



Emotional Attachment in Music Production and Mixing

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ABSTRACT

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This thesis explores the mindset and motivations of music producers who mix their own music, focusing on the emotional attachment involved in the process. By examining the psychological effects of music on the human brain and recent history on the topic, the aim was to provide an overview of the mindset of those who handle both the songwriting and mixing by themselves.

The research is based on four interviews with industry professionals, literature on neuroscience related to music, and online articles about recording and mixing. Through these sources the goal was to understand how emotional attachment can benefit the mixing process for music producers.

The study aimed to uncover when mixing begins in the songwriting process, the motivations for producers to take on mixing, the potential benefits, and the influence of emotional attachment on completing a song independently. The research results in the conclusion that having an emotional attachment when mixing and producing music can be highly beneficial.

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1 INTRODUCTION

As a musician who has been a part of writing, recording, producing, and eventually mixing my own songs, I am fascinated by the motivations behind why some artists choose to take this all-inclusive approach to music creation. In today's saturated musical landscape, with songs being uploaded to the streaming services constantly and the flood of information and content being created, it is important for musicians and producers to create a distinctive sound and identity for themselves.

Music production and mixing can be an intertwined process that blends technical skills with creativity. For songwriters and producers who tackle the responsibility of mixing their own music, these tasks are connected with a deep sense of emotional attachment, shaping every aspect of their work. This thesis aims to dig into the mindset and motivations of such artists, with a focus on understanding how their emotional connection to their music influences the mixing process.

The key questions to be explored in this research include:

- 1. What are the key aspects and challenges involved in mixing and music production, and how has the practice evolved over time?
- 2. What are the common characteristics, working methods, and mentality of music producers who mix their own songs, and how do they balance emotional attachment with their work?
- 3. What insights did I gain from the interviewees during my research, and how have these insights influenced my perspective on mixing and producing music?

By examining these questions, this thesis aims to provide a comprehensive understanding of the role of emotional attachment in music production and mixing, and how it can enhance the creative process for musicians who decide to take on this role.

2 INTERVIEWS

In this section, I introduce the people selected for the interviews, offering insights into their professional backgrounds and highlighting the reasons behind their selection as interview subjects. Following the introduction, I give further details about interviewing as a research method and also details about the interviews.

2.1 Ruban Nielson / Unknown Mortal Orchestra

Ruban Nielson is a Hawaiian-New Zealand musician, singer, producer and song-writer, best known as the frontman of the worldwide popular rock band Unknown Mortal Orchestra. He has done collaborations with the likes of The Gorillaz and Portugal. The Man, and is widely acknowledged from his own distinctive psychedelic sounds, personal but complex lyricism and his style of mixing. (Shute 2020, Discogs.com n.d.)

Ruban was born in New Zealand and has a background in both music and visual art. Before forming Unknown Mortal Orchestra Ruban played and sung in a band called The Mint Chicks who gained significant popularity in the early 2000's. After The Mint Chicks broke up Ruban moved to Portland, USA, and actually quit making music for a while. He pursued a career as an illustrator and after a while started experimenting with recording music on his own. (Shute 2020.)

He uploaded a song called 'Ffunny Ffriends' to Bandcamp under the name of Unknown Mortal Orchestra, and made a strong and immediate impact to the indie scene. Music blogs, record deals, fans and all kinds of offers starter flying towards Ruban, and he decided to keep making music, in his own terms. (Shute 2020.) Ruban has produced, recorded and mixed most of his work on his own, and continues to do so (Nielson 2024).

Nielson's music is described as a broad mix of genres, incorporating elements of psychedelic rock, funk, soul, and electronic music all together. His lyrics often explore themes of love, identity, and honest existential reflection. His innovative sound has an ability to blend various genres and styles together and it has earned

him a big following and a respected place in the music scene. Unknown Mortal Orchestra has almost two million monthly listeners when writing this and they have toured the world playing respected music festivals and sold out shows across the globe.

I wanted to interview Ruban because he is a huge source of inspiration and he has a fascinating and very relatable mindset when it comes to creating and mixing music. He has a way of thinking about music that encourages others to create something that feels true and honest. When it comes to mixing, he emphasises that the most important thing is not the technicalities but the overall sound, and the vibe that the song has (Nielson 2024).

2.2 Robbie Moore

Robbie Moore is a musician, producer, mixing engineer, and a studio-owner who has worked with the likes of Florence + The Machine and Little Simz (Soundbetter.com, n.d). Originally from the UK, Robbie has paved his way up as an entrepreneur in the industry and has so far built two professional studios, one in Berlin where he spent 10 years, and the other where he is located now, near Malmö, Sweden (Moore 2024) where I had the pleasure of interning at.

Robbie has an incredibly colourful history with art and music and when it comes to making or recording music, Robbie is mostly self-taught. Robbie has worked as a musician and a recording engineer in London during the early 2000's and worked with the likes of Babyshambles, a band led by Pete Doherty amongst many others before relocating to Berlin (Moore 2024).

In Berlin Robbie managed to balance family life, music projects, and the process of building his own dream studio designed and built by himself. Now Robbie and his family are located in Sweden near Malmö, where they are building a sustainable creative hub where nutrition, arts, and music can thrive in a massive 750m² farmhouse. (Moore 2024.) The building process can be followed on YouTube where every step of the building is documented, as Robbie keeps being an absolute source of inspiration when it comes to creativity and working ethics.

2.3 Jacob Bergson

Jacob Bergson, also known for his alias TAUT, is a musician and a producer who has played with Jojo Mayer & The Nerve, worked as a sound engineer at the Bunker Studios in New York, and has now settled in Berlin to pursue his own career in electronic music. Jacob's innovative way of crafting sounds and manipulating audio can be heard in his solo material, and he emphasizes the importance of improvising and self-development to be the driving factors for him in music. (Bergson 2024.)

At the end of college, Jacob started to intern at Bunker Studios in New York. After the internship they offered him a job, and as part of his compensation, he received couple of studio days that he could sell to friends or use for himself. He spent the next couple of years essentially as a house engineer and also touring as a FOH (Front of House) engineer for different bands. Around 2014, he started playing in the band Nerve led by a respected drummer Jojo Mayer alongside with the owners of Bunker Studios, John Davis, and Aaron Nevezie. (Bergson 2024.)

Jacob got to observe their process and methods quite a lot and especially with Nerve, he had the freedom to be as creative as he wanted, which made it more sensible to pursue his musical ideas on stage and in the studio. Nowadays Jacob lives in Berlin and performs with his alias TAUT, while working as a versatile musician and producer as well. (Bergson 2024.)

I wanted to interview Jacob because I find his music very fascinating and exciting. Having the possibility to meet and interview him gave me perspective on how to perceive music production.

2.4 Kasper Granroth

Kasper Granroth, also known as Kasper G, Loverse, and Fella Sleep, is a versatile musician, producer and a songwriter who has played and toured across Europe with bands such as Constables and the Finnish sensation ALMA. Later in life, he moved to Berlin to pursue a career as a musician and a producer with his own label Lost Favourite Records. (Granroth 2024.)

Kasper began playing drums at the age of 10 and later founded an indie rock band called Constables, which was active from 2010 to 2015. The band recorded several EPs and toured abroad. Alongside playing in the band, he became inspired by producers like Avicii and Skrillex, who made music on computers. (Granroth 2024.)

Kasper began using Logic Pro X software and learned to create his own songs and remixes. In 2013, he released his first EP on SoundCloud, and a British record label found interest in it and wanted to release it, which started his journey on being the mastermind behind his own music. Alongside producing and doing DJgigs Kasper plays drums and tours with ALMA. After founding his own record label, he lived in Berlin for several years. Now based in Finland, he continues to produce music and pursue his musical career while also working in Berlin. (Granroth 2024.)

I wanted to interview Kasper because he is Finnish like me, and he has done something that many seem to dream about: to move abroad and pursue a career in music, and he has made it in his own terms.

2.5 Interviewing as a research method

I chose interviewing as a research method because I knew all of the subjects work mainly alone on their material, and I wanted to offer a chance for them to talk freely about their work in the industry and the emotional attachment in music. The interviews followed a semi-structured approach, I had the same questions prepared for everyone, but since most of them were done face to face, I wanted

to allow the discussion to shift course freely. Having the possibility to talk to most of them face to face, it allowed interesting follow-up questions to emerge and I wanted to have a relaxed atmosphere in the interview.

I asked all of them the following questions:

- 1. Tell me a bit of your mixing methods, what DAW do you use, and what kind of signal processing do you usually use (in the box, analog, both of them, reamping etc.). Feel free to share a bit of your setup and way of working.
- 2. How do you usually start writing a song, and what steps do you follow to bring your songwriting ideas to fruition? Do you separate the songwriting from the recording, and at what stage does recording and mixing start to take place?
- 3. Can you describe in what ways do you feel emotionally attached to your songs?
- 4. Do you feel like you need to be emotionally attached to a song in order to be satisfied with it, or to release it?
- 5. In what ways does the awareness of the forthcoming mixing impact the instrumentation and production choices made during songwriting?
- 6. Do you have any examples of in what ways this awareness affected the songwriting process?
- 7. In what ways it has been helpful or beneficial for you to know that you are going to mix the song, while writing or recording the song?
- 8. What role does self-awareness play in managing emotional attachment during the mixing process?
- 9. Do you feel that having an emotional attachment to your songs influence critical listening skills, and in what ways?

- 10. Have you noticed imposter syndrome or perfectionism manifesting itself in the mixing process, and what strategies can be employed to overcome these psychological barriers?
- 11. How does the process of mixing your own songs reflect emotional relationship with your music, and what motivations or psychological factors drive your decision to take on this role?

Each interviewee was chosen because they have succeeded in something that many see hard or impossible to do in the industry: working on your own music, on your own terms, and mostly by yourself. Each interviewee varies from each other, some work more just in mixing and some just on creating music, but by listening to their music, reading articles of them, or by browsing their social media, I sensed that all of them feel really deeply connected to their craft. Their different background and musical genres create a wide perspective on the subject.

3 THE ART OF MIXING

3.1 The role of a mixing engineer

The role of a mixing engineer, in a nutshell, has been and still is to ensure that the produced audio is well balanced and satisfying to hear for the listener. The Phonograph cylinder, invented by Thomas Edison and first introduced in 1887, was an invention that could record sound and play it back. Edison's invention used tin foil as the capturing medium, which was later improved by Alexander Graham Bell to use a wax coating. The evolution from a cylinder that could play back sound to a wax disc and later on to the more commonly known vinyl disc marked the birth of modern consumed music. The engineers who conducted these first recordings and ensured the signal was pleasant to hear can be crowned as the first mixing engineers. (Wheatley 2022.)

So, the term "mixing engineer" parallels with the evolution of recorded music. In the early to mid-20th century, when music was listened to either through radio stations or wax discs at home, it was the sound engineer's job to ensure that the playback of the recording sounded good.

During this early era that later on birthed modern pop culture, recording techniques were still evolving, and engineers did the best they could with the machinery and knowledge they had. Since the recordings of this time were typically just a sum of one audio signal, engineers would place one microphone strategically in the recording room, positioning the singer in front of the microphone and the rest of the band behind the singer to create a mix of the performance for the recording. Before multitrack recordings or any overdubbing techniques, the placement of the musicians, the placement of the microphone in the room, signal routing, and the final monitoring of the signal levels created the final mix of the song. (McDowell 2024.)

A true key figure for developing and shaping the term of a mixing engineer is Tom Dowd, a highly important recording engineer known best for his work at Atlantic Records during the 1950-60's, with the greats like Aretha Franklin, Ray Charles and the Allman Brothers. Dowd's parents were involved in the show business and

he grew up studying music, but eventually shifted his focus to science and later on studied physics at Columbia University. (McDowell 2024.)

Dowd got drafted into the Army during World War II, and he even contributed to the Manhattan Project, where he was involved in developing the first nuclear weapons. After finishing his service in the military and witnessing advancements beyond his academic studies, Dowd decided to forgo his education and pursued a career in music as a recording engineer. Dowd quickly grew into an industry name for his passion for recording and innovative way of working. When he got an eight-track machine, he replaced the traditional knobs with slide wires, and was able to do "fade-ins" and "fade-outs" and almost play the console like an instrument. Dowd's contributions to the music industry were recognized with numerous awards and honors, reinforcing his legacy as one of the most influential figures in recording history. (McDowell 2024.)

Les Paul, the inventor of the solid body electric guitar, is also considered one of the cornerstones for modern recording engineers. For his innovations in the studio with multitracking and overdubbing techniques he is hailed as the "The Father of the modern recording studio". (Les Paul 2021.) Les Paul, in his early teens, started experimenting with the idea of electrifying his guitar using a telephone microphone underneath the guitar strings and amplifying the signal with his mother's radio. One of his most revolutionary inventions is called "Sound on Sound", where he added a second playback head to an Ampex model 300 tape recorder he got as a present, and that led to the first true sound on sound, or in other words overdubbed recording, which later on led to the invention of the 8-track recorder, that Ampex built for him. (Les Paul 2021.)

Les Paul also invented the technique of repeating a note as soon as it has been played, now commonly known as delay (Les Paul 2021). The delay effect is widely used in vocal and guitar effects and in mixing, to create depth to the sound and is considered one of the fundamentals when it comes to mixing or music production (Avid 2023).

3.2 Evolution of recording techniques

After Les Paul's and Tom Dowd's innovative recording methods and the generalization of 4-track tape machines, more mainstreamed major recording studios started to use multitrack tape machines as well. This way you did not have to record everything at once, but you could record instruments separately, and it gave the musicians and mixing engineers way more creative freedom to experiment with. (Les Paul 2021.)

Pop groups from the 60's like The Beatles are commonly considered the pioneers of melding songwriting and production into one and using the studio and its gear to create more whole and impressive recordings. The 1967 album Sgt. Pepper's Lonely Hearts Club Band by The Beatles was recorded on a 4-track tape machine, and it consists innovative overdubbing techniques, tape delay experimentations and other sonic features that sparked an ongoing inspiration for musicians that has influenced generations. The Beatles spent over 700 hours in the studio for Sgt. Pepper which was unheard of at that time. (Tingen 2017.)

The Beatles producer George Martin called it "A time of almost continuous technological experimentation" (Tingen 2017). Some of the many technological innovations The Beatles started, if not invented, are nowadays considered standard recording techniques. For example, double tracking of a vocal take, using varispeed of the tape machines to alter the pitch of the vocals or instruments, bouncing between 4-track tape machines and using the tape machines in a chain, close miking the drums and many more (Tingen 2017).

By combining these techniques with the recording process, The Beatles were able to underscore the lyrical meaning and the general atmosphere of the songs much more, amplifying the songs impact and resonance. To still this day Sgt. Pepper's Lonely Hearts Club Band remains the best-selling Beatles album of all time, with an estimated 32 million sales to date. (Tingen 2017.)

Studio time and the use of these massive 4 or 8-track tape machines was expensive, and it was not until the 1970's when recording devices evolved into a more compatible and affordable form for those who couldn't afford to record in

expensive studios. Another revolutionary invention for songwriters and producers that allowed them to experiment recording at home came with the invention of cassette desks in the mid 1960s. Philips developed the Compat Cassette in 1962 and launched it for the markets in the following years, making it possible to have your music in a smaller and portable form compared to vinyl and reel to reel machines. (Sommerfeld n.d.)

Like the stories heard from people who lived their youth in the 70s-mid 90s, cassette recorders were used in everyday life to create your own mixtapes, or in modern days terms playlists. Sony's Walkman made it possible to go about your day listening to your favourite music. Some cassette players had a microphone or line in input and you could record your singing or playing on top of a cassette, and in that way create your own songs and demos. (Sound of life 2023.)

With the possibilities cassette desks brought, it became much more easier for musicians to experiment with songwriting from the comfort of their own home. With the possibility of playback and multitrack recorders in a compatible size, and later on with more advanced cassette desks with some equalization options, musicians of that time basically were able to do the songwriting process from start to finish by themselves, from an idea to a produced audible whole.

Bruce Springsteen's highly praised album "Nebraska" was unintentionally made with a 4-track Tascam 144 cassette desk. After Springsteen finished recordings for the critically acclaimed "Born in the USA" with his E-Street Band, Springsteen decided that he wanted to work more with a batch of demos he had made at home. Originally recorded as demos at his New Jersey home, the demo tracks captured Springsteen's raw, unfiltered performances, accompanied only by his acoustic guitar and harmonica. After attempts of trying to re-recording the songs and arranging them to suit the band, Springsteen later on came to the studio with the original cassette with his hand and told the engineers "I want it to sound more like this". (Keller 2007.) These recordings, with their flaws and charm, haunting simplicity, and evocative lyricism would ultimately form the foundation of the album and be mastered and then released as an album as they were (Keller 2007).

3.3 Modern home recording equipment

In the 21st century when computers became a household item, home recording evolved to what it is this day. Almost anyone can now make music if they have a computer, DAW, and a set of headphones. This kind of setup comes with limitations, but the easy access to making music and learning about it online has birthed a new generation of "bedroom producers", who can now with the right skillset compose, produce, record, mix, and master their songs without leaving their house.

Digital Audio Workstation (DAW) is a software for computers where audio can be recorded, produced, edited and mixed (Avid, 2023). It offers a wide range of possibilities from multitrack audio recording to editing imported audio files, endless MIDI possibilities and all the necessary tools for mixing, as in EQs, compressors and spatial effects. In modern day music production, it is almost mandatory to have a computer and a DAW to work with. Basically, everything that can be found in a real recording studio, can be emulated within a DAW.

Monitoring music at home for production or mixing purposes can come with issues, such as acoustic problems within the room or simply not having the same level of fidelity and accuracy as linear professional studio monitors and environments have. Still, it can be possible to reach surprisingly good and even professional results with small acoustic treatments in the room and with a pair of speakers, or even just headphones. Modern day producers might work from home or on the road while touring, and therefore without access to well-treated rooms for listening to their mix, they have to rely on working with headphones. (Granroth & Bergson 2024.) Being familiar with the sound of the headphones and the ability to reference tracks while mixing is crucial for anyone using headphones. Gaining a familiarity with the sonic features of your headphones enables the possibility to create professional-quality mixes at home or on the road.

3.4 Fundamentals of mixing

The concept of mixing has evolved from the very simple ways of balancing tracks of audio together into a creative artform of mangling and manipulating the audio in many ways, but certain principles still remain to this day. Every mix begins with the same essential elements that are balance, stereo image, tonal balance, dynamics, and space. (Avid 2023.)

In its simplest form mixing should be considered as cleaning and polishing the audio and making everything sit well together. However, producers and musicians now often incorporate mixing techniques into the songwriting and producing process. This includes techniques as such as compressing audio or using effects, using EQ and mashing songwriting, production, and mixing all into one. For many engineers, recording and mixing can be an intertwined process, with a progressive rather than a noticeable separation between them. (Nielson 2024.)

Balancing in mixing terms refers to adjusting volume levels, and it is a way to start your mix. Levelling your tracks determines the overall loudness of sounds and the balance within the instruments in the song. (Avid 2023.) When mixing engineers receive stems to be mixed, and the stems being at a nominal level, it should be clear what needs to be done with the mix. It should be like a breeze just to push up the faders and the music does the rest. (Bergson 2024.)

Closely related to balancing, **panning** – as in placing elements in the stereo field – will determinate the width of the mix. Some elements, like drum overheads, already dictate the placement in the stereo field based on the actual recorded signal, whether it's on the left or the right side. Panning allows you to determine the placement of the instruments in the stereo field. Typically, drums are centred with the bass, synths, guitars, and effects panned left or right while traditionally vocals remain in the centre. (Avid 2023.) Panning with bold solutions can also be used to create interesting and creative mixes.

The **frequency spectrum** covers the audible field of human hearing, which is roughly 20Hz (Hertz) - 20 000Khz (Kilohertz). This spectrum encompasses the low bass frequencies, midrange frequencies, and high treble frequencies.

(Laaksonen 2013, 326.) For a producer and a mixing engineer, it is crucial to know and recognize what instruments belong where in this spectrum. This helps to make sure each instrument sounds clear and does not drown out or clash with others. For instance, knowing that bass and kick drum usually belongs in the low frequencies, lets the engineer carve room for them in the mix without clashing them with each other. Recognizing that vocals and guitars often sit in the midrange informs decisions about EQ and panning to make sure they are well-balanced and separated from each other in the mix.

Equalization (EQ) is the manipulation of levels in the frequency spectrum to enhance certain characteristics of the sound. It is a technique originating from the compensation of saturation and signal loss in long-distance landline calls, and was invented to improve quality by equalizing lost frequencies back to normal through boosting the high frequencies. It is one of the most commonly used tools for mixing engineers. Equalizers allow you to do their original function, which is to correct a signal and make it sound as natural and clear as possible. They can also be used to make corrections to an audio track by cutting unpleasant frequency peaks, or boosting frequencies to create a sense of more bass or airiness. Additionally, equalizers can add colour and character to a track, and their usage varies greatly depending on the needs or skills of the user. (Laaksonen 2013, 316-317.)

Along with EQ, **compression** is one of the most important and basic mixing tools. Compressors and other dynamic processors are used to control the peaks of audio. With compression you can tame the loudest peaks and make the whole audio more balanced. When applying compression to an audio track, you can reduce the volume of the louder parts while simultaneously making the quieter parts sound louder. Compression in recording or mixing a very transient-heavy audio like vocals or drums is a crucial tool for a mixing engineer. (Laaksonen 2013, 335.)

Saturation, either done by tubes or other physical circuits or emulated by plugins, adds warmth to your sound and curves the peaks of the transients. The warmth is created by harmonic distortion: when the signal is driven, it generates

overtones that distort, resulting in a fuzzy and pleasingly distorted sound that the human ear tends to like. (Laaksonen 2013, 58 & Avid 2023.)

In a lot of contemporary mixing practises, the desired saturation is achieved by incorporating the characteristics of a tape machine and its subtle compression. Tape machines can add a feel of cohesion and fullness to the track, and can also be used to saturate a track. The saturated sound, resulting from harmonic distortion and the rounding of the audio transients, is often referred to as a "warm" sound. Depending on the desired sound, mixing engineers can utilize various tape machines, opting for smaller tapes for increased saturation or larger tapes for a cleaner sound. (Nielson 2024.)

When the basic mix is complete, you can elevate it further with spatial effects such as **reverbs** and **delays**. These effects add an extra dimension to your mix, and the use of them create a sense of space, depth, and atmosphere. Reverb adds a sense of ambience by simulating the reflections of sound in various environments such as rooms, churches, halls or another physical places. Delays creates a sense of depth and movement by repeating audio signals. (Avid 2023.)

Automation involves adjusting the levels of a single track, groups, or effects during the song. A common example of automation in mixing would be the long etheric reverb tails you would hear in modern day pop production in the end of a vocalist's phrase. By automating the parameters of your audio processors such as volume, equalizations, reverbs, and delays, you can really make the mix feel like it is moving and emphasize the emotion of the song. The primary purpose of mix automation is to enhance the expressiveness, movement, and overall impact of a piece of music. (Avid 2023.)

3.4.1 Arrangement

Arranging a song is a process that demands both artistic intuition and technical skills. With a well-done arrangement you can imagine you are almost pre-mixing the song, by deciding what instruments will dominate the low end, what the harmonic content will be through the mid frequencies and how the chords are divided

within instruments and vocals, and what kind of layers and textures other elements will bring. (Bergson 2024.)

With a well-arranged song structure, you can trust that the mixing part is going to be easy and that it is going to feel natural. It seems so that the more attached you are to your songs, the more you tend to emphasize the arrangement to make room for the idea and the emotion of the song to flourish. Aiming for a minimalistic approach in recording and arrangement is a good approach. Often, the same instruments or sounds are used consistently throughout an entire record. A well-done arrangement can have a significant impact; when the arrangement is good, the mix is going to be good. (Bergson 2024.) When simple elements are arranged well and space is used carefully, the result usually sounds pleasing. Also, there is the approach of implying a rich harmony with minimal notes. This approach can create an open feeling, as certain chord tones may be excluded. This method often contributes to a better fit for the vocals. (Nielson 2024.)

When talking about **instrumentation**, it is important to know what instruments to use and how they can fit in the song. In arranging it is crucial to figure out what are the elements that take the lowest frequencies, and what are the elements that live in the middle, and what elements cover the highest frequencies. Thinking about the frequency spread in the production and mixing phase is important for making sure that each instrument or voice in the arrangement adds harmoniously to the overall sound without overpowering or overshadowing other elements. When the arrangement is good, the mixing will sound great as long as it shows the arrangement and the song. A good mix of a bad song is worthless. A bad mix of a good song can be of value. (Nielson, 2024.)

Sound choices are important, because all instruments have their own characters, their own personality, their sound, and their function and place in the song. Some instruments or sounds can be perceived as relaxing, beautiful, and serene, and by using them they can add a sense of tranquility and emphasize the peacefulness of the song itself even more. Other instruments and sounds can be perceived as energetic, loud, or even chaotic and can emphasize the songs and the lyrical meaning by being loud and very dynamic. Some sounds can be weird and dirty, and sound bad just on their own, but used well in a mix they can enhance

the song drastically. Arranging and mixing is like some sort of alchemy, and it is a realm of no rules when it comes to combining these elements, and through experimentation or even doing something that has been considered wrong, some of the most interesting sounds and songs can emerge.

It is everyone's own opinion what can be considered groovy, but us humans we tend to trust on something that is repeating, predictable enough, and easy to follow. Just like when we are walking or running, we tend to do it in some sort of **rhythm** – in music the same feeling of things moving forward and being in motion makes us feel good and safe. It can be explained in some sense that humans feel the pulse of music safe but it is also exciting and rewarding when rhythmically something abnormal occurs. It keeps us waiting for more, trying to predict the rhythm section's next moves, and it gives us pleasure and excites us when we keep up with it and follow the groove. Daniel Levitin suitably said that "Groove is that quality which drives music forward, the musical equivalent of a book that you can't put down". (Levitin 2006, 170.)

The approach to rhythm can be simple too — aim to have every element drive the rhythm forward in its own unique manner. Consider how accents occur at offset times to ensure interdependence among other elements. When the arrangement pieces fit together seamlessly, the mixing process usually just involves general polishing and creating space and dimension. (Nielson 2024.)

It is also important to consider what is in **stereo** and what is in **mono**, when making arrangement or mixing choices. In modern music production, particularly when using plug-in instruments and presets, many synth sounds and samples are in stereo format. They often come preloaded with reverb or delay effects, which can sound impressive on their own. However, when included in the overall production of the song, these elements can result in a cluttered or messy sound. (Bergson 2024.)

Stereo is a method of sound reproduction that emulates human hearing and the perception of audio from different directions and the left-to-right auditory field (Avid 2023). Stereo is two audio signals, the audible left and right – and music typically is listened in stereo with two speakers or with headphones. In music

production or mixing you can give music a sense of direction and depth by placing audio in different spots in the stereo field.

Mono is an audio signal or a sum of multiple signals that is audible only from one source, like a radio that has only one speaker. In music production and mixing mono is a one audio signal and it can be panned either left or right, or kept in the middle in the stereo field. When it comes to arrangement and mixing, it is important not to overcrowd your stereo field with instruments or especially spatial effects like reverbs and delays so the impression of direction and depth of your music does not get cluttered.

3.4.2 Listening

Listening, or the actual physical ability to hear, is by far the most important tool for a mixing engineer. Without hearing you cannot mix music. No matter how simple it may seem in theory, with modern technology it is easy for an engineer to rely on meters and monitors and other visual aid in addition to trusting their own ears. Of course, these are very useful tools, but our hearing is the most precious one when it comes to mixing. No one has the same pair of ears as you, and a pair of ears can be trained and fine tuned in to the most powerful mixing tool that there is.

When mixing your own music, listening and feeling it is crucial to make sure you are doing what the song needs and not just technically mixing it correctly. When mixing and therefore listening, the main goal is to set the stage for the emotions in the music. If there has been something emotionally impactful in the song or performance that has been captured, the important thing is to recognize it and make sure it stays intact as you work on it. Continuously ask yourself if the changes you are making are improving or detracting from the emotional vibe. (Nielson 2024.)

It is also very important to take breaks and to give your mix some time. Coming back to your session with fresh ears and a clear head is more important than tweaking a sound for two hours straight; in fact you might just do more damage to yourself and the track. Experience helps you recognize when your ears are fatigued. Mixing too long can lead to mistakes because the focus might shift to the technicalities rather than really listening. When that happens, it is best to take a break and come back later with fresh ears. (Nielson 2024.) Sometimes it is more important to try to listen to the vibe, rather than the technical performance of the mix (Granroth 2024).

3.4.3 Creativity

Like many things, creativity in mixing comes down to personal taste, and it is impossible to determine what is creative and what is not. However, there are many creative things you can explore in mixing, and it is a world without rules as long as the end result – the finished song – is something that you or the artist is satisfied with.

Many creative solutions in mixing can be done with simple tools. For example, cutting audio bits to match the rhythm of a song, muting all the tracks when the last snare hits before the last chorus, or automating delays and reverbs to rise or oscillate after something dramatic has been said or done. In this context, it is up to the producer who mixes themselves to decide how creative the mix needs to be, and if it will add value to the song.

Mixing engineers tailor their decisions based on the intended purpose of each song: whether it is meant for the dance floor, to establish an atmosphere, or to evoke nostalgia. Usually, these decisions are already made during the demo phase, when the core idea is established. Whether decisions are deliberate or instinctual, the goal is always to enhance the essence of the song. (Granroth 2024.)

4 EMOTIONAL ATTACHMENT IN MUSIC PRODUCTION

In the context of music production and songwriting, emotional attachment can manifest when artists, producers, or engineers develop a strong bond towards the music they create or work with. This emotional connection could come from various of factors, including personal experiences, memories associated with the music, or the time spent writing a piece of music and the creative process itself.

4.1 Music-evoked memory

It is safe to assume that for those that have the ability to hear, there is music in everyone's past that evokes strong memories and feelings within. It could be a lullaby sung by a caregiver or a song that was discovered in the teenage years during a troubled time, and even after decades it still can evoke similar feelings within. It seems then that music is not only good at evoking memories, but also the times when we are more likely to listen to music are the times when our minds may naturally be more likely to wander anyway. (Jakubowski n.d.)

When writing songs, songwriters and producers often aim to incorporate real feelings based on events that have happened in their life to their music. When it is something personal that they have experienced, it can evoke same feelings in the listener. Even if it is not lyrical music, or the lyrics will not give away the authors innermost secrets, I often find that real emotion and care given to the song can be heard, and felt in the music.

For songwriters songs are usually grounded in real-life experiences. It might not be about self-expression or creating mythology, but rather because it can be easier to draw inspiration from actual events that have happened. Songs serve as emotional snapshots of specific moments in time. They allow for revisiting those memories and remind oneself of who they once were. (Nielson 2024.)

Songs can hold a strong emotional connection to the writer, stemming from deepseated personal experiences. They are just not compositions and lyrics, but carry significant personal meaning. The emotional bond resonates deeply, and it can create a shared experience with listeners (Granroth 2024). When a strong attachment exists to songs it can be because of the goal of creating something that's genuinely loved by the songwriter. The goal simply can be a point where the music is just enjoyable to listen to (Bergson 2024).

Songs can serve as personal reflections, almost like diary entries that capture the emotional state of the moment the song was made at. Listening back to those songs can evoke strong emotions, resembling to one's own thoughts through an artistic lense. It can offer validation and a sense of accomplishment. (Moore 2024.) When an artist is touring, delivering the song with the same energy as the first few times they played it is important. The emotions and memories of the song can guide the performance, giving an honest performance of the song each time. (Nielson 2024.)

Music can help humans to manage and regulate their emotions. People often listen to music to uplift their mood, motivate themselves, to create an atmosphere in a room, or to reduce stress (Tams 2021). Music can also hold personal meanings that can be hard to explain. However, the same principles and reasons apply to why we enjoy listening and making music. Daniel Levitin, the author of "The world in six songs" (2009), quoted Peter Seeger in a following way: "Musical force comes from a sense of form; whereas ordinary speech doesn't have quite that much organization. You can say what you mean, but similarly with painting or with cooking or with other arts, there is a form and design to music. And this becomes intriguing, it becomes something you can remember" (Levitin 2009, 13). For humans the combination of form and structure and an emotional message is what makes music so much more memorable and impactful (Levitin 2009, 13).

Music has always been a powerful tool for spreading messages around the world. With music, it might be easier to shout and also mean that "All you need is love" or "Get up, stand up, stand up for your rights". I think that he emotional connection music has can amplify the impact of these messages, uniting people and inspiring action. Whether it is a call for peace or justice, or in pursuit of calming you down, the universal language of music goes beyond cultural barriers resonating deeply with audiences of all kind.

Listening to music also triggers a cascade of activity in the brain regions (Levitin 2006, 191). In a study made by Anne Blood it was shown that a "powerful musical emotion" is connected in the parts of the brain that relate to emotions of rewarding, motivation and arousal (Levitin, 2006, 189). This structure of the brain includes a part called nucleus accumbens, and it is the centrepiece of the reward system and it has an important role in the forming of pleasure and addiction (Levitin 2006, 189).

So, it is no wonder that songwriters and producers feel deeply connected to their own music, as it is deeply connected to the parts of the brain that control feelings of pleasure and reward. Having a deep emotional attachment to a song, whether mixing it or performing it, can evoke these feelings, emotions, and memories like they did in the first place. Essentially, what music does for a human, is that it activates the oldest, most primitive and as well the most evolved parts of the brain. The act of listening to music is a combination of logical perception and emotional perception in the brain, which makes it an all-encompassing process, affecting humans deeply. (Levitin 2006, 192.)

4.2 Songwriting and recording

Songwriting can be a tool for artists to express the emotions and experiences they have lived through in their lives. It is a process that is different for everyone and there are numerous of methods, possibilities, and approaches on how to make a song. Some producers might find that limiting themselves can spark inspiration. Instead of relying solely on computers and programs to create music, they explore the power of using only instruments and vocals. This approach ensures that the song captures their true emotions and intentions more authentically. Other producers find inspiration in manipulating audio into something so it is unrecognizable from the original, and in that way create interesting sonic features that spark an idea that might birth something that feels truly original.

There is something fascinating that occurs when honesty is embraced in songwriting—it seems to add a unique and enigmatic quality to the music. It is hard to pinpoint why this happens, and writing in a way that links memories to specific moments can be a tool for a songwriter to keep the songs and the performance fresh and real. (Nielson 2024.)

Songwriting can be many things. It can be a deeply personal and expressive art form that allows the songwriter to convey their emotions, thoughts, and experiences through music and lyrics. Songwriting can be in pursuit of making people feel careless, to make them move and feel good, or to feel moved by the music. All these emotional factors come into consideration when a producer is arranging the song or recording and mixing it.

Songwriting taps into one's innermost feelings, whether they are joy, sorrow, love, heartache, or hope, and music can be considered as personal diary entries and snapshots into the songwriters life. Writing music can be like therapy (Granroth, 2024).

5 ANALYSIS

Through looking at the various literature and reviews and cross-referencing them with the interviews I have conducted, we can analyse and speculate what caused the need for mixing engineers, and how advancements in music technology allowed musicians to be creative and emotive in the recording process.

Chris Wheatley wrote in his article "A brief history of more than 30 music formats" about the importance of the possibility of music becoming listenable at home and that how the culture changed when music and records were made more compatible (Wheatley, 2022). With this revolution it came possible to own your favourite music, to have it as a physical thing, to read about your favourite artists and get closer to the art. With this generalization of consumed music, and the shift in the youth culture and then the birth of pop culture, marked the emergence of mixing engineers, whose creative and technical innovations and skills became crucial in shaping the final sound of recordings, paving the way for modern music production.

The invention of multitracking made the recording process significantly more accessible and allowed more possibilities of creativity in the studio environment. An example of one of the first multitrack recording tools is the 4-track tape machine. It "was originally intended for use on large opera sessions, the idea being the orchestra could be recorded in stereo onto tracks 1 & 2 and leave tracks 3 & 4 for vocal overdubs. It soon became apparent this technology would be very useful for pop recording needs and eventually became the standard by the mid 60's". (Abbey Road 2021.)

A decade later the versatility that cassette players brought and the innovative music that emerged from multitrack recordings allowed musicians to experiment and to be creative with recording techniques at home. Like the famous Bruce Springsteen album "Nebraska" stitched together the roles of a musician and a producer, and changed the ways how music "should be" recorded. (Keller 2007.)

In music production and songwriting, emotional attachment occurs when artists, producers, or engineers develop a deep connection with the music they make. This bond often emerges from personal experiences, memories, and emotions, and those feelings are infused into their work. Everyone I interviewed told me that they are attached to their songs, and feel the need of having a connection to the music they are making. Making music can feel like therapy and it can be snapshots from lived periods of time.

The creative process can become highly personal, making the music an extension of the artist's identity, thoughts, and feelings. This attachment can enhance the authenticity and emotional impact of their music, and it can resonate deeply with listeners and create a shared emotional experience. Even without explicit lyrics, genuine emotion and care in the music can be felt by the listener. So, it can be assumed that songwriters and producers aim to infuse real feelings into their music, thus making music that resonates with themselves and with the listeners.

Music helps humans manage and regulate emotions, uplifting moods, reducing stress, and creating atmospheres. It holds personal meanings and resonates through its combination of form, structure, and emotional message, making it more memorable and impactful than speech. Daniel Levitin notes that music's organized form makes it intriguing and memorable. Music spreads powerful messages, unites people, and inspires action. Listening to music activates brain regions related to emotion, reward, and motivation, highlighting its profound impact on human experience. (Levitin 2009.)

For modern producers songwriting, recording, and mixing often blend together seamlessly. It is easy to forget the boundaries between these stages. With today's tools, it is common for artists to integrate all these elements when creating music from start to finish. This can be seen very clearly through the interviews I conducted for the research. The following are examples of what the interviewees said about the process of mixing becoming a part of the production:

"Recording and mixing are pretty blended together for me. It's not a hard separation. More a gradual thing. I've always mixed everything myself so it's been the same for every song since the start of the band in that way" (Nielson, 2024).

"For me, mixing and production are closely intertwined. Often, while producing, I mix simultaneously. Once the production is complete, I usually take a few days' break before returning to mixing" (Granroth 2024).

"My mix is almost done, when I'm done with the production" (Bergson 2024).

"When recording a song from start to finish, I'm essentially pre-mixing it as I go. It's not a proper mix, but you develop a sense of how close it is to being really good with a bit of fine-tuning. Certain mixing decisions, like effects or saturation, often happen during the recording stage" (Moore 2024).

When being the one who makes the music from the start, and works with the music from the songwriting to the point of mixing, it is extremely important to pay attention to arrangement. The interviewees also talked about the importance of arrangement, and how it affects mixing:

"A well-arranged song is essentially a great mix. When everything works together seamlessly, mixing becomes effortless. Opening a well-arranged project feels like a breeze—you just push up the faders, adjust panning and add some reverb, and it sounds fantastic. Instead of fixing issues like conflicting instruments or struggling with vocals during mixing, all those details should be sorted out beforehand. That way, during mixing, you can focus on enhancing the music's storytelling and overall presentation" (Bergson 2024).

"When the pieces fit together well in the arrangement the mixing just has to clean things up and create some nice space and dimension. I consider myself a bad mixer, but I know my mixing works for my records. When the arrangement is good the mixing will sound great as long as it shows the arrangement and the song. A good mix of a bad song is worthless. A bad mix of a good song can be of value" (Nielson 2024).

Ruban also talked about his song Hunnybee as an example, where an arrangement effects the mixing process:

"We have a song called Hunnybee and for that song I had some changes and a melody but absolutely no arrangement and we were hashing that out together as a band which is rare but worked well this time. At first the guitar was playing all the notes you need for the chord change in the verse, but as we jammed through it I realized I could get away with reducing and reducing the guitar part until it was really simple, although a decent amount of harmony is implied especially in the little turn around. Just knowing earlier on that it'll sound better the more it's reduced to a few well-chosen notes makes a big impact as you mix" (Nielson 2024).

When asked about how long it takes to mix or when does the mixing take place in the process, the interviewees commented:

"With the music I create, production isn't just a musical element but also a sonic one. If the production wasn't almost mixed before the official mix, the final result wouldn't capture the essence of the song" (Bergson 2024).

"My ideal situation is to handle the production until it's thoroughly completed, and then pass it over to someone to mix it, with minimal adjustments" (Bergson 2024).

"For me, mixing and production are closely intertwined. Often, while producing, I mix simultaneously. Once the production is complete, I usually take a few days' break before returning to mixing. I make a conscious decision not to edit the production anymore, but to focus on final touches and frequency corrections" (Granroth 2024).

Overall, all of the discussions with the interviewees gave the result that emotional attachment in the process of mixing, especially when doing everything yourself from A-Z, is crucial. This is because through emotional attachment, you are able to treat the song in the way that it needs to be, in your own opinion. You can give it the time and care that others might not. Like Jacob said, it is an amazing thing when you can work and listen to the music that you love, and it is something to

aim at. With emotional attachment the songs and sounds that you create can be snippets from your life, and therefore stay forever with you.

"I'm definitely attached to my songs; my goal is to create something I genuinely love. I just try to get to the point where I really enjoy listening to my music" (Bergson 2024).

"I try to write in a way that tethers my memory to a certain time. I find as I get older it's harder to contain all of the memories that are important. Songs can be a way of taking an emotional snapshot of a certain time. And then you can revisit that time, to some degree. Remind yourself who you were" (Nielson 2024).

"I love how songs become like diary entries, reflecting the emotional state you were in when you wrote them. Listening back to my music can be emotional for me; it's like reading my own thoughts through a piece of art. It feels validating, like giving myself a pat on the back or a hug, knowing that I was able to express those feelings in a song. I don't think there's enough truly honest music being made. I put a lot of work, craft, and care into my music, and I'm very proud of it. That alone creates a deep emotional attachment for me" (Moore 2024).

"Every song I make means much more to me than just composition and lyrics. They have a strong emotional bond that comes from somewhere deep within me. It's not just music; it's like a feeling or experience that I share with my listeners" (Granroth 2024).

Songs can feel precious, and very important. Your creations can give you a feeling of satisfaction and make you proud. As a friend once told me, a finished song is a work of art, and like all artforms it needs to be created with sensitivity and care. Maintaining a sense of respect for your creation keeps the realness with it. Having an emotional attachment to your music will make it feel more precious and important for you.

"It's about the preciousness, almost like feeling afraid" (Moore 2024).

6 MY EXPERIENCE

6.1 Production

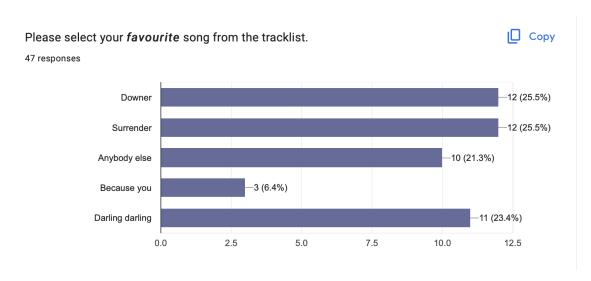
Production is a crucial phase before the actual recording takes place. During the production phase, my band Lilith & The Wildflowers wrote several songs with the intention of selecting five out of them to create fully produced demos and later recording two of them professionally.

In my opinion the songwriting process itself is certainly one of the most enjoyable aspects of music creation. Whether it involves jamming and exploring ideas with instruments or crafting melodies directly into a DAW, there is an undeniable excitement in seeing ideas come together while chasing the perfect sound or an idea of a song. All the demo instrumentations for our songs were made with me and the bassist of the band in the comfort of my own home, using my modest home setup. This process involved a lot of improvisation, with guitar parts and basslines layered over various tempos and drum loops to find the right groove and feel for the songs.

Once the instrumentation felt solid, we passed it along to our vocalist, who added her own ideas. Drawing from her personal experiences, she made lyrics that reflected her emotions and life at the time of writing the song. After finalizing the lyrics and topline melodies, she sent the audio back to me, and I worked on creating a rough mix of the songs on my computer. This collaborative process allowed us to create music that felt both authentic and deeply personal. After this process the demos were shared in our group chat for general brainstorming and approval. We then brought them to our band room and worked on the arrangement of the songs with the whole band. The final form of the song took shape at the band practice, where every instrument found its groove and locked into place within the song.

6.2 Demos

Once the band felt prepared, we scheduled a more formal recording session to produce the definitive demos. This involved recording all five songs with greater attention to detail, using multiple microphones for the drums, recording multiple takes of the instruments and vocals, carefully considering arrangements, and incorporating overdubs and editing techniques such as time and pitch editing. Upon completion of the recording phase, all individual tracks were compiled into a single session, where a more precise mixing process was undertaken to achieve a polished sound. Upon finalizing the mixing, the completed songs were shared on SoundCloud, accompanied by a private link and a survey distributed to listeners to gauge their preferences and solicit feedback.



PICTURE 1. screenshot from the survey, Artturi Borén

The purpose of this survey was to find out what was the best received song of the five demos. We wanted to hear feedback from our colleagues and friends and took the results of the poll into consideration when we decided the songs that we were going to record. 47 people responded and some of the songs were listened many as 300 times. After the poll we made the choice based on the votes and the band's opinion to professionally record and mix the songs "Anybody else" and "Surrender". We listened to the demos and discussed them thoroughly with the band, and felt the most attached to these two, and thought they were the best songs to be the first ones to present the sound of the band. We then recorded drums, bass, vocals, and guitars for both songs in one day at TAMK studios and

I mixed the songs.

6.3 The mixing process

For the mixing process, I tried to follow a mindset that a colleague and a good friend Nadim Khoury shared with me, alongside the advice I had received from the interviews.

- 1. Shut your brain and heart do all the timing edits, pitch edits, cuts and fades, and all the technical parts that can be considered as boring until the song is completely cleaned and good to go.
- 2. Open your brain in this phase, think critically. Make corrections with equalizations, compress what needs to be compressed, balance the levels, make panning decisions and make the overall mix with the volume, and route everything to their respective effects. By the end of this, the mix should start to sound fairly good.
- 3. Open your heart in this phase it is time to be creative. Try to reach a flow state of mind and just enjoy the mixing process. Aim to elevate the mix to a new level with creative decisions based on what you feel and hear. Do not focus on the faders but rather listen, think, and feel what the song needs to be.

I can honestly say that I am deeply attached to these songs. I have been involved with them since the very beginning, feeling responsible for their development from the initial idea to the final result. The songs feel like they are mine, even though they are a collective effort involving many factors and people. I aimed for them to paint a vivid picture with their sound, conveying emotions through their sonic elements. Both songs are love songs. Although I did not write the lyrics, crafting the harmonic content with my bandmates mirrors the emotions our songwriter expressed in her lyrics. The spring-reverberated guitar leads are meant to sound wistful, while the fuzzy bass and smashing drums bring out the passion and energy in the song "Anybody Else", and all the reverbs and delays are meant to

carry the vocals and melodies into the realm of heartache and passion in "Surrender".

When mixing, I often felt more like a producer than a mixing engineer. Due to my emotional attachment and investment in the songs, the production process and mixing were deeply intertwined. My personal connection drove the creative direction of the mixes emphasizing emotionally resonating elements. My investment also led to high attention of detail, and the songs being so important I felt like I could listen to them with more precision. Like Jacob Bergson said, "Perhaps I enjoy listening to my own songs more, which might influence me to listen to them more frequently" (Bergson 2024).

I listened to the songs carefully, many times from start to finish, thinking and feeling what each song needed. I focused on the vibe we aimed to evoke with the band and tried to elevate it. My goal was to express my emotions within the limitations of my DAW, while keeping the performance of the four of us as natural as possible. I do not feel like there was emotional bias happening, since we had already made two recorded versions of the songs, so the parts were clear and all the sonic elements were dictated.

I felt like time was a necessary tool with mixing these songs, and the more time I had the better I felt about mixing. Being able to step back and to listen with fresh ears was crucial. When mixing "Surrender" I tried to listen to it without doing any broad adjustments and tried to sense when something magical in my opinion emerged from the speakers. I was extra careful not to adjust the song too much, as I was advised by Ruban Nielson (Nielson 2024).

7 DISCUSSION

The study reveals some of the key aspects and challenges involved in mixing and music production. Mixing follows technical fundamentals, and it is a skill that takes years of learning and dedication. It is a practise where you can always evolve in. Without the innovative methods of the likes of Les Paul and Tom Dowd who paved the way for mixing to be a more of an artform than rather just engineering a pleasurable playback, there would not be the same precision, technicality, and creativity included in the mixing process as there is nowadays.

Keeping a curious mind and living up with the times can be something that keeps the inspiration going and assures that there is always something to learn. Even Dowd after his successful career and recognition in the industry kept on recording and producing music and transitioned seamlessly into the digital age and recognized the opportunities that arose from it (McDowell, 2024). The artform of mixing in modern day is a sum of a lot of technical tools. When these tools are applied and the basics are taken care of, creativity will find its place to flourish.

When being the one who writes the songs, records them and mixes them, it all can melt into a one big creative process. I find this truly fascinating, and through the articles I have researched and through interviews I conducted it can be found that emotional attachment and mixing can work together as a tool, and it can elevate the work of a producer to another level. I learned that it is an intertwined process which fuels the artists' work, and it can provide insights that might stay hidden without the emotional link and commitment to the song.

In conclusion, there are as many ways of working as there are musicians or producers. However, it is reasonable to argue that most music producers who mix their own songs tend to share similar characteristics, working methods, and mentality when it comes to working on their own songs. Balancing the emotional attachment and bias is not an issue; it is more of a gift for a producer to feel that the song they are working on is a precious and deserving of the right treatment and care.

Emotional attachment can be highly beneficial, as it can drive passion and creativity in the mixing process and inspire innovative ideas and deeper commitment to the final quality of the song. Emotional investment can fuel creativity, leading to unique and expressive mixes. Producers who have an emotional attachment to the song they are working on are more likely to invest more effort and care into the mix, striving for a result that truly resonates emotionally with listeners. This study showcases the importance of emotional attachment and creates awareness of what a sensitive and emotional process it is to create music from scratch to a finished product, despite how serious and technical it might seem to an outsider. In the future, the research can be developed by interviewing more active industry professionals and expanding the research.

While doing this research I found it truly inspiring to learn what the interviewees had to say on the topic and how they described their ways of working. It seems like it all boils down to creating a taste and an opinion of what you like, and trusting your own listening and technical skills. Listening to the interviewees changed the perspective toward my own mixing and producing. I believe that being in tune with the emotions evoked by the songs I make have an effect to the process of creating music and mixing it.

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APPENDICES

Appendix 1.

Detailed information about interviews:

Jacob Bergson, interview in person. Berlin, Germany 29.3.2024

Kasper Granroth, interview in person. Berlin, Germany 26.3.2024

Robbie Moore, interview held over Zoom. 7.5.2024

Ruban Nielson interview by email. Answers received 15.4.2024

Interview transcripts belong to Artturi Borén, artturi.boren@tuni.fi

Appendix 2.

Lilith & The Wildflowers – Anybody Else
https://open.spotify.com/track/26yvaz5h3Tm2HgXjs5EUrW?si=b5835b062eaa4
10d

Appendix 3.

Lilith & The Wildflowers – Surrender

https://open.spotify.com/track/6IOPeZjlyKLd5H7BI5mNQ6?si=bb25ebb2f2d544