



STUDIO ENGINEER PROGRAMME NOTES

Luc Thomas



Table of Contents

Track 1 – “Stop This Train” – Sarah Passmore	2
Track 2 – “Maintain the Funk” – Beatrix	3
Track 3 – “Free Mind” – State of Decay.....	4
References List:.....	6
Track 1 – “Stop This Train”:	6
Track 2 – “Maintain the Funk”:.....	6
Track 3 – “Free Mind”:	7

Track 1 – “Stop This Train” – Sarah Passmore

Track/artist background:

Sarah Passmore is a singer and guitarist from Swansea. They generally make songs in a folk/country style. Her songs and performances are centred on Her singing and guitar playing, with performances often just consisting of vocals and guitar (Mother bear, 2017) and when she does have other instruments in her performances, they are usually background accompaniments, not the central focus (Cornerstone Sessions, 2015). I took this into account when I mixed the track.

Mixing:

A number of my mixing choices were influenced by the genre of the track which is country/Americana. Through my research, I found that the most important element of country songs is the vocals and lyrics (Messite, N, 2018) and therefore I pushed the vocals upfront in the mix by mixing them to be the loudest track and keeping them in the centre, with nothing else interfering in that area. I also found that authenticity is central in country music (Owsinski, B, 2018) and so I left in some of the breaths before vocal lines to add a more real and energetic sounding vocal. In addition, I found that rhythm is often not the driving force of a song in country (Kent-eh, 2014) and therefore I panned the cajons away from the centre. In addition, I personally associate country with summer, so I wanted to bring a summery atmosphere to the track.

I used the song, “As Ugly as I Seem” (The White Stripes, 2005) as a reference track to influence how I panned the different instruments in the track. I followed the reference track by panning the main components, left, centre and right, with the percussion panned to the left, the vocals in the centre and the guitar on the right with the bass slightly off centre to allow space for everything in the mix. This was also influenced by my knowledge of Sarah Passmore and the country genre; the vocals are the most important part, and the other instruments are just accompaniment, so I tried to reflect that in the mix.

Personal mixing decisions/thought process:

Vocals	• I used gain automation on the vocals as they were uneven with some very quiet mumbled vocals and vocals that trailed off, so I used automated gain to bring out the more subtle vocals. • There was lots of harsh sibilance and upper frequencies on the vocal line at 2:04 not present on the rest of the vocals, so I created a new track and added additional EQ to cut out those frequencies and make the vocals sound more uniform. • I applied reverb automation on the vocals at 3:28 to add an extended reverb tail, which lets the vocals ring out more rather than stopping abruptly and creates a lush harmony and atmosphere with the instrumental.
--------	---

Drums	I boosted the upper frequencies of the cajons to emphasise the train-like rhythm of the higher parts as it fits thematically with the title and lyrics and creates a breezy atmosphere.
Bass	I used straightforward EQ and compression to add low-end punch and clarity to the bass part. Cut around 80 hz to not interfere with cajons. Not too much punch in the low-end in order to not detract from the breezy atmosphere.
Guitar	I used straightforward EQ and compression to add presence, brightness and to even out the sound.
Overall	I applied soft compression and serial compression on the instruments and output track as this creates a more natural, less processed sound (Computer Music) which fits with the stripped-back, personal arrangement and the country genre. Room mics were turned down as they muddled the mix and I wanted it to be clean and summery.

Track 2 – “Maintain the Funk” – Beatrix

Track/artist background:

Beatrix is a DJ and Producer from Swansea. Their songs are in the hip hop genre (Dj Beatrix, 2012), more specifically boom bap, which is a genre described as, “Raw, gritty hip hop that normally features a DJ scratching” (Mlynar, P., 2013) which I took into account during my mixing.

Mixing:

To reflect the hip hop and boom bap genres, I used delay on the vocals instead of reverb as that is a technique commonly used in hip-hop (Produce Like a Pro, 2021) and creates a vocal texture that blends well with this type of sample-based instrumental. Also, due to boom bap’s focus on drums – The name is a “phonetic evocation of the sound of a kick and snare (Reynolds, S., 2009) I used snare side-chain compression on the samples to allow the drums to cut through the mix and have more presence, especially in the instrumental sections.

Personal Mixing decisions/thought process

Vocals	- I employed heavy compression on vocals to add aggression and presence (I used heavier compression on the vocal part from 2:36 – 3:26 to emphasise the percussive ‘K’ and ‘P’ sounds of that vocalist). - I used overdrive on alakazam vocals to smooth out and add saturation as they had an unpleasant timbre that didn’t cohere with the instrumental. Vocals panning to reflect the lyrics at 1:07, to add more energy and a sense of fun/humour.
--------	--

Drums	I utilised parallel compression on kick and snare samples, partially sent to slammed compressor bus to add grit so that it cohered with the blown-out sound of the main drum loop.
Samples	I used panning on horn (can be heard at 0:38-0:41) and record scratch samples using time-based tremolo to add movement and energy to the track that might be lost from the lack of live instrument recording.
Bass	- I cut out popping sound in the bass to remove unwanted noise cluttering the mix. - I cut a lot of the bass in EQ as there were a lot of unwanted frequencies and it had an unpleasant booming timbre, so I reduced it and compressed it significantly to where it just provided additional rhythm and pulse, e.g., the bass hits at 2:36.
Overall	I didn't use limiters or heavy compression on output in order to not take energy away from the track and also because it is a DIY genre that is not usually super polished.

Track 3 – “Free Mind” – State of Decay

Track/artist background:

State of Decay is a punk rock band from Swansea. The punk rock genre originated in the 1970s and was characterised by a DIY aesthetic, simple two-three chord songs due to lack of musical training and typically political lyrics (Cooper, R, 2018). State of Decay follows these conventions closely, with power chord progressions and explicitly anti-establishment and imagery lyrics (State of Decay, 2014) and therefore I considered these conventions when I was mixing.

Mixing:

From my research, I found that punk production is often relatively dry, with little reverb (jrob1977, 2016) and therefore I used a small room reverb mixed low, to add sense of space and cohesiveness to the mix but trying to avoid the reverb having too much presence and washing out or muddying the track.

I used the song “Heartworm” (Oh Sees, 2019) as a reference track and took inspiration from its blown-out, heavily compressed drum sound (especially the cymbals) and distorted vocals with delay, so I used similar heavy compression on the drum bus and distortion on Overheads to add aggression and energy. On the vocals, I employed overdrive to add saturation and presence and used delay to create a live feel. I recognised that these elements could be seen as too drastic or extreme and therefore I created a cleaner, less processed version as an alternate mix.

Personal Mixing decisions/thought process:

Vocals	• I panned the vocals to left, right and centre to create a communal feeling of a band playing, which also creates a sense of unity and satisfaction when the vocal lines, which lack in impact when panned significantly away from the centre join together on the refrain (e.g. at 0:23), creating a fuller sound than the vocal parts by themselves.
Guitar	• There were two mics for each guitar so in EQ I boosted the higher frequencies, cutting low frequencies on one mic and vice versa to the other mic to create one, full, even guitar sound.
Bass	• I used straightforward EQ and compression to add presence, brightness and to even out the sound.
Drums	• snare side-chain compression on the guitar buses to let the snare cut through, ensuring that that the rhythm and pulse of the track isn't obscured by the layers of guitar and bass distortion.
Overall	• I left in some of the band warm-up and count-in at the beginning to create a live feel/sense of authenticity, linking to the DIY aesthetic of punk. It also builds and anticipation and energy before the song kicks in.

References List:

Track 1 – “Stop This Train”:

1. Computer Music, ‘How To Use Serial Compression’ Musicradar, Available at: <https://www.musicradar.com/tuition/tech/how-to-use-serial-compression-628804> (Accessed: 10/05/21)
2. Cornerstone Sessions, (2015), [Video] ‘The Cornerstone Sessions #01 – Sarah Passmore’ Available at: <https://youtu.be/w9ZRzCF1Xng> (accessed: 13/05/21)
3. Kent-eh, (July 14, 2014), ‘Mixing Country for the First Time, Any Tips’ [Online Forum Post] Available At: https://www.reddit.com/r/livesound/comments/2amich/mixing_country_music_for_the_first_time_any_tips/ciwnfhi/?utm_source=reddit&utm_medium=web2x&context=3 (Accessed: 10/05/21)
4. Messite, N, (2018), ‘15 Tips for Mixing Country Music with Grammy Winner Julian King’ Izotope, Available at: <https://www.izotope.com/en/learn/15-tips-for-mixing-country-music-with-grammy-winner-julian-king.html> (Accessed: 10/05/21)
5. Mother Bear, (2017) [Video] ‘Sarah Passmore – A Case of You’ Available at: <https://youtu.be/U4b8hPHDkfU> (Accessed: 13/05/21)
6. Owsinski, B, (2018), ‘Mixing Nashville in The Box With Influential Engineer Ed Seay’ Available at: <https://bobbyowsinski.com/2018/02/14/ed-seay-mixing/> (Accessed: 10/05/21)
7. The White Stripes, (2005) ‘As Ugly As I Seem’, *Get Behind Me Satan* [CD] Third Man Records, Available at: <https://youtu.be/rmeGX8JXrwA>

Track 2 – “Maintain the Funk”:

1. Dj Beatrix, (2012), ‘Give it Some feat. The Doozer’ Available at: <https://soundcloud.com/dj-beatrix/give-it-some-feat-the-doozer>
2. Mlynar, P., (2013), ‘In Search of Boom Bap’, Red Bull Music Academy, Available at: <https://daily.redbullmusicacademy.com/2013/11/in-search-of-boom-bap> (Accessed: 12/05/21)
3. Produce Like A Pro, (2021), [Video] ‘5 Hip-Hop Vocal Mixing Tricks from Paul “Willie Green” Womack!’ Available at: <https://www.youtube.com/watch?v=7RPymX8W7bg&list=WL&index=14> (Accessed 1/05/21)

4. Reynolds, S, (2009), '*The Cult of J Dilla*', The Guardian, Available at: <https://www.theguardian.com/music/musicblog/2009/jun/16/cult-j-dilla> (Accessed 12/05/21)

Track 3 – “Free Mind”:

1. Cooper, R, (2018), '*The History and Evolution of Punk Rock Music*', Available at: <https://www.liveabout.com/history-of-punk-rock-2803345> (Accessed: 14/05/21)
2. jrob1977, (February 22, 2016), 'Need some tips for recording/mixing a punk band' [Online Forum Post], Available at: https://www.reddit.com/r/audioengineering/comments/471nkq/need_some_tips_for_recordingmixing_a_punk_band/d09quun/?utm_source=reddit&utm_medium=web2x&context=3 (Accessed: 14/05/21)
3. Oh Sees, (2019), '*Heartworm*' *Face Stabber* [CD], Castleface Records, Available at: https://youtu.be/L_131ULbRhY
4. State of Decay, (2014), [Video], 'State of Decay – Lies (Promo Video)', Available at: <https://youtu.be/z4-aURNrA74>