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Recording Skint.

How Recording with Limitations and a Low Budget Can Influence the
Recording Process Between Producer and Artist.

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A thesis submitted to the University of Huddersfield in
partial fulfilment of the requirements for the degree of
Master of Arts.

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Abstract.

The role a music producer brings to recording has been studied extensively by many academics; however, previous literature discusses the integral essence of recording and briefly investigates the role a music producer has whilst recording on a low budget/limitations. The main objective of the research presented here is to examine and demonstrate what can be achieved through the use of a limited budget and the usage of limitations.

Introduction.

This thesis is concerned with studying the effects of how a limited budget and creative limitations can influence the recording process between the music producer and the artist. There has been more recent research on the role a music producer has with regards to recording music. While that research may have discussed the broader aspects of the music producer, less attention has been given to what the producer can do when working with a very limited budget in the modern age. This research includes a literature review that discusses the relatable topics and questions within my study. These topics include; how does limitations affect the role of the music producer and the artist? How these limitations contributed to the rise of DIY culture? How DIY culture gave rise to new musical revelations? And finally, how does this all relate and impact the recording process and working relationship between the producer and artist? In addition to a literature review, I have also included a record review, which showcases examples of artists/producers using limited budget/limitations for the benefit of their records. An interview from music producer Rob Schnapf was also conducted in order to gain a professional industry standards opinion on the study. Part of this thesis is practical with a portfolio of fourteen tracks and the other is an in depth analysis on how the recording process of the tracks were recorded and produced. These tracks showcase the development of the recording process and document how the producer and artist work together under these restraints. I recorded myself, two solo artists and a five-piece jazz band. These recordings were recorded wherever and whenever space was available with limited use of equipment. The styles of these musicians range from acoustic, lo-fi, rock, jazz and country.

Literature Review.

The influence limitations has on an artist is a key necessity in the creative process of making great art, whether it be literature, film, dance or music. Porter, (2014) describes the use of limitations as freeing your creative abilities and spurring your creative output. She explains that “as frustrating limitations might be at first, they truly are assets. I have worked with many designers who impose a limited colour palette on themselves. At the end of the day, a good design is about good ideas that are executed skilfully, not about the size of a budget, time or other resources.” (Porter, p. 107). When discussing the concept of working within a financial limitation, Burrows (2010) suggests to identify what “the context you are in financially, and in terms of infrastructure, allows you to do? Your context will influence what happens, for good or bad; recognising your limitations is part of the process.” (Burrows, p.51).

When discussing the theme of financial limitations, the occupation of ‘music producer’ must be treated like any other job that has an understanding of working hours and finance. These are integral to any working position and as such, should be applied in relation to music producers. Financial issues can have an impact on the livelihood of a producer, just like it can affect any other job. With the rise of affordable digital recording rigs and easier programming software, Leyshon (2009) highlights the democratisation of this technology as a significant point in the downfall of recording studios. He explains “the end of the twentieth century and beginning of the twenty-first century saw a significant amount of professional studios close due to various financial challenges.” (Leyshon, p. 1326). Such studios had been the sole work place for many music producers whose skills acquired there were now easily accessible, challenging the financial justification and skill the role of the music producer had to offer. Financial challenges from the artist’s perspective can also impact the music producer. In an interview with music producer Richard Formby, Martin (2014) concludes that Formby’s views relating to finance and the artist, can be seen as an ethical dilemma. He explains that Formby “is questioning the producer’s ethical right to take a royalty percentage from an artist in the early stages of their career considering the producer has already been remunerated for their time. Formby is clearly demonstrating a form of selfless approach towards his income by recognising the difficulties of being an early-career artist in such an economic climate. He is also, in effect, questioning the ethics behind the standardised practice of distributing royalties alongside a production fee and therefore showing a form of support for the artist/s.” (Martin, p. 206).

The setting of where you record your music can play an influence on how the musician defines their own musical personality. Zagorski-Thomas (2014), discusses that the home studio and the musician played a significant role in today's musical users. "Probably the biggest long term-influence on musicians as users of recording technology has been the much broader global configuration of people as computer users". (Zagorski-Thomas, 2014, p.200). The significance of the rise in computer users has expanded the notion of recording music into an easily accessible marketplace. Now it is possible to obtain free recording software on your smartphone with only what you paid for your phone as a budget.

For both artist and producer, the increasing accessibility of musical resources gave rise to the DIY ethos of self-recording and producing.

The term 'DIY' has its roots in society, culture, economy and politics. DIY is a politics of possibility, where activism is also a post capitalist politics for what comes next (Gibson-Graham, 2006). It is a politics of prefiguration ('be the change you want to see', as Gandhi said) which aims to build achievable future aspirations in the present through an accumulation of small changes (Birch-Mykhnenko, 2013). Sarah Lowndes (2016) suggests that activities of DIY possess two key characteristics: "[1] Initiated by creative practitioners (artists, musicians, writers, publishers, curators) – that is, not commissioned or overseen by a government body, a bank or a corporation. Indeed, DIY activities are often conceived as community-based alternatives to existing hierarchical power structures. [2] Not wholly commercial – that is, guided by non-profit motivations. DIY activities are often carried out using economy of means and materials, and exhibit what could be called an aesthetic of necessity." (Lowndes, p. 14).

An early pioneer of the DIY aesthetic in record production was by John Lodger. In the late 70s, the London based advertising jingle producer had just bought an 8-track analogue tape recorder and was asked to record a demo for newly formed anarchist punk band, Crass. Lodger's work on the album *The Feeding of the 500* (1979) is notable for its distinct lack of editing, ambience or any time based effects processing, resulting in an abrasive, upfront and 'raw' sound. After recording *Feeding of the 500*, Lodger had become the alternative recordist for a generation of alternative and independent musicians (Bennett, 2018). The 'under production' of his work helped establish a sonic signature for Lodger. He went on to produce all of Crass's follow-up albums, whilst establishing the label of Crass Records. Now punk musicians were experimenting to make their recordings sound 'unfinished' or better still, hardly recorded in the first place.

Andy Bennett and Paula Guerra (2018) discuss, in general, that the DIY aesthetic can be seen as

evolving “to a level of professionalism that is aimed towards ensuring aesthetic and, where possible, economic sustainability.” (Bennett & Guerra, p.7). This DIY aesthetic has been integrated with Fayte’s (2008) and Edstrom’s (2010) work on presenting an informative handy guide book on recording with a low budget. These present the reader with an instructional guide suggesting appropriate production gear/equipment, setting tutorials on recording/mixing techniques and how to distribute your music online. However, these suggestions do not guarantee making great art. “Recording is an art – not just a craft or skill set – is evidenced by the many poor, or just unimaginative, recordings that are being made despite the use of the latest or most expensive gear. Even using the best equipment, and knowing how it operates, is not enough to guarantee a good recording. To expect this would be like expecting that simply by buying the best paints, canvas, knives and brushes... anyone can paint a masterpiece” (Shirley, n.d).

Luvaas (2013) comments that the meaning of DIY through society has become much broader than it once had with fiercely independent circles of punk bands and zine writers. “Among other things, DIY is now a home improvement channel on American cable television, a popular title for a now series of large-print illustrated ‘self-help’ books, a marketing term for Toyota’s highly customisable Scion automobile, a regular feature in design and decoration magazines and a catchphrase on hundreds of business brochures. DIY is much the ethos of management conferences as it is of garage rockers and anarchist activists.”

The relationship between the producer and artist is perhaps, the most critical element in the recording process. “A producer can be closer to the artist than anyone else in his or her life during the weeks or months they spend together making a record. The intimacy they share is largely unspoken; it touches raw nerves, and if the producer is especially good at what he does, helps peel back the anxiety and fear that dwells within every performer” (Ramone – Granata, 2007).

Establishing a good working relationship is essential in guiding the artist’s vision and making it be the best possible result the artist could have hoped for. Burgess, (2013) explains that a key role in a producer is eliminating any sense of hierarchy. “There is no ‘best’ type of producer. Different artists and projects have different production needs, and the best producer is the one that fits those requirements most closely.” (Burgess, p. 8).

This is significant when applying limitations and budget costs, as a producer must always be there for the artist whilst also trying to “figure out how you can take the money and spread it out for as long as you need to make your record.” (Schnapf, 2019).

Record Review.

The following section looks at key artists/producers and the use of a limited budget/limitations within their records.

Artists and producers have always peaked my interest in how they recorded their albums, in particularly those who have used a limited budget and equipment to their advantage. The process of having a limitation or restriction can force the artist to use their limited resources as their greatest strength. When Bon Iver recorded *For Emma Forever Ago* (2007), it began with Justin Vernon being isolated in a hunting cabin in North-western Wisconsin. Using only a Shure sm57 dynamic microphone and a four track at first, “he took them up the cabin’s popple plank stairs to an upstairs room which would become his studio” (Beaumont, 2013). Later, his recording setup consisted of the sm57, Pro-Tools “Mbox” digital-audio interface and a laptop loaded with Pro Tools “Mpowered” DAW that was included with the purchase of every new “Mbox” interface. Having only a limited equipment/budget at his disposal, this album is an example on how the limitations of one microphone can be used to achieve a full sounding, multi textured album. This is discussed further in Amanda Lewis’s: *Microphone Practice on Selected Songs from Bon Iver’s For Emma, Forever Ago* (Lewis, 2011).

Records such as, Iron and Wine’s *The Creek Drank the Cradle* (2002) and Hiss Golden Messenger’s *Bad Debt* (2010) utilise recording from their homes and in the case of *Bad Debt*, recording “in the dead of the North Carolina winter on a cassette recorder at his kitchen table, playing softly so as not

to wake the household” (Pitchfork, 2014). These records have a lo-fi ‘demo’ quality to them, emoting an atmospheric intimacy surrounding the tracks. The process of recording Bruce Springsteen’s *Nebraska* (1982) began with Springsteen being frustrated of spending all his money on studio time. “I sent my guitar tech out to get a recorder, a little less lo-fi than a cassette recorder I usually used to lay down my new song ideas. I needed a better and less expensive way to tell if my new material was record-worthy” (Springsteen, 2017, pp. 299). The tracks were recorded on a Japanese Tascam 144 cassette recorder. Fast forward to a few months later and Springsteen was ready to re-record the tracks with the band for a cleaner hi-fi sound. However, Springsteen was frustrated at how the newly recorded tracks were inferior to the demos. Springsteen went up to Toby Scott, the engineer for the recording sessions and said “There’s something about the atmosphere on this tape. I want it to sound like this. Can’t we just master off it?” (Milner, 2011). Eventually, after several master engineers, the record was mastered from the demo cassette tape.

Sometimes the decisions made leading up to the release of a record sounding ‘lo-fi’ can be mistaken in the public eye as an artistic choice and technique. Discussing the making of the experimental rock lo-fi album *Mellow Gold* (1994), the record’s co-producer Rob Schnapf argues that, “The whole lo-fi thing is a misnomer in a way. I don’t think anybody sets out to record lo-fi. We set out to record with what we have to make a piece of music. Only later did lo-fi become an artistic aesthetic because people liked the songs and feelings that certain records had. The low fidelity then got associated with what made them cool. *Mellow Gold* had its share of guerrilla recording but I’m not sure we should call them techniques.” (Schnapf, 2011).

An example of an album that was a direct retaliation to the complexity of recording music was Link Wray’s 1971 self-titled album *Link Wray* (1971). Recorded at Wray’s own Maryland studio, known as the “Shack Three Track” (as it was identified in the hand-painted legend on its weather-scarred walls) in Accokeek. Opting to record the entire album using only three tracks was seen, by Wray, as a return to simplicity in the music. As *Billboard Magazine* (1971) wrote “Wray foresees a reaction against the 16 and 24 track productions, considering that the music put down becomes mechanical and head music, too planned out”. Wray’s brother, Ray Vernon and long-time friend, Steve Verroca carried out the production work on the album. Recorded in a seemingly primitive little studio setup, it was furnished with state of the art equipment comprising of top rate Neumann microphones and a large pair of Altec Lansing studio monitors. However, the gear had been poorly housed in a room that was little better than a lean-to. As a result, co-producer Verroca was faced with challenges of using the damaged equipment while attempting to commit the band to tape. In an interview with *Uncut magazine* (2015) he recalled “There was no buttons, no high, no low, no bass, no treble, just

one way: boom! The sound was so huge that it was impossible to record. The amp leaked into the drum [and] piano track. So we decided to put the amp outside in the yard. The only way we could do that was to mic it through the window. We were trying different things.” Another issue with the recording was that the piano was completely untunable. “The piano was all rusted, because the shack in winter leaked. We had all blankets all over the place and we miked the piano under the blankets and we started playing. The problem was- the piano was untunable. We had to tune to the piano, so we were all out of tune! That’s how we got that sound.” The battered house piano was complemented by drummer Doug Wray’s simple, thumping drumming; at times, he or Verroca would alternate on pushing the songs by stomping on the studio floor and scraping hand-held percussion instruments.

A record with a lo-fi aesthetic can sometimes convey a nostalgic feel surrounding the musician’s work. The Moldy Peaches’ self-titled debut album (2001) recorded the lo-fi album on a four track cassette recorder with limited equipment and budget. In 2002, music magazine PopMatters, discussed how the album was the apotheosis of lo-fi. The nostalgic value and significance of recording with old ‘raw’ technology was perceived to be better than the newer hi-fi recording technology. He described this as the ‘R. Crumb Effect’ relating to the American cartoonist and musician whose work displays a nostalgia of American folk culture of the late 19th and early 20th centuries. “When modernity gets you down, you can put yourself on the cutting edge by fetishising ancient styles and technologies, and your antithetical influence will start making its mark on popular tastes.” (Desrosiers, 2002).

As well as nostalgia being generated by music itself, there is also a nostalgic desire for the technology used in creating music. Technostalgia (Bijsterveld & van Dijck, 2009) discusses why “people treasure the sound of analogue amps or worn out electronic guitars in the digital age.” (pp.19). Artist such as Ariel Pink have used the cultural significance of the cassette tape and his music is regarded as a growing trend of ‘Hypnagogic pop.’ Niemeyer (2014), explains the “the hypnagogic trend, represented by artist like James Ferraro and Spencer Clarke (The Skaters) or Ariel Pink, belongs to the growing propensity to retro-futurism in contemporary pop.” (p.77). The popularity for emulators and DAW plug ins to obtain that ‘old school/nostalgic sound’ is certainly in high demand, with many artist and producers wanting to embellish their work with a nostalgic touch. However, the digital representation of these is often seen as “simply a con job, and the scorn with which they have been dismissed by older generations of audio professionals is often cast in negative comparisons to “the real thing.” (Williams, 2015).

While using a cassette tape can just as well create a lo-fi aesthetic, digital lo-fi was now a ready option. Car Seat Headrest's Will Toledo began his musical career recording his vocals into a cheap computer mic in the back of his family's car because he felt embarrassed to sing in his parent's house. His early 'numbered' albums 1 (2010), 2 (2010) and 3 (2010) were released independently onto the music site, Bandcamp. When asked about being influenced by lo-fi recording by WestWorld magazine (Roberts, 2016), his response was unique in that he was using a mixture of digital lo-fi and 'old school' lo-fi. "I was using lo-fi computer equipment: a cheap computer microphone and free computer software, Audacity. But I was also trying to achieve the older lo-fi sound — more of the tape sound. It's sort of a blend between digital lo-fi and a pastiche of old lo-fi music."

Method.

Qualitative Research

Qualitative research was the chosen method for this thesis. Silverman (2010) defines qualitative research as a choice the researcher chooses that suits their research question. Taken from a student example (p.11), Karyn McKinney says “I’ve always found qualitative data more interesting than quantitative data. Beyond that I believe that qualitative data is often more suited to provide me with the answers to questions I’m interested in. I find that my interests usually lie in ‘how’ questions rather than in ‘how many’ questions.” With my project being part practical and part analytical, the appeal of researching a qualitative ‘how’ question, was more interesting to me than researching a quantitative based question. As part of my qualitative research, this thesis includes an interview with music producer Rob Schnapf.

Rob Schnapf is an American Grammy award winning record producer and musician who has worked with critically acclaimed artists such as Elliott Smith, Beck, Guided by Voices, The Vines, Foo Fighters, Kurt Vile, Cass McCombs and Booker T. Jones.

In the early 1990’s, Schnapf, alongside Tom Rothrock and Bradshaw Lambert, founded the independent record label Bong Load Custom Records. In 1994, they recorded and produced Beck’s 2x US platinum breakthrough album *Mellow Gold* which included the single “Loser”. Loser became a global hit after being re-released by Geffen Records in 1994. The single went on to be included in Rolling Stone’s 500 Greatest Songs of All Time (2011). The success of *Mellow Gold* was followed up by another collaboration with Beck, producing and a mixing the track “Ramshackle” from his critically acclaimed 4x US platinum album *Odelay* (1996).

From the 1990’s to early 2000’s, Schnapf co-produced, mixed and recorded on three of Elliott Smith’s albums, *Either/Or* (1997), *XO* (1998) and *Figure 8* (2000). All albums garnered critical acclaim when released and have since been listed as some of the greatest records of those decades, placing No. 42 on Rolling Stone’s 100 Best Albums of 2000 (2011) and No. 149 on NME’s 500 Greatest Albums of All Time (2013). In 2009, Schnapf won a Grammy for Best Contemporary Instrumental

Album (2009) co-producing with Booker T. Jones on the album *Potato Hole* (2009) and would receive a second for *The Road from Memphis* (2011).

Most recently he has produced, recorded and mixed for artists Kurt Vile on his two albums *B'lieve I'm Goin Down* (2015) and *Bottle It In* (2019) and Cass McCombs's *Mangy Love* (2016).

Rob Schnapf has both the experience of working on lo-fi low budget recordings and big budget hi-fi productions which made him the perfect choice for my project in gaining a professional understanding of working with a low budget. Generally regarded by artists as a very supportive guy, an interview with Mixdown magazine (2017), Matt Caughthran of the hardcore punk band The Bronx said this to working with Schnapf, "He's always the kind of guy who's right here whenever you need him. Whatever sound you're after, whatever idea you're chasing, he'll be the one who gets it over the line by going that little bit extra for it. He makes every song feel special." In an interview with

AudioTechnology (2016), Kurt Vile discussed when making *B'lieve I'm Goin' Down* that "'Pretty Pimpin' definitely had the most help from a producer. [Schnapf] is just a really good listener... the unplanned producer who called out of the blue, was the difference between a nightmare recurrence and getting the song on the record."

When proposing the idea of working within a limited budget, the first issue was establishing what a limited budget represented. I chose to only use my equipment that was available to me or sought out any additional equipment by appealing to friends. This used the DIY aesthetic, commonly found in low budget recordings. Using constructive limitations, my project was created to establish a creative and honest representation of using a limited budget. I analysed my data through explaining how my portfolio of tracks were recorded and how the process related back to my question. I chose to do a portfolio of tracks as this was the most efficient and clearest way of showcasing them.

Recording Set Up

The following is a list of all recording equipment used in the portfolio of tracks.

- Condenser Behringer C1 Microphone
- Dynamic Peavey Pvi 2 Microphone
- Dynamic Realistic Highball 7 Microphone:
- Sony TCM-939 Portable Cassette-recorder
- UX2 Audio Interface
- Behringer UMC404HD Audio Interface
- Laptop with DAW (Cubase)

How I came into possession of the equipment was sourced from multiple places. While some were received as gifts or bought by myself (Condenser C1, Realistic Highball, Behringer UMC404HD and the laptop), the Peavey, the UX2 and the cassette recorder were sourced by

friends and family. The DIY aesthetic should see yourself seek out equipment from friends, musicians, family and pawn shops as this commits you to actively search for whatever you can find/inherit using a low budget to set the limit.

A unique method was created when recording the vocals and certain instruments by using a wooden bird box to act as a portable isolation/vocal booth. The chosen microphone would situate inside the box (padded with socks for extra sound absorption) attached to a microphone stand. This also acted as a natural reverb space. In some cases, as an artistic choice, the vocals were recorded with a microphone and the cassette recorder simultaneously. The two vocals were then combined together as one in the mixing process, creating a blend of lo-fi and hi-fi quality.

The following section is a list of the fourteen tracks, the order they appear and where they were recorded. Several basements and bedrooms from friends and musicians were used whenever they were available to record in different spaces.

Artist	Track	No.	Location of recording
Calum Bowling	Ciders & Jigsaw	1	Bedroom
	Untitled 1	2	Bedroom
	Gloria	3	Bedroom
	Dirty Halo	4	Bedroom/Basement
	Dog Walkin	5	Bedroom/Basement
	The Round	6	Bedroom/Basement
Oliver Bray	Short and Sweet	7	Basement
	Run	8	Bedroom
Taj Abbott	Realise	9	Basement
	Angels Fall	10	Living Room/Basement
	Dumpster Diving	11	Living Room/Basement
Back Pockets	Minor Swing	12	Living Room
	Monsters Inc	13	Living Room
	My Funny Valentine	14	Living Room

Analysis

The following section is an in depth analysis on the recording process between myself (producer) and the artist/s.

Artist: Calum Bowling (Tracks 1-6)

Ciders & Jigsaws

A rather short, simple and catchy song with rock/pop influences. The process of recording this track combined both lo-fi and mid-fi production. The lo-fi aesthetic was chosen as an artistic intention on the vocals (recorded on the cassette recorder) to expand the dynamic range of the track. In keeping with the playful and light hearted tone of the track, the drums and percussion were recorded on a child's miniature toy drum kit using both the dynamic microphones and the cassette recorder. This allowed for cassette tape to add some warmth to the mix. The electric guitar and bass were recorded directly into the interface whilst the acoustic was recorded with the condenser microphone.

Untitled 1

This track was very reminiscent of the early lo-fi recordings. The recording is very quiet due to the constraints of recording late in the evening. The atmosphere was crucial when capturing the recording as the song is very melancholic and relaxed. This required to be recorded in a dimly lit room during the evening so as to remain quiet and capture the delicate feel of the track. The vocals were recorded and over dubbed using both the Peavey and Behringer microphones. To optimise the isolation of the vocals, they were recorded in a small closet.

Through the use of experimentation with microphone placement, the drum/percussion was recorded by combining the bass drum and cymbal of the toy drum kit and the tapping of a plastic bin lid, acting as a snare. This further added to the lo-fi and DIY aesthetic of using whatever you can find

to assist in creating the sound you want.

Gloria

A very limited recording featuring vocals, acoustic guitar and a Casio mt-70 keyboard. The majority of the track was recorded on the cassette recorder aside from the vocals, being recorded by the highball dynamic microphone through an amp. The final section used a mellotron plugin played on a midi keyboard. The mellotron section was also trying to emulate a lo-fi aesthetic through digital manipulation. The track was deliberately made to sound dated and brittle as the lyrics loosely reference the film, *They Shoot Horses Don't They?* (1969). Recording the majority on tape was reminiscent to the works of Ariel Pink and R. Stevie Moore and conveyed a nostalgic feel to the song.

Dirty Halo

This track was recorded live in a basement trying to replicate a recording done on an 8 track cassette recorder. The basement was a small space with an upright piano and a drum kit consisting of a snare, high-hat and ride cymbal. The bass, guitar and drums were recorded live with some of the vocals being overdubbed in a closet with the cassette recorder. It was important to capture the recording space and the closeness of the room as it reflected the delicate feel of the track whilst adding an analogue organic substance in the recording. The process of emulating the track to sound like an 8 track was done through digital plugins which included several tape/reel to reel emulators.

Dog Walkin

The majority of this track was recorded in the basement with the vocals and lead guitar being overdubbed in the bedroom. This was to demonstrate that budget limitations did not mean reduced sound quality. The intention of the track was to record a crisp clean recording with a non-lo-fi aesthetic involved. To do this, the drums were recorded with all microphones in a padded section of the basement with the condenser acting as a room microphone for natural ambience. The drums were the first to be recorded with a rough guide track created by the bass and guitar to act as a guide track for the drummer. The bass and guitar were then re-recorded with the now recorded drums. The Peavey and Behringer microphones were then mic'd to the bass and guitar's amp. The final recording was the vocals and was done using the bird box method in the bedroom.

The Round

Similar to 'Dog Walkin', this track utilised the same recording methods with the vocals/backing vocals and lead guitar being recorded in the bedroom. The decision in making the drums quiet in the mix added to the laid back tone of the track juxtaposed by the distorted electric lead, gradually building up to an explosive crescendo.

Artist: Oliver Bray (Tracks 7-8)

Oliver Bray (Olly) is a local musician around the Huddersfield circuit who regularly plays at various local venues and open mic nights. My relationship with him started when I first came to Huddersfield and was playing around the local scene. We soon became close friends as I became a member of his band for a brief period. Olly is a very experimental and open minded musician with a great sense of fun in his music and character. We immediately struck a chord. Knowing that he was looking to record a few tracks and I asked him to take part in this thesis and he enthusiastically agreed. He had already had prior recording experience in a studio but told me he felt the atmosphere was too uptight for his natural laid back attitude. I suggested my limited style recording method and showed him my bird box method of recording the vocals. He loved it and that sealed the deal to record him.

Short and Sweet

Olly's first track, unnamed at the time, began with him sending me an acoustic demo from his phone to give me a rough idea of the song. After meeting up one night we talked about different approaches to record the song and how we wanted it sound. Relating to the 'laid back' nature of the lyrics and the overall steady ease of the song, I suggested a 'warm' simple mellow recording similar to how The Velvet Underground had recorded their track "Oh sweet Nuthin" which happened to be one of Olly's favourites as well. The next thing to establish was how to set the mood and atmosphere for the perfect recording. We went down to the basement and set the lights low and set up some fairy lights to create a relaxed ambient mood. I applied this technique like I would to create the appropriate mood for a vocal performance. The dimmed lights and cosy atmosphere relaxed the both of us and alleviated the pressures of recording. The drums were recorded live while the bass was recorded directly into an interface onto the DAW. The bass itself was old, cheap and could only control volume as the tone knob didn't adjust at all. We also decided that the bass didn't sound right through my small Raven guitar amp so we decided not to record it live but instead through the interface.

Easily the most fun and experimental part of the recording process was recording the vocals. Taking influence from the DIY aesthetic of recording, I decided to create my own pop-up vocal booth. Similar to how Sylvia Massy (2016) had created a make-shift isolation booth for System of a Down's Serj Tankian at Rick Rubin's home studio using "a large camping tent, tall enough to stand in" (Massy, p. 71), I inverted my blow up couch and used my bed screen to create the vocal booth (with my duvet thrown on top to complete the isolation of the vocals). With Olly referring to it as 'the pillow fort', the vocals were recorded with a condenser mic and a cassette recorder, capturing both a hi-fi and lo-fi vocal take simultaneously. After several unsuccessful vocal takes, I wasn't satisfied with his performance and noticed he wasn't emoting his natural delivery the song was requiring. We took a break from the vocals and I told Olly to smoke the spliff he had already rolled during the basement setup. From a collected interview, producer Matt Wallace (2016) discusses the importance of obtaining the best result from a performer whilst making the performer act as natural as they can be. "For me as a producer, sometimes you have to keep the booze and drugs away from people and sometimes you have to absolutely feed it to them. It's true. Just because you are going into a studio doesn't mean you should stop doing what you normally do." (Wallace, p. 87). I asked Olly, did you write the song while you were high? He said yes and I suggested he should be high whilst singing the song to get the best performance that would suit the feeling for the song. That was the perfect vocal take and the one that ended up on the record.

Run

"Run" was a unique and experimental track to record.

After the success of recording Olly's first track, he was keen to record his newly written one. We went up to my bedroom and he played me a rough acoustic version of the song. After asking for my feedback and suggestion on how the song should develop, I simply replied by saying "we've got to go full country on this." The style of country we agreed was similar to the folk-punk aesthetics of the Violent Femmes (1983). The difficult aspect of this was limiting to what was in my room for a full country sound. Accepting it as a fun challenge, we quickly recorded his guitar and the bass into the DAW. I suggested to modify my electric resonator with a sponge to dampen the strings, resulting in a characteristic 'twangy' banjo sound. From there, it was free reign to find whatever we could to complete the rhythm section of the song. By deciding to use whatever was around us, it gave us a naïve and unconventional approach which added a sense of spontaneity to the recording process. Often producers encourage a shift from normality when recording instruments in order to view the project from a different angle. Daniel Lanius, who produced Bruce Springsteen's record *Wrecking Ball* (2012), expresses that "if things start sounding too commonplace on people's normal instruments, then I just ask them to play another instrument, just come up with things from a more

unusual or stranger angle.” (Albin, p. 54). We ended up using makeshift shakers (made from silica gel bags), a toy drum kit and our own body percussion.

Artist: Taj Abbott (Tracks 9-11)

Taj Abbott (Tom) is a solo, mostly acoustic, singer-songwriter with folk, blues and soul influences. I had first seen Tom play at a local open mic night and was immediately drawn to his style of music. After he finished his set we jokingly acknowledged that each of us does a superior version of the others previous signature cover. Our friendship grew as I lived with him for my third year of my undergrad. I describe Taj as a musical encyclopaedia that has endless musical tastes from all around the world. Having spent some time homeless in New Zealand and travelling most parts of South East Asia and Australia, the general vibe he gave was a laid back ‘hippiesque’ musician with strong political beliefs. This influenced his music and song writing style with semi-autobiographical lyrics. He had seen my previous production work on my music and was eager to record an E.P. His financial states were pretty low and I suggested that I would record and produce it. Having seen what could be done with a limited budget he trusted my skills and agreed to be included in my thesis.

Recording the entirety of Tom’s E.P. was over the course of two weeks staying over at his in the middle of summer. I wanted to spend as much time together as much as a possible in order to gain a true understanding of how musically he worked. Just like how a painter would spend time observing and getting to know the subject for a personal painting, I wanted to know how to bring Tom’s music onto the canvas. In an interview from producer Jack Joesph Puig (2016), he discusses the difficulty of being only limited to the one of the five senses. “Keep in mind, we only appeal to one sense. We don’t have to visual like the film people. Somehow I need to make you see it. That you can visualise what the singer is talking about.” (Massy, p. 2). This was especially important for Tom as his song writing and performances told very vivid stories.

Angels Fall

Tom wanted this track to be a blend of James Brown funk and early psychedelic Pink Floyd, “Brown-Floyd” as he called it. We set up the drums in the basement and brought the amps for the guitar and bass and began to record live. Tom initially wanted to record the vocals live as well but after telling him too much bleed from the other instruments would ruin the vocals in the mix. I wanted to make sure his vocals were front and centre in the mix in order for the listener to hear his lyrics and story. We had asked a friend of ours to record bass with myself on drums and Tom on acoustic guitar. The

electric parts would be overdubbed after the main body of the recording was done. After warming up with a jam session, we were ready to record. The drums and bass packed a funky, heavy punch with Tom's guitar equally carrying the song with smooth licks. After listening back to the takes, Tom insisted on redoing them because he felt they were not loose enough and did not capture the correct rhythmic tempo. I suggested we all take a drink to ease ourselves. Back down in the basement to record, I knew we were on the right course watching Tom dance along to the recording sessions. The crucial element to the song was the vocals. We went to the living room and set the microphone up against the wall in front of a huge Bob Marley poster, at the request of Tom. As we recorded the vocals, I could tell Tom was focusing too much on his performance and the self-doubt he had was coming through his vocals. I suggested that he would be more comfortable singing with a hand held mic. Even though we were using a condenser microphone, I wrapped it up in foam and duct tape to reduce the handling noise. If any noticeable pops or bangs were present on the recording, it was relatively an easy fix in the editing section.

Realise

Realise was one the first songs we attempted to record together. The first time he played me the song was years prior to this project. I was over at his with an old four track I had found in a charity shop and he recorded a very rough acoustic demo. We got high and joked about making the song as epic sounding as possible, with string quartets, brass sections and an orchestras playing behind him. Eventually, he brought his influences of Bill Withers to me for the recording. He wanted it to be an intimate song which would directly be speaking to the audience. We began the recording with just the drums in the basement, finding anything we could to dampen the sound of the basement. Egg boxes, carpet even bedding – it was all on the table. I played the drums along to a click track recording of the acoustic tempo while Tom held up cue cards for me.

Dumpster Diving

The inspiration for this dirty, bluesy rock song was from Tom's own experiences of 'dumpster diving' looking for food when he was homeless in Australia. We wanted to reflect this gritty story by making this a gut-punching song. The drums were recorded live in the basement after recording the rhythm guitar and bass separately as a guide with a click track for the drummer to drum along to. Once the drums were recorded, the bass and rhythm was then re-recorded. In the original version of the song, Tom was unhappy with how the track suddenly just started with the crash of the cymbal without having any build up. I suggested that because the song had a bluesy feel to it to try a slide intro, similar to the opening of Loser by Beck. Tom was a fan of Loser and agreed to try it out. After a successful test, he requested that the slide lead would feature throughout the song. The slide guitar was by being mic'd with the Peavey dynamic. When the track was in the mixing stage we were still unsatisfied with the opening as it was missing something to stand out. The idea of making the opening sound lo-fi and 'old' came when Tom remembered an emulator I had used to add vinyl crackle to a song I had previously worked on.

Artist: The Back Pockets (Tracks 12-14)

The Back Pockets are a rotating jazz band, at the moment comprising of Rosy McQuillan (vocals), Rob Mear (guitar), Michael Ford (drums and percussion), Corey Howard (bass), Stephanie Reading (saxophone) and occasionally Carl Willis (guitar and trumpet). I had got to know all the musicians through the music circuit and had collaborated with Rob on a few projects. I had jammed with Rob with my harmonica one night and this led to an invitation for me to perform alongside the band as the unofficial harmonica player. I suggested to him to record an E.P. of the band as a point of reference for possible other gig opportunities. One night in a bar, I proposed to him the idea of recording the band as a mid-fi production which peaked his curiosity, having never heard of the term before. I explained that it was a combination of hi-fi and lo-fi recording blending the two methods together. He liked it and told the rest of the band which all agreed to the recording. For a smoother recording process, I asked the band if they could play the three best songs they could perform. They decided upon the jazz standards *Minor Swing*, *My Funny Valentine* and a crowd favourite *Monster's Inc.*

For the recordings of The Back Pockets, they were all performed live in one of the member's living-room (excluding the vocals, being overdubbed in the attic on a separate date).

The recording process of The Back Pockets took place in the evening at Rob and Rosy's house. I arrived in the late afternoon with all the equipment I could carry and began to setup. I wanted to record the band as an attempt to replicate classic jazz recordings when all the musicians were in the same room, playing off each other. The original idea was to have screens set up to isolate each member playing in the room. However, because the living room was rather small and cluttered there would have been no room for the players inside if screens had been set up. I had told the band that my intention was to use cheap equipment and record it all in one live space (exception being vocals). When Corey (a professional session bass player) saw me with my wooden bird-box, a flimsy dynamic highball 7 mic, duct tape and my cassette recorder he gleefully thought I had gone mad to record a jazz band with this equipment. I wanted to shock the band's preconception of how recording a jazz band should be done and make them realise you could use cheap gear to achieve a good sounding record. This was also done out of the limitations I had as I could only use what equipment I had available at the time. I set up the bird box with the condenser inside to mic up Rob's guitar amp, the highball dynamic was positioned between the snare and hi-hat, the tape cassette was by the couch to capture the overall performance and room ambience and the rest of the mics were scattered around the room to record the sax and trumpet. There was an importance of using bleed/leakage in the recording. In Owsinki's *The Recording Engineer's Handbook* (2005), leakage provides an enhancement to the tracks by blending the musicians in a live closely recorded atmosphere. This establishes great understanding of depth in the mix and paints a sonic image of the room. Once the recording for the night was done, I went home to do a brief mix of the songs, ready for the next day of vocal recording.

The vocals were recorded upstairs in the attic at the house. I arrived the next day with my condenser, the bird box and the cassette recorder. I had suggested to record in the attic with Rosy as it was a very cosy and secluded area of the house. I had spent several nights staying over at the house as a friend and had even done a bit of recording in the attic one night as part of a jam session with Rob. We knew the attic had a good vibe, so we wanted to record the vocals there. She did a wonderful job of knowing how to distance her voice from the microphone, which was harder because of the bird box perched on top on the stand. With a lo-fi and hi-fi take recorded, I showed her the process of syncing the two and balancing out the levels. It combined both the dynamic qualities of recording with tape with modern digital recording methods but importantly, it resulted in a warm and natural vocal track. Once the vocals had been recorded, I returned home and began the process of completing the E.P.

Conclusion

This study has shown me that the usage of limitations and low budgets in recording music is an exercise in acquiring all the necessary qualities of becoming a more experienced and successful producer. The process of recording the artists, under these restrictions, was both a challenge but also a liberating experience.

From my background as an under graduate studying BA Music Technology and Popular Music, I was always told there was no official right or wrong way to record music. This of course is true.

However, the artistic freedom aspect of how something should sound was always dictated by what the tutor deemed listenable and appropriate in comparison to industry standards. That comparison to industry standard started to confirm my thoughts that the production of music began to sound repetitive and uninspired. This lead me further to reject the hi-fi production costs of recording studios, gear, equipment etc. and be in favour with lo-fi, personal home recordings. Those seemed to focus on showing craftsmanship rather than showmanship.

My interview with Rob Schnapf gave me a deep understanding regarding the importance of the role of the producer as he explains “I think the job is one of support. Help the artist bring their vision across the finish line if they don’t have a vision of who they are, try to draw that out of them. Find what the thread is about all the songs that is the run thru. Use that as the trunk to branch off of. Send out the probe, explore, and see if you can find things that inspire or trigger a vision.” (Schnapf, 2019).

While having the resources is always comforting to know for any project you want to record, you can find yourself in a safe zone that can impede your creative flow by not experimenting with limiting your resources. This is when you truly gain a full understanding of your equipment/gear and how to utilise them to their fullest potential. When you understand how all your tools in the box work, you can apply them to achieve the best possible results for yourself but more importantly for the artist.

Further study could have been done on recording more varied genres of music, to expand the challenges both artist and producer faces when dealing with a low budget for a more digital based genre.

The tracks I recorded for my portfolio showed me that there are more benefits in approaching the process of recording music via the use of limitations either as an artistic intention or not. This is mostly justified by the process of experimenting with the artist and making decisions from there. True collaboration is formed when the ideas you have bounce back and forth with whoever you are working with. Sometimes successful and sometimes not so much. However, success should not be judged by limitations during recording but other parameters apply here, therefore, limitations do neither equal nor deny success. It is commitment that defies success in recording. "You made sounds and recorded them you then reacted to those said sounds and recorded more based on those.

You made decisions along the way those decisions helped inform the next round of decisions and so what you were doing was collecting commitments thru the process until the song was done. Now you had a well-informed vetted inspired track that come mix time, you were mixing not deciding what should've happened all along the way." (Schnapf, 2019).

The following transcript is that of an interview between myself (CB) and Rob Schnapf (RS) conducted on 06/05/2019 via email.

CB: There are many aspects and various degrees of involvement as the role of a producer. While some may just be complicit to what the artist is wanting, others offer more creative input and collaborate with the artist's vision. How important would you say your role is to making sure the artist is happy with the finished project?

RS: First off I think the job is one of support. Help the artist bring their vision across the finish line if they don't have a vision of who they are, try to draw that out of them. Find what the thread is about all the songs that is the run thru. Use that as the trunk to branch off of. Send out the probe, explore, and see if you can find things that inspire or trigger a vision.

Second it's very important that the artist is proud of the work and can stand behind it because they will have to withstand whatever it is that comes there way once it is released into the free world.

So I really try to be transparent and helpful. I'm not trying to play on everybody's record. I'm not trying to have a fingerprint or sound. Just trying to make great art. Sometimes we succeed in the public's eye and sometimes not but as long as the process was honest vetted and inspired then to me we succeeded.

CB: I've always liked it when you can tell someone's imprint or signature on their work. You know when you're watching a Tarantino film or listening to a Phil Spector record because it has their signature style all over it. I was wondering what your opinion is on the relationship between the artist and producer establishing a 'sonic signature', is it the artist who creates it or the producer?

RS: Like I said I am not trying to have a sound and I am not trying to have ego. I do have musical sensibilities and creative aesthetics and I think if you truly collaborate with somebody these are the things that naturally get combined and mashed together with whomever you are working with and by whatever degree you need to be injecting that type of input into the project.

CB: Do you think you have a sonic signature yourself? Can you tell me how you managed to create the lo-fi sounds of Mellow Gold and Either/Or (In particular, Elliott's vocals and drums)

RS: I don't think I have a signature sound but I also spend zero time thinking about it or worrying about it.

I think mellow gold sounds the way it does because we recorded it in houses not studios, using consumer gear with hints of nice gear and we were all about making due with what we had to capture that moment. That's what this is really about. It's not about tripping out on the gear, it's about being present cheerleading and hitting record at the right time.

The whole lo-fi thing is a misnomer in a way. I don't think anybody sets out to record lo-fi. We set out to record with what we have to make a piece of music. Only later did lo-fi become an artistic aesthetic because people liked the songs and feelings that certain records had. The lo fidelity then got associated with what made them cool. I don't necessarily agree with that. I think if Either/Or or any GBV record was recorded in high fidelity with the same artistic intent they would've communicated just as well.

CB: What is your usually set up for recording on a low budget? How did you record Mellow Gold on a low budget? Did you use an unorthodox recording techniques on that record?

RS: Figure out how you can take the money and spread it out for as long as you need to make your record.

Mellow gold had its share of guerrilla recording but I'm not sure we should call them techniques.

The loser vocal was recorded with a radio shack PZM because that's what was the only mic around at that moment.

CB: How did you approach the idea to record Mellow Gold? Did Beck specifically ask for anything?

RS: He didn't ask for anything we just were pleasing ourselves. It was made under the watchful eye of nobody and made for one. Totally uncalculated. Just reaction to what was going on at the time and a convergence of musical styles that were actively swirling all around.

CB: Do you think there is more freedom and enjoyment in experimentation on recording with limitations and budget restrictions?

RS: Not necessarily. You can be uptight and closed off at any price.

CB: There are loads of tutorials online showing you how to create a bedroom studio setup or tips for recording on a low budget. From your experience, how important do you think a budget and equipment is to recording?

RS: Fuck tutorials.

So my opinion from where I am now is I think I like having the deep tool box i.e.

I like the gear. Now, it ain't about the gear at all you don't need it to make great art but it sure is nice if the choice is up to you whether you something to be lo/fi mid/fi or hi/fi.

Often it's about combining these elements. Not unlike choosing whether you want it to be a Tele or a Les Paul player

CB: I've seen a lot of musicians (myself included) trying to replicate an 'old school' sounding aesthetic to their sound. Whether it be tape emulators or a plugin to make it sound like it was recorded in a certain decade, do you think there is any shame in using digital equipment as opposed to pure analog to recreate what the musician wants?

RS: No shame.

I think the single most overlooked and misunderstood thing about old school recording is that it's not about the storage medium so much as it is to the track limitations that that medium offer you. In other words it forces you to be present and commit to a performance, a sound a take etc. this is the magic of recording and record making. Unlike digital where you never have to commit until you mix.

So many times I get tracks to mix and there are 3 mics on the guitars and multiple room mics on different tracks or background vocal parts not blended or I am asked to do the vocal comp.

That isn't making a record. That's recording and not deciding anything.

So old school was recording drums you pretty much had to get it down to 8 tracks on the 24 track.

You committed your multiple snare mics to a track your room mics to a stereo pair etc etc.

You made sounds and recorded them you then reacted to those said sounds and recorded more based on those. You had a committed lead vocal. There were two tracks that had all the harmonies.

See where this going. You made decisions along the way those decisions helped inform the next round of decisions and so what you were doing was collecting commitments thru the process until the song was done. Now you had a well-informed vetted inspired track that come mix time, you were mixing not deciding what should've happened all along the way.

CB: You recently just had a hand in producing Kurt Vile's latest record. One of the tracks 'Cold Was the Wind' has a distinct lo-fi sound and I was wondering if Kurt, personally asked for you to mix and produce some tracks because of your experience in lo-fi records?

RS: Don't know, I know he was a mellow gold fan but I think more importantly we hit off personally.

CB: This last question is more personal, was there a certain moment in your life when listening to a piece of music that triggered you to find out how they created that sound and introduced you to the production line of making music? For me it was Neil Young's Harvest.

RS: Yeah but it's all over the place. Mostly I loved that the whole process it seemed like a mystery.

Are they men in lab coats?

Are they a bunch of hippies?

Oh wait it could be both.

I wanna wear a lab coat and have long hair that's cool.

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