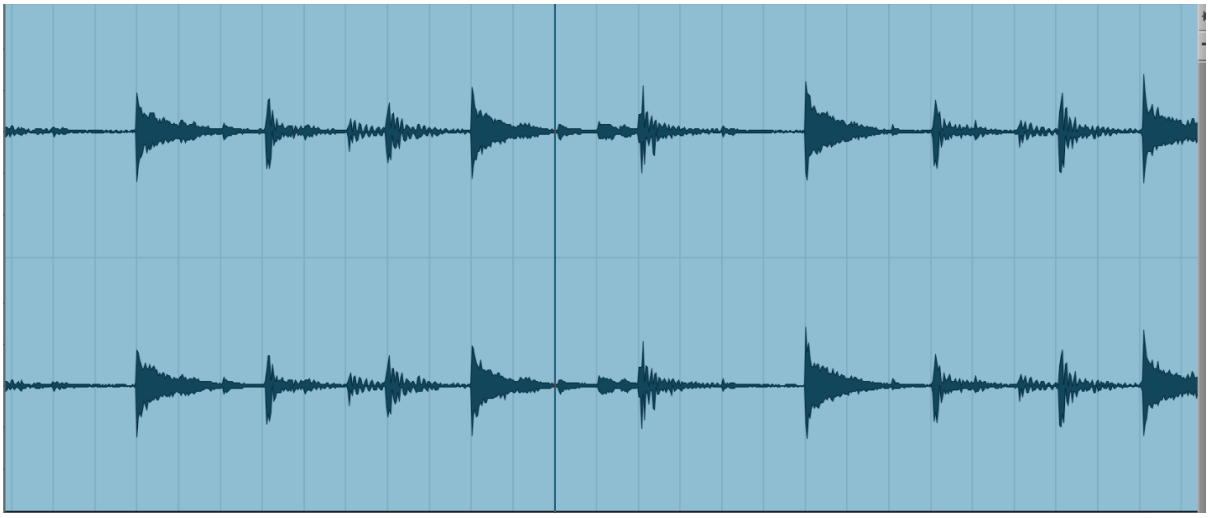
By the early to mid 1970s multitrack recording had been widely adopted; facilitated by which many composers created music that exists beyond the borders of sonic reality (Gracyk, 1996; Zak, 2001). Notwithstanding, in my opinion there is an undeniable 'raw' & 'live' aesthetic present on many albums from this era, despite them not being truly 'live'. As I ascertained in my past research, a contributing factor is the practice of recording over a 'live base', meaning a live recording of which parts are replaced, or additional parts are added to trough overdubbing. Led Zeppelin I is a good example, being recorded in 36 hours ''with almost no overdubs'' (Dolan, 2019). Herein preserving the inherent organic tempo and subtleties of human performance (Zak, 2001). Starting in the 1980s, this is often sacrificed through the use of click tracks and sequencers; courtesy of SMPTE synchronising (invented in 1974).
Below it is visible that the tempo of 'When the Curtain Falls' (2018) is constant, compared to a fluctuating tempo in 'Good Times Bad Times' (1969).



A good example of the rhythmic dissonance and resolve is 'How many more Times' (1969). At 02:07 the fills push and pull against the general tempo, but settle back into the right groove, providing a sense of excitement.



When looking at a fill in 'When the Curtain Falls' (2018), for instance at 03:26, it lacks this energy. Upon further analysis, there is evidence of partial quantization of the drums, as the downbeats of the drums line up perfectly with the grid. This means that even if the original performance incorporated a fill that pushed against the click tempo, and then resolved, this was not preserved.

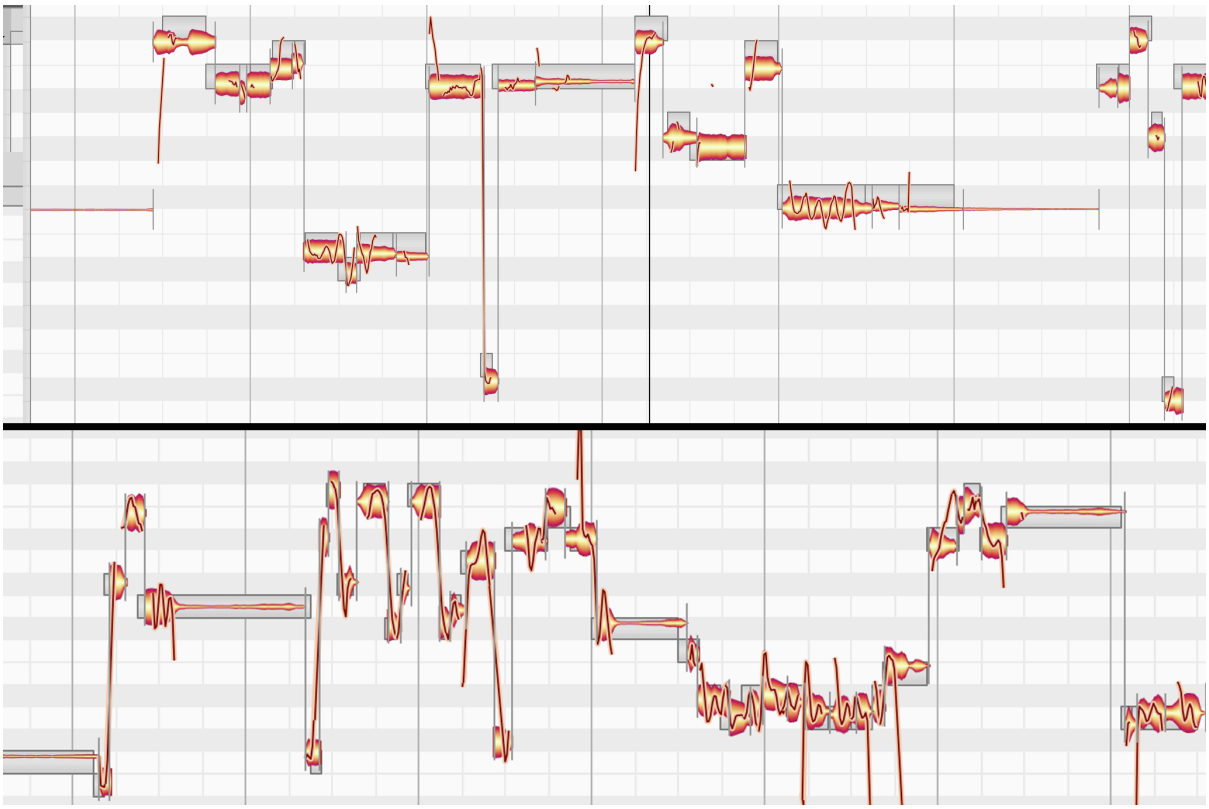


Despite using expansion and limiting to examine, the isolated drum stems don't include instrument bleed, apart from members occasionally shouting. Of course DI recording might explain this, but in my personal experience unamplified electric guitars are still audible in the room microphones during quieter. Therefore the shouts could have been recorded afterwards, but there is not way of knowing this with 100% certainty. The producers themselves state that the band ''always laid the backing tracks down live'' (Sutton as cited by Tingen, 2019).

For example & drum track When The Curtain Falls see:
https://1drv.ms/u/s!ArNraO7sMBE3g2Tekd3zCBN3J9BR?e=lOBFeT

Improvisations and Whole Takes

The vocal performance throughout ‘When The Curtain Falls’ (2018) sounds ‘too perfect’ at times, suggestive of auto-tune. Upon using Melodyne to compare the isolated vocals of Plant from Ramble On (1996) with Kiszka’s, pitch drift and pitching indicate this is indeed most likely the case



Translating this into musical value, Plant’s performance has more character as it incorporates more ambiguous blue notes, and sometimes goes slightly sharp or flat during ‘portamento’ when dragging or starting phrases. Another noticeable difference between the two performances is continuity of ad-lib phrases and improvisation. In Plant’s performance, call and response between his own phrases, as well as other instruments is incorporated. Upon examining the isolated recording of his voice, continuous breathing can be heard between sections, confirming that at least large sections were recorded in as full takes. A particularly good example of aforementioned inter-instrument call and response is Dazed and confused (1969) at 02:05 (drums, vocals, bass, and guitar) and 3:40 (guitar unison bends and vocals). During a similar arrangement breakdown in ‘When The Curtain Falls’ (2018) at 02:07, this type of inter-instrument communication seems to be lacking.Next to this Kiszka’s ad lips seem to be more formulaic, and there is evidence of ‘comping’.

Comping evidence sound see:
https://1drv.ms/u/s!ArNraO7sMBE3g2Tekd3zCBN3J9BR?e=lOBFeT

This suggests the vocals might have been recorded in shorter sections using ‘punching’, explaining the overall disjointed sound.

When comparing the guitars in ‘When The Curtain Falls’ (2018) with ‘Good Times Bad Times’ (1969), it becomes apparent a considerable degree of ‘imperfection’ (open strings, scratches, imperfect intonation etc.) has been retained in the Greta van Fleet track, albeit not as many as in

’Good times Bad Times’ (1969). However, there seem to be more discrepancies between double tracked parts in Communication Breakdown, again suggestive that some guitar parts on ‘When The Curtain Falls’ (2018) were recorded as isolated performances, section by section.

Conclusions

Overall it can’t be denied that Greta van Fleet closely matches their obvious inspiration sonically, however, compared to Led Zeppelin their music sounds more ‘constructed’ rather than ‘performed’. Judging from live performances I do believe the band are capable of producing a more ‘performed’ record, but as Hamilton (2003) indicates, the band might have been preconditioned by the existence of ‘perfect’ recordings, or perhaps decided their audience wouldn’t be tolerant towards ‘imperfections’ a result of this conditioning. However, considering they aim to evoke nostalgic feelings among older Rock consumers, it could be argued the audience would be acceptable of more imperfections (Moore, 2002).

Proposed Digital Restrictions

- **Rewinding & Comping Takes**

Although waiting half a minute before moving the cursor back to a certain point on the timeline seems excessive, taking some time to review what was just recorded is undoubtedly an appropriate practice to adopt based on the aforementioned facts.
Herein restricting the use of loop and playlist recording seems like a reasonable sacrifice in order to promote more thoughtful improvisation. Of course, things can be re-recorded if they aren’t of sufficient quality, but it has to be done in a destructive manner by recording over a previous take, or ‘punching in’ for doing specific sections. Especially in my case, as I find myself recording an unnecessary amount of takes, this prevents extensive auditioning of takes and preserves performance flow. Lastly, small imperfections that can add character are preserved if a take that has the right emotion is selected over a potential replacement that won’t be exactly the same, even if it’s more perfect. (based on Bennett, 2012 next to my own data)

- **Budgets and Time**

Another important factor to consider is the time spent inside a working recording environment. The advent of home recording allows people to record high quality sound at home, even with a modest budget. However, this often doesn’t involve full group performances, as this requires a suitable space, not to even mention the equipment needed to capture and monitor multiple sources. If artist do decide to use a professional studio for a (partially) live group recording, budgets often don’t allow for extensive time-consuming experimentation and improvisation that is only possible when communicating. This applies to both the ‘base’ live performance as well as the overdubs. In the 20th centuries when budgets were bigger, artist sometimes developed and composed material in the studio. Examples are Prince’s residency at Sunset sound, as well as Led Zeppelin’s stay at Headley Grange. The fact that ideas were committed to tape as they were conceived, or moments after, perhaps contributes to the unpolished sound of 1970s recordings. To ensure a time pressure free environment, although interaction and jamming isn’t possible alone to a similar extent, unplanned overdubs and alterations will be embraced. Luckily I will be recording in studio environment without time/budgetary restraints. For this same reason I can leave everything setup to revisit instruments etc, if ideas pop up based on other instruments.

- **Editing**

The ‘Nedmoot’ version will be recorded in free time, using no click tracks. Editing will obviously not be allowed, as that is the equivalent of tampering with results.

D (link)
https://1drv.ms/v/s!ArNraO7sMBE3g3C93Q4pHUndu_pI