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## **Production Perspectives of Heavy Metal Record Producers**

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### **Abstract**

*The study of the recorded artefact from a musicological perspective continues to unfold through contemporary research. Whilst an understanding of the scientific elements of recorded sound is well documented the exploration of the artistic nature of this endeavour from a production viewpoint is still developing. This study presents an understanding of the phenomenological aspects of Heavy Metal music from the perspective of seven renowned producers working within this genre. Through a series of interviews and subsequent in-depth analysis particular sonic qualities are identified as key within the production of this work: impact; energy; precision; and extremity. A framework is then put forward for understanding sonic elements of recorded Heavy Metal Music.*

Keywords: recording; Heavy Metal; production; producers; phenomenology

### **Introduction**

The twenty-first century provides a rich source of creative opportunity through digital technology for practicing musicians to record music. The affordances of the digital revolution have subsequently changed the opportunities for those involved in the creation of such works. Technology enables those who could be described as amateur music makers the opportunity to record music with relative ease. The democratisation of technology has meant that mobile devices can become pocket sized recording studios (Leyshon, 2009), whilst affordable solutions and emulations of previously prohibitively expensive computing and recording technology are readily available via the Internet. The technology associated with certain aspects of music making is now more widespread and enables a new sense of creative musical freedom; music producers command a limitless array of technological choices within the process. Despite the benefits of the ever-increasing rate of technological development the recording industry is changing dramatically, and with it, the

production perspectives of record producers. It is through an understanding of the production of Heavy Metal (HM), from the perspective of industry professionals, that will provide unique insights into the key aspects of this particular genre, and signposts routes that can be explored in other contexts.

Understanding past technologies and approaches is a prevalent theme through the current research concerning record production, particularly through associations such as the Art of Record Production (AoRP). Philip McIntyre's article 'Tradition and Innovation in Creative Studio Practise: The Use of Older Gear, Processes and Ideas in Conjunction with Digital Technologies' (2015) is a key example of the views displayed by some work in this area. McIntyre attempts to ascertain the reasoning for romanticism in relation to older recording technology. It is suggested through the work of Csikszentmihalyi that original thought does not exist within a vacuum, and therefore an understanding of the traditions of a particular phenomenon complements innovation. This questions the perhaps *diametric* opposition of tradition and innovation suggested by some researchers, and proposes that these are indeed linked and complementary; presenting a positive construction of the ways record producers interact with technology and aid forward thinking technological development.

Other notable volumes that examine recording and playback technologies largely through a musicological lens include *The Cambridge Companion to Recorded Music* (Cook et al; 2009). This edition details the transformation of such technologies with vignettes from industry practitioners. Artistic perspectives are put forward by Zak (p. 62-76) amongst many interesting essays on how recording technology has and is utilised. *Recorded Music: Philosophical and Critical Reflections* (Doğantan, 2008) complements the work of the companion in that it questions areas such as ontology and aesthetics, alongside specific genre-related studies in areas such as jazz. However, neither volume offers a particular viewpoint of HM and the sonic qualities specific to this type of music. There are more specific historical studies in the area of music production by Burgess (2014) that address the early beginnings of recorded

music through key decades and eras concerning recorded sound. This work also includes signposts to some of the key producers during the last 100 years.

A framework for the study of recorded music is put forward by Zagorski-Thomas (2014) that addresses both ontological questions concerning recorded sound and attempts to build a bridge between scholars of different musical genres such as popular and classical music. Concepts such as *Embodied Cognition* are also drawn upon by Zagorski-Thomas, alongside other areas from outside musicology. The process of recording music encompasses many socio-cultural influences that shape the way in which music is produced in the studio. More importantly, these influences are assumed to shape the way that music makers operate the specific technology housed within the recording studio and influence the recorded artefact. For HM record producers technology permeates the recording process in unique ways, both influencing the recording itself, as well as the performance styles HM musicians have developed since the late 1960s. The relationship that Dockwray and Moore (2010) suggest between cognitive choice and informed musical decisions cause tensions for record producers. To fully understand these tensions, the development of technology must be explored alongside record producers' subjective experience of using technology; further linking recorded HM music with the production processes that seemingly define its sonic character. To comprehend the experiences of HM producers, in relation to technology, two concepts must be understood: the use of the recording studio; and the record producer.<sup>1</sup>

### **The Record Producer**

Muikku's 'On the Role and Tasks of a Record Producer' (1990), presents a short chronology of the music producer before exploring the transformative role. He explores how, between the 1930s and 50s, the role of producer remained static and simple: 'get the artist in the studio, switch on the microphone and make the

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<sup>1</sup>For the purpose of this paper, the title producer will also include the role of recording and mix engineer as these roles are increasingly overlapping in the 21<sup>st</sup> century.

resulting sound as clear as possible' (p.25).<sup>2</sup> The 1960s changed the role of the producer as a result of the development of recording technology (p.26) and rock music. The traditional role of the producer moved away from the simple role described above, to one that involved more creativity. The model that Muikku constructs suggests that the producer balances artistic, economic, and social roles (p.28). However, Muikku does suggest that this model is still somewhat problematic as it has to embrace expectations (Hennion, 1989) and producers must also act as the link between artists and record companies:

For example, during different kinds of conflicts (economic, artistic or social) the producer is the person who tries to conclude peace. In the end, the producer is loyal to money. (p.32)

The problem with Muikku's conclusion here is that, since 1990, the recording industry has changed more dramatically than expected; it can be assumed that for most record producers working in the present day, financial loyalty would amount to an unsuccessful career.

Varied research suggests that the role of the music producer is definable by interchangeable tripartite models that include, in some form: artistic; commercial; technical; social influences; and skillsets. The role of the record producer is clearly still problematic for musicologists. The role has changed dramatically since early incarnations a century ago. Theorists suggest this has been determined by technological development, the transformative nature of the recording industry, and the social contextualisation of the recording studio. Martin's (2014) tripartite model that encompasses social, artistic and technical skillsets seems the most appropriate model put forward by contemporary musicologists, as it presents the most contemporary view of the spectrum of working music producers. Howlett's article for the AoRP journal, 'The Record Producer as Nexus' (2012), continues the tripartite modelling theme that Muikku and Martin suggest. Howlett proposes that the producer acts as a nexus, 'a means of connection' (p.1), between 'artist, the

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<sup>2</sup>This view is further exemplified by the generalisations noted by Negus (2010): 'These [anecdotes] characteristically portray the producer's roles as allowing [Bob] Dylan to record with few obstructions, putting a microphone in front of him or arranging microphones in such a way as to follow his movements' (p.214)

technology, and the commercial interest'. For Howlett 'the producer's role is profoundly musical' (p.4). The role is defined by the music produced as a result of balancing artistry, technology, and commerciality. Howlett also suggests that this connection makes the music meaningful (p.4), highlighting the role of the producer as crucial to the recording process.

Zak's *The Poetics of Rock: Cutting Tracks, Making Records* (2001), dedicates an entire chapter to the roles of the engineer and the producer. Crucially, Zak focuses in on the producer role and notes:

While [producer's] work includes things as mundane as budget management, it can also tend to the enigmatic [...] Conceptions of the producer's role vary greatly among producers themselves and from one era to another, and the scope of the role is limited only by the number of tasks on a given project. (p.172)

Zak presents the producer role as both singular and collective responsibilities, in equal measure. He recognises that the producer can be musically involved with a project, as well as taking a back seat and acting simply as an administrator, but inclusive of any role in-between. The crucial part of Zak's analysis is that the producer role is transformative, and this depends on the type of artist the producer works with, and the period of time the producer is active within.

One of the problems of working within the emerging field of Metal Studies (Spracklen et al, 2011) is that the existing literature focuses on the historical and socio-cultural themes that the genre exhibits. When considering the record producer who works with HM recordings there is limited literature, hence the inherent need to study the role of the HM producer and the influence technology has had on those individuals.

## **Heavy Metal Production**

There is limited academic writing dealing with HM record production. Key themes in the literature include: guitar timbre (Berger and Fales, 2005); artistic convention

(Friesen and Epstein, 1994); HM production techniques (Mynett, 2012, 2013; Mynett, Wakefield and Till, 2010, 2011); socially influenced production (Reyes, 2008); empirical analysis of HM recordings (Turner, 2009); and, the changing timbre of recorded HM music (Williams, 2015). Discussion focusing on gender, politics, sociology, and youth culture directs the research detailing the genres social development (Arnett, 1995; Jones, 2011; Kahn-Harris, 2006; Walser, 1993; and Weinstein, 1991 for instance) with production values and techniques often discussed in passing. When production is dealt with, we are often met with generalisations of overdriven guitars and extreme volume:

Heavy metal music is distinguishable from other forms of rock music by its reliance on heavily distorted electric-guitar-based-minor key song structures and the absence of the use of keyboards. HM is extremely loud, relatively simplistic, and general associated with the alleged delinquent, or worse, behaviour of its fans. (Friesen and Epstein, 1994, p.3)

A critical note here would be that a number of Progressive HM bands employ keyboards (Between The Buried and Me, Dimmu Borgir, and Dream Theater, amongst many others), whilst a vast amount of HM, is far from simplistic. Key works within musicology have introduced the study of HM's sound and timbre into journals and edited volumes; for example, Frith (1998) uses HM's technicality to discuss the role of the critic and the mediation between musician and audience (p.64). Although, the process of genre specific record production has only recently been recognised. Zagorski-Thomas (2010b) writes:

Rock artists whose audience experienced them in large venues developed production techniques that were mimetic of that form of large-scale space. (p.6).

It is suggested that specific genres of music encompass very different production aesthetics according to their social consumption and playback devices. For Rock, and more importantly, HM, the main consumers are likely to be driven by the live experience and the sound of an artist in a large venue, with size becoming a very important consideration. The potential for HM production to be an exaggeration of this theory is also possible, with modern recorded HM purposely being presented as unrealistic.

Reyes' thesis *Sound, Technology, and Interpretation in Subcultures of Heavy Music Production* (2000) presents the unique technological discourses of different genres of HM. It considers production from a subcultural context, signifying the potential scope for genre specific studies of record production in a 'mass-mediated culture' (p.iv). Reyes' study aims 'to conceive a mode of thinking appropriate to understanding aesthetic judgment vis-à-vis the evolving life of sound in a technologized, mass-mediated culture.' (p.iv). Reyes addresses the importance subculture has when determining the use of recording technology, most specifically in that of Punk music and the 'raw' aesthetic that is often the focus of producing this genre. There are issues of power, issues of critical listening and authenticity and, most significantly, the act of making a deliberate aesthetic decision; is 'modern, digital production a trick in itself?' (p.143). Now that digital production has influenced the sonic aesthetics that would have historically been achieved (analogue tape saturation, for instance), does technological development signify a change in agency and locus of control? Whilst Reyes highlights the importance of study for aesthetic choices in production, this research aims to link the experience of technological choices that are made and determine why producers of HM music make these choices. Critical to Reyes' thesis, and to the genre's audience, is HM's intention to embody power.

This intention of power is something that becomes increasingly evident with HM artists, with volume often becoming the method of achieving power. This volume, and relating intensity links to the metaphors of size and power and is part of the discourse of HM that Walser (1993) suggests to be empowering. Zagorski-Thomas (2010b) constructs notions of size and power as 'fundamental human metaphor[s]' (p.256), which is apparent in HM production aesthetics. Heavy is simply a signifier of extreme weight that is generally applied to objects of great size. Weinstein (2000) suggests that HM 'can be felt, not only metaphorically, but literally, particularly in the listener's chest' (p.25), implying power. Historically, for HM, these metaphors (power, weight and aggression) become extremely important towards understanding the genre's production process.

Turner's (2009, n.p) paper from the AoRP conference explores the nature of recorded HM music as 'extreme music', and how more extreme mixing techniques can be applied. To do so, Turner focuses on the work of prolific HM producer Andy Sneap (known for his work with 36 Crazyfists; Accept; Arch Enemy; Cradle of Filth; Killswitch Engage; Machine Head; Megadeth; Trivium; and many more). Turner approaches Sneap's work by examining the multi-track Pro Tools sessions of extreme metal band Cradle of Filth and detailing the exact processing techniques used. It is suggested that HM can be made subject to extreme application of certain production techniques:

The evidence from the multitrack points towards the notion that extreme music can tolerate extreme mixing methods. Sneap's liberal approach to sample augmentation also adds credence to this argument. However, the approach of moderation in equalisation to the guitars and bass highlights that Sneap does not 'EQ for EQ's sake'. The application of extreme EQ in this instance is not an arbitrary process, but one based in a clear production methodology and an insightful musical rationale. (n.p, 2009)

It is interesting that Turner implies that HM is a tangible object that can 'tolerate' extremity. Not only does this reinforce HM's namesake weight, it suggests that perhaps other genres of music could not tolerate the same processes in the same way. Turner isolates HM music by drawing the same conclusion, albeit about its sonic aesthetic, that Walser (1993) and Sinclair (2011) draw about its confrontational nature. As well as providing a clear rationale for the workflow and mix techniques applied, albeit singularly, by HM mix engineers, Turner also suggests that:

It is hoped, ultimately, that these processes may yield a production methodology for extreme Metal, in addition to progressing the field of record production as a bone fide scholarly discipline. (n.p, 2009)

Turner's thoughts can be supplemented by Izhaki (2013) who states:

We must not forget that, as with many other mixing tools, sometimes we are more interested in hearing the edge – subtlety and transparency is not always what we are after. For example, in genres such as death metal, equalizers are often used in what is considered a



radical way, with very generous boosts. The equalizer's artifacts are used to produce harshness, which works well in the context of the specific music. (p. 231)

It is clear from Turner and Izhaki's work that we should consider HM production as a unique phenomenon. Izhaki's 'radical' presentation, via technology, is seemingly inherent in recorded HM, linking closely with the work of Walser (1993) and Sinclair (2011).

## **Heaviness**

HM has generated a rapidly growing academic community, underpinned by the International Society of Metal Music Studies (ISMMS), yet it is often the case that the music makers themselves are removed from the discussion that varies between more traditional musicological approaches and sociological research. Berger and Fales' (2005) 'Heaviness in the Perception of Heavy Metal Guitar Timbres: The Match of Perceptual and Acoustic Features over Time' presents a study of heaviness in timbre as the relationship between noise, or distortion, and acoustic events. The chapter considers the prominence of the electric guitar and the importance of timbre in HM providing a focused discussion of aural discourse. Overdrive and distortion effects create white noise and harmonic overtones, particularly with electric guitars, bass guitars and to some extent keyboards, and this is addressed in the psychoacoustic domain. In the same way that Turner (2009) discusses empirical audible technicalities, Berger and Fales provide precise deconstructions of specific harmonic values, the historical context of specific guitar timbres, and the audible effects of distortion that, in their opinion, provides HM with its 'heaviness' (p.187). The aim of the authors is to construct a method for understanding timbre as an objective trait of a genre, in this case by presenting the empirical measurement of the audible qualities of heaviness, specifically related to guitar timbre, and discussing this in relation to sociological perceptions of HM. It is stated:

The puzzle, in other words, is this: metalheads affirm that they hear a quality X, heaviness, that defines the genre that contains it, a genre that must demonstrate greater X – that must increase in Xness – over time. If X were 'brightness' (presumably a timbral quality), then over

time the music's timbre would become brighter; if X were 'syncopation' (presumably a rhythmic quality), then over time the music's rhythm would become more syncopated (p.193)

The central theme here is that heaviness, an audible phenomenon, is defined comparatively by listeners and is an example of how audible phenomena are 'historically emergent within specific music cultures' (p.197). Whilst Berger and Fales' chapter is not strictly a discussion of production methods it presents a relationship between the audible and the socio-cultural issues that potentially influence HM producers. This view contradicts the work of Friesen and Epstein (1994) suggesting the HM is potentially defined by the increasing development of its aesthetic conventions, its 'Xness'. It also suggests a practice of consumer led audible trends in musical subcultures.

Similarly, Williams (2015) explores HM in the psychoacoustic domain; deconstructing the timbre of HM mixes and the individual elements that make up the highlighted timbres. William's uses an empirical approach to develop a psychoacoustic framework for understanding the timbral trends in HM production. The conclusions made suggest that current metal productions are 'identifiable by their acoustic fingerprints' (p.63), namely: bass guitar distortion; brightness and heaviness of guitar timbres; and kick-drum sampling. It supports a view that HM production methods have become homogenised. The aim for Williams is to create a set of tools for researchers, namely musicologists, to aid with the timbral analysis of production style. This research could potentially be valuable to the record industry, providing quick A/B analyses of different productions, although it also suggests further homogeneity, encouraging production styles to converge into a production methodology.<sup>3</sup>

Williams also suggests that HM fans are often '...critically invested in the production value[s] of new releases.' (p.40). Because of this investment it is not uncommon to

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<sup>3</sup> Record producers, as well as amateurs, will often compare their mixes to mixes that are already established as successful productions. Whilst the intent is not to replicate the successful mix, knowing when a production is meeting a standard can be helpful.

hear statements like 'the next album will be heavier' in discussions of different release or on online forums or interviews with bands. For example, Metallica stated in an interview for *Rolling Stone* magazine that their follow up to *Death Magnetic* would be 'a heavier version of what we were doing in the early 90s'.<sup>4</sup> Black Sabbath state in a video released via their YouTube channel on 13/02/2013 (the 40th anniversary of their debut album), that their latest release is 'a legacy to live up to',<sup>5</sup> implying an inherent pressure for bands to push for more extreme levels of heaviness as a signifier of improvement. This concept could potentially be linked subconsciously to the idea of power within heaviness, the heavier the better, as it were. It would seem that there is a constant struggle for HM bands to prove their worth, something again that can be associated with Berger and Fales' (2005) work on the link between the audible and sociocultural.

Mynett's work (2012; 2013) explores the detail and precision that is present in the production of HM music, as well as the concept of heaviness in music; collaborating with other authors to expand research that details mixing the HM genre (Mynett and Wakefield, 2009; Mynett, Wakefield and Till, 2010, 2011). There are a number of central concepts to Mynett's work including: heaviness; intelligibility; masking; and replicated ferocity. The notion of heaviness in music can be linked to what Mynett (2012) describes as 'sonic weight' (p.1). Weinstein (2000) describes how the rhythm section plays a specific role in creating heaviness:

The distinctive bottom sound provided by the bass drum is greatly enhanced by the electronic bass guitar, which performs a more important role in heavy metal than in any other genre of rock music. Mainly used as a rhythm instrument, the bass produces a heavily amplified sound. Its contribution to the instrumental mix is what makes heavy metal 'heavy'.  
(p.24)

Mynett (2012) focuses on how these different sonic elements work together to create heaviness whilst dealing with the problem of presenting each element of the mix in an 'intelligible' way (p.6). This suggests that there is an issue with agency in

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<sup>4</sup>[www.metalhammer.co.uk/top-posts/metallica-new-album-is-a-heavier-black-album/](http://www.metalhammer.co.uk/top-posts/metallica-new-album-is-a-heavier-black-album/) [online] accessed 23/04/2013

<sup>5</sup> <http://www.youtube.com/watch?v=3GLqS7yjmW&feature=youtu.be> [online] accessed 13/02/2013

the production process of HM. Mynett further presents this tension in the concluding chapter of his thesis *Contemporary Metal Music Production* (2013). HM production's 'heaviness' is defined thus:

[Contemporary Metal Music's] defining and essential feature of 'heaviness' is primarily substantiated through its displays of distortion and, regardless of the listening levels involved, the fundamentals of this identity are inherently linked to volume, power, energy, intensity, emotionality and aggression. (p.104)

The issue with agency, whilst not explicitly part of Mynett's discourse, is subtly suggested here. If HM production is concerned with the defining features suggested here, does the production process fall victim to following a certain methodology? Mynett's work also explores the importance of distortion as a key element of HM's power and sound, and further links heaviness and the sonic qualities of HM:

Heaviness is primarily substantiated through displays of distortion, and, regardless of the listening levels involved, the fundamentals of this identity are ecologically linked to volume, power, energy, intensity, emotionality and aggression. (p.6)

As further commentary of HM production aesthetics, Mynett (2013, p.104-111) presents six elements (such as spatial awareness) of production that define the genre. Key to Mynett's work is the 'radical' (2013, p.106) way in which HM is produced; alluding to a more extreme approach, less conservative than may be used to produce other styles of music; which is similar to the conclusions made by Turner (2009). As a generalisation, the same, rather precise and extreme dynamic processing of percussive elements in a HM mix would be contextually inappropriate for the percussive elements of recorded folk music.

Mynett (2013) also questions the authenticity (p.111) of HM music and whether the production processes he defines are a measure of HM's authenticity. The themes highlighted by Reyes (2008), heavy music as 'art' and the philosophical notions these insight, can be linked to Mynett's concept of intelligibility and how modern HM music must present instrumentation in a way that the audience can comprehend and react to, or with.

Mynett (2012, 2013) and Turner (2009) focus their respective works on the precision application of specific techniques that create the sound of HM, as it is realised in the twenty first century. Both authors recognise the sonic elements that are prominent in the construction of HM (this could be both culturally as well as aesthetically): the electric guitar sound, the importance of the kick drum; and, the aural perspective of the bass guitar. Turner focuses on the equalisation and dynamic processes that form the aural discourse of selected examples of contemporary HM. Both arguments highlight the extreme nature of the production process when recording and mixing HM, which musicologists from a more traditional approach mirror in their discussion of sonic qualities of the genre. For example, Shuker (2005) attempts to define HM thus:

The music parameters of [HM] as a genre cannot be comfortably reduced to formulaic terms. It is usually louder, harder, and faster-paced than conventional rock music, and remains predominantly guitar-orientated. (p.132-133)

For Shuker, HM does not deal in subtleties. His definition parallels the sentiments of Mynett and Turner, albeit a fairly broad interpretation of the sonic aesthetics of the genre. Shuker's definition does support Mynett's constructions of heaviness and timbre, but the concise nature of Shuker's entry for HM, does not attend to the production aesthetics, simply the musical attributes, subgenre fragmentation, and research outputs (albeit limited). The work of Mynett and Turner does suggest, however, that there are now formulaic undercurrents in the production of recorded HM music.

### **Exploring the phenomena of recorded Heavy Metal Music**

An understanding of the phenomenological aspects of this genre was explored through a series of interviews with key producers working within HM. The central aims were:

- To identify the ways in which the sound of HM has changed, as experienced by the people who make it, with specific relation to music technology;
- To understand the views of working producers and engineers to gain insight into the way in which recorded HM is produced, whether this has changed and suggest directions in which it may develop further.

Semi-structured in-depth interviews took place with seven participants who work almost exclusively with HM artists, or have significant credits within the genre:

- **Romesh Dodangoda (RD)**, credits include: *Bleed From Within; Bring Me The Horizon; Bullet For My Valentine; Earthtone9; Funeral For a Friend; Monuments; Motörhead; and Sylosis.*
- **Mike Exeter (ME)**, credits include: *Black Sabbath; Cradle of Filth; Heaven & Hell; Iommi; Jaguar; Judas Priest; and Sonic Altar.*
- **Russ Russell (RR)**, credits include: *Dimmu Borgir; Evile; The Ga-Ga's; Napalm Death; The Rotted; Sikth; and The Wildhearts.*
- **Tom Allom (TA)**, his credits include: *Aerosmith; Black Sabbath; Def Leppard; Judas Priest; Krokus; Loverboy; and The Tourists.*
- **Dave Chang (DC)**, credits include: *Dagoba; Earthtone9; Electric Wizard; Forever Never; Gorerotted; Orange Goblin; and Stamping Ground.*
- **Oz Craggs (OC)**, credits include: *Dead Harts; Feed The Rhino; Mallory Knox; and Pay No Respect.*
- **Martyn 'Ginge' Ford (MF)**, credits include: *Axewound; Bleed From Within; Bullet For My Valentine; Trivium; and Slipknot.*

These interviews were coded adhering to the process of *Interpretative Phenomenological Analysis* (IPA) to reveal recurrent themes in HM production, as interpreted by the participants.

*Interpretative Phenomenological Analysis* (IPA) is 'a qualitative research approach committed to the examination of how people make sense of their major life

experiences', or hermeneutics (Smith, Flowers, and Larkin, 2009, p.2). IPA allows for observed or recorded experience to be categorised independent of any pre-existing categorical approach, whilst providing a 'focus on personal meaning and sense-making in a particular context, for people who share a particular experience' (Smith et al., 2009, p.45). In this case the shared experience is the use of technology to make HM records. The importance of interpretation reflects the mediation that each participant enacts within the recording studio and how they interpret their own actions and position with regards to technological influence. It is also suggested that IPA '[situates] participants in their particular contexts exploring their personal perspectives' (Smith et al., 2009, p.32), making IPA an ideal choice when exploring the experiences participants have with technology in the 'everyday activity' of recording HM music.

## Analysis

The participant accounts revealed four key production elements within recorded HM music that relate to genre specific qualities: *impact; energy; precision; and extremity*.<sup>6</sup> This section begins with insights from Tom Allom (TA), the participant who has been working the longest in the field and is viewed as the producer who gave birth to the HM sound, notably for his work with Black Sabbath between 1969 and 1972.<sup>7</sup> TA provides insight into what aspects of a record's production makes for a successful production. On recording with Judas Priest he describes:

TA: That was about feel. It just had a good feel and it was a great riff. I was listening to [the guitar] and it was sending shivers down my spine.

For TA, production aesthetics seem to be given value when elements of the production, in this case the sound of the electric guitar, made him feel a specific way. When these elements gave him the 'shiver' reaction, he knew it was right.

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<sup>6</sup> Whilst these elements do not fall into any immediate hierarchy, the order in which they are presented is linked to the interpretation made as to their importance for the participants.

<sup>7</sup> In an interview discussing the production of guitar sounds on the early Black Sabbath records, TA suggests that had he recorded them a decade later they would be 'heavier'. This is attributed to TA learning more about microphone technology and use.

[http://www.ultimateguitar.com/interviews/interviews/tom\\_allom\\_the\\_sounds\\_on\\_first\\_sabbath\\_albums\\_could\\_have\\_been\\_heavier.html](http://www.ultimateguitar.com/interviews/interviews/tom_allom_the_sounds_on_first_sabbath_albums_could_have_been_heavier.html) [online] accessed 17/06/2015

Affirmation comes in the form of an emotional response. TA stands out as an anomaly due to his removal from producing HM records for a number of years; although this does not devalue his experiences. His importance to this study lies in establishing a historical context for the development of recorded HM and music technology. Concerning the early Black Sabbath recordings TA recalls:

TA: The thing that struck me when I was listening to the multi-tracks, when I did this Classic Albums [documentary] (2010). I don't think I was aware at the time just how good they were; the way that the bass and drums worked together.

Implied in this reflective statement is the importance of the rhythm section. The concepts of size and power that are linked to the rhythm section and the problems that performance style and timbre create have clearly been at the forefront of HM production since 1969. TA continues to suggest that Black Sabbath were important in establishing this trait within HM production:

TA: The way that the bass and drums worked together. It was almost a jazz band in a way, really amazing intricate patterns and everything. [...] They were [making] this music that no one else had [...]

More importantly, this suggests there is a value system in place for HM production. For TA value is evident in his description of feel; this becomes the positive indicator for a successful production. MF also highlights feel as an indicator of value, whilst highlighting his own concerns for production:

MF: The feel of music, for me, as long as you don't over trigger it [...] comes from where you are hitting the drums [...] It being perfectly in time doesn't alter the feel of something; as long as the drummer is playing that.

Using this idea of value, worth and importance, as a pathway through understanding the production perspectives of HM producers also highlights the significant influence music technology has over the process. The prominence of a value system held by each of the participants is recurrent within discussion of production aesthetics.



## Impact

For DC the value of impact, suggestive of power, becomes a focal point. Interestingly DC chose to explore the value of impact through discussion of his influences:

DC: It was really the sounds of the nineties and people like Nirvana. The Andy Wallace mixes and things like that. I was thinking this is really what I want to be hearing, this sound, this kind of impact. Now there is the Chris Lord Alge [...] new wave of rock and metal sound, and that more modern sound which was all still done analogue back then, but that was really getting to sonically this is what it should all be about.

Impact stands out as part of Chang's motivation to become a producer and the attribute he values of records produced by Andy Wallace and Chris Lord Alge. DC suggests that the sound heard, when listening to records produced by the aforementioned producers, was 'what it should all be about'. This *should be* suggests that these values potentially spawn from feeling that something is missing where production is concerned. Andy Wallace, as a further example of influence, is equally as important for OC.

OC: Everything Andy Wallace has done is my favourite thing in the world. [...] I just would sit and deconstruct Andy Wallace mixes.

OC follows with:

OC: Heavy music is supposed to sound aggressive, sounding like it's jumping out of the speakers.

Heavy music is supposed to sound like X. OC supports his own influences and how these influences hold value, comparably to DC, by implying how HM music should evoke feeling, how it should be presented; HM record production holds value through a representation of its perceived underlying characteristics. However, by 'deconstructing' the records made by his influences, OC has had to process his own understanding of his emotional responses. For OC however, the production aesthetics that HM supposedly finds invaluable also present their own problems for the people that produce it. Expectations and desirables influence the way

technology is used to produce HM music, something that is explored later in this chapter. OC takes a stance that heavy music production is primarily concerned with energy.

## **Energy**

Achieving energy, like DC's impact, is paramount for OC:

OC: I think the most important part is the energy and I think that people kind of have an idea of what energy should be.

OC: It's really about getting that energy onto the recording in whatever capacity it takes.

OC believes there to be a prior understanding, presumably for musician, producer and listener, that a fundamental quality for a successful HM production is energy. Energy, seemingly a necessity, can be achieved in a number of ways and means different things within the context of production:

OC: I want people to play their best and I think the energy, the most important thing for me, comes from people thinking they are playing their best.

Energy once again becomes an indicator of success, linking to TA's feel. It is interesting that OC suggests that perhaps a part of his role as producer is about convincing people that they are playing their best. It would seem it is more the case that producers are providing the opportunity for musicians to give their best performance. Technology affords the opportunity to create and encourage energy on record:

OC: My primary focus is energy and making things sound exciting. Now if I can use these tools, like drum quantising or drum samples, or anything else, to give that more energetic sound then I will use it.

OC begins to identify a tension between technology and desired aesthetic effect. This tension begins to show how genre specific trends in production, drum quantising and sampling for example, can potentially hold influence over the process. Tension is placed elsewhere for DC. He suggests that the tension he feels

with producing music is between the perception of live and recorded versions of the same music:

DC: I want the recording to be special for them [...] I want everyone to feel like this is providing something the live performance isn't providing. Because the live performance gives you the energy, people jumping about, the crowd, all of that. This is the studio performance. Depending on the kind of genre you might want it to be more accurate; you certainly still want the energy and the life [...]

For DC, the recorded version of a piece of music must demonstrate qualities beyond the live performance of the same piece. He wants his production approach to emphasise this, whilst retaining the energy of live performance. ME relates his view of energy within HM production to how fans perceive the music, and how fans expect certain aesthetics:

ME: When you're getting into the metal side of things, yes, they may want it loaded up with Lars Ulrich kick drums and bell brass snares, and maybe that's the energy that the youngsters are looking for [...]

Drums commonly feature as a significant way of creating the energy HM music now seems to find necessary. It is also noted that ME identifies how energy can be created by technology when he uses the term 'loaded up', referring to samples being added or programmed. For RD energy seems to be embodied in creating excitement and surprise. This seems similar to DC's view on the essence of live performance and how that fits into the recorded format. For RD, this excitement is created in the way the drums are presented in HM. Drum production once again seems to become an important example of achieving certain aesthetics in HM music production:

RD: When you do rock music you have to find things that are gonna make the listener be surprised I guess. You want an element of excitement for the listener [...] drums are a really good way of creating excitement.

Importantly, energy is frequently linked to the production of transients. Further exploration might focus on how transient detail is specifically dealt with in guitar production, but using drum production as the key example, transient intelligibility is

explicitly linked to energy and excitement. Energy, as DC describes above, as a key element of a successful 'studio performance', pushes transient intelligibility to the forefront. A mix of a recorded performance must exhibit clear presentation of these transients, as one element of overall intelligibility. Whilst the participants perceive energy in a number of ways it can be exemplified by the intelligibility of transient detail.

The processes RR chose to leave out defines his construction of energy, how that fits into his production approach, and what this does for the music he produces:

RR: What I'm sort of, what I like is when it sounds a bit raw, not perfect, not like it's been edited to death. When it sounds like a band. When it sounds like *that* band more importantly.

Energy is not the central focus of RR's thoughts here; however, consider the previous examples displayed above. Each example links energy in HM production to an aesthetic that they want to achieve: excitement, feel, live-ness, and surpassing expectations. For RR the energetic aesthetic is more aligned with reproduction of the artist's sound. He wants the music he makes to sound like a band. The tensions that striving for specific sonic qualities cause are apparent in how the participants interpret their own actions. For RR this tension is caused by perfection and precision.

### **Precision**

OC: I think the expectation of the listener on heavy music is an expectation of clinical precision now. I think if you were to do a certain type of heavy band and do not include the editing of tightness maybe people would feel cheated, feel like it's not tight. The technology has made the performance element transcend what was acceptable, now it has become unacceptable in some ways.

OC's idea that modern HM productions must be edited and tightened confirms that production techniques directly affect musical elements. It is also interesting to find that OC considers HM production to be defined by an aesthetic that is no longer

desired. This almost directly juxtaposes the view of TA that feel is the most important aesthetic within HM music. Precision, synonymous with tightness, now takes precedence over feel. MF takes the view that to create the power that is often described within HM music, precision plays an important part:

MF: Even though I am going to nail it to the grid, if its full on metal that's where the power comes from, when everything lands together.

MF acknowledges that precision becomes a compromise for modern HM. To achieve the aesthetic his clients strive for, the energy, the power, he must put everything into perfect time ('nail it to the grid').<sup>8</sup> His response suggests an acceptance that HM production cannot be done any other way. Contrastingly he goes on to acknowledge that because of the precision required, HM music has forged itself as one of the most difficult musical genres to engineer, or produce:

MF: As far as production is concerned metal probably uses the technology more than most [...] If you can record a metal band and make that sound decent you can pretty much do anything else [...] It's so precise and everything about it, the playing, [it is] the most difficult thing you could record.

Secondary to this acknowledgement of HM music's complexity is the acceptance that technology plays a far more important role for HM production than any other genre. This technological influence over production techniques transcends the production process and also impacts upon the song writing and performance practices of HM musicians. RR identifies with this:

RR: It's almost the norm now for a HM drummer to practice and always play with triggers on his kicks, not everybody, but more than not now. Just that alone has influenced how songs are being written, tempo and precision has gone up and up and up.

Precision is a specific example of how production techniques have influenced both the recording process and performance practice. Once again drums are presented as the key indicator of the influence production techniques have, perhaps due to their

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<sup>8</sup> The 'Grid' is part of the architecture within modern DAW (digital audio workstations) that highlights different aspects of musical timing: bars, beats or seconds.

position in the *Sound-box* (Dockwray and Moore, 2010) or because of the widely accepted order in which instruments are recorded. Whilst most view HM as a genre that exhibits unique production techniques, DC takes the opinion that HM shares its precision focused aesthetics with electronic and dance music. He also suggests that precision affords the technological processes that are often employed within HM production.

DC: Even before digital came in I was already beginning to think HM has a lot in common with electronic and dance music in that kind of, people are after that precision [...] it suited the kind of editing you could do with Pro Tools more than any other genre.

Precision can be recognised here as a key production element for HM music. The acceptance of precision as a requirement for success within a HM recording, as well as the ways in which it is implemented, suggests that a reliance on precision has been developed over time, paralleling how technology has developed. DC highlights this chronological development by identifying the use of *Pro Tools* and its vast array of audio editing functions, in direct contrast to pre-digital production, as a key motivator for precision.

### **Extremity**

Impact, energy, and precision are central production aesthetics of HM music. The tensions that these create for performance practice and song writing suggest that there is a struggle for extremity within HM production. Extremity can be seen in the precision of both performance and recording practices; it is also present in the links made by Mynett (2013) to the concepts of size and weight within HM production. Extreme musical attributes often influence production aesthetics within HM music. Extreme performance qualities such as tempi and dynamics often inform the equalisation and dynamic processing that is used. So why is extremity important for the consideration of GSPAs?

Extremity is suggested by production aesthetics and how HM producers set out to achieve them; heaviness and sonic weight are but some of the examples that are

defined by extremity. Impact implies an object coming into contact with another object with relative force. Energy, within the participant responses, is only ever linked to having an *abundance* of energy. Extreme attention to detail is implied by precision. Heavy describes something with extreme weight. Within the confines of this study, extremity alludes to musical and performance attributes that influence production methods. This is highlighted by the radical EQ and dynamics processing that are analysed by Turner (2009). It can also be interpreted as a reflexive aesthetic suggesting that the extreme performance attributes are a product of the affordances of technology, allowing for more radical, and sometimes necessary, processing (extreme dynamics processing allows drummers to perform with less dynamic consistency so that they can focus on speed for example). Extremity is both musical and technological.

What extremity *does* represent is an accepted ideal, the acceptance of a value system, or indeed a production methodology, for HM production. Whilst the above key aesthetics seem fundamental to HM production, it seems that the fact that they are accepted is more important than simply acknowledging their existence. The above production aesthetics are part of a construction of accepted ideals, by engineer, producers and musicians alike. Their presence begins to fulfil the aims of this article, but to truly develop an understanding of the influence technology, and its development, has over the production of HM music, the proposed concept of accepted ideals must be explored further. The anticipated use of technology and the potential use of technology are analysed below as emergent super-ordinate themes from the participant interviews. Early HM productions emphasise feel as the central musical aesthetic of recorded HM. TA discusses how the absence of any form of prior knowledge of how to record HM music caused the production process to simply focus on feel. Emphasis is placed on the rhythm section and how this influenced the feel of the recording, purely related to performance. This develops out into a set of individual aesthetics that are both musical and sonic. These form the central production aesthetics of HM: Impact; Energy; Precision; and, Extremity. The shared experience of these aesthetics suggest that the participants have a value system, or at least a subconscious notion of what recorded HM music should sound

like. This is strengthened by the ways in which the participants strive to achieve these aesthetics. Finally, the proposed concept of a value system for HM record production suggests that HM production is subject to an accepted ideal.

### **Towards a Framework for understanding Heavy Metal Production Aesthetics**

As well as the participant identified aesthetics for HM music creating a value system when producing HM, the participants also suggest that HM production is partly an exercise in compromise. This compromise allows us to place the aesthetics discussed into a framework that draws on the lived experience of the participants.

Energy, not always as an expression of acoustic properties, is linked to the expectations surrounding performance capture, the live-ness of a recording, and the subjective perfection of a HM recording. It could be that semantic issues cause this compromise; for instance, the *experience* of capturing a HM performance. Performance suggests a singular, live, event that could not be recreated, re-performed if you will, in exactly the same way ever again. However, HM production employs such precision that it removes the variables that seemingly define performance. If a drum performance is edited to fit exactly within a fixed tempo quantise grid, it may be a *perfect* musical artefact but is it a truthful representation of the drummer's performance? Here lies the first suggested compromise: HM productions can either be an authentic exercise in capturing the performance of a group of musicians (multi-track technology is an issue here as it separates a live performance into its constituent parts) or they can be a representation of a performance that fits into the accepted ideals of a typified modern HM production. Seemingly energy can be created by both of these methods, it is just expressed in different ways.

The same could be said for impact. Creating impact within a HM production is part of the process of recording and mixing, whilst simultaneously being a musical device. Participants described it as 'the sound we should be hearing' (DC) or the way HM



music should 'jump out of the speakers' or 'be aggressive' (OC). As with performance, and consequently precision, impact could be created through capturing a live performance or enhancing a performance through technological processes; something will be compromised each time. Ultimately this compromise seems to be about a representation of authenticity, whilst it also relates directly to Mynett's intelligibility. An unprocessed, un-intelligible recording could provide as much impact as one that is processed and edited to the nth, intelligible, degree.

RR stated that he does not make 'perfect records' as they do not excite him; it is assumed that to achieve the aesthetics he finds authentic, or exciting, a record cannot be an exercise in precision or acute production processing. Perhaps this is not so much a compromise, for RR, as a realisation that having a specific production methodology, which extends to the use of technology, only adds to the problem of homogeneity within HM production; the concept of replication. Of course, to return to the idea that production aesthetics are affected by semantics, RR's idea of excitement may be different to another HM producer. The idea of excitement and energy extends to OC's view that the emotional content of HM is often compromised in the same way:

OC: I think sometimes the technology has reduced the emotion level, for the sake of tightness. It comes down to finding the ethical point.

Extremity within HM production provides quite a clear example of compromise. As a product of the production aesthetics identified by the participants, extremity forces HM production to be less concerned with subtleties and shifts its focus towards explicit sonic aesthetics. The compromise lies in the idea of the production methodology that may be subscribed to, and equally criticised, by some of the participants. For example, the sound of the kick drum; extreme production methods must be used to achieve the expectations held for a HM recording (Turner, 2009). As a result, every other sonic component in the mix must then be treated equally as extremely. This is also a further signifier of Mynett's intelligibility:

Furthermore, when additional spectral information, in the form of high frequency energy, is introduced to guitars' timbres, they are perceived as heavier (Berger and Fales, 2005,

pp.193-194). In order for the other instrumentation to punch through, and be perceived as within the same context of, this 'sonic wall' (Turner, 2009) of extremely bright rhythm guitars, heightened high frequency content is normally required for much of the other instrumentation. (2013, p.45)

Here the example of distortion, and the resultant audible effect, is a clear indicator that achieving the desired production aesthetic is a product of compromise with the rest of the mix.

## **Conclusion**

This resultant effect of striving for specific production aesthetics has led to the supposed existence of a HM production methodology. This methodology can only be put into practise if those using it follow the accepted ideals of HM production. The producers who were interviewed have suggested that production aesthetics, and, more importantly, accepting the concept of idealism, highlights how technology has influenced the production of HM music. It is also apparent that music technology has developed alongside changing ideals for production suggesting that the production aesthetics that the participants described could also be a technological issue. Further study is required to determine the effect of the increasing fragmentation of modern record production (the development of multi-tracking, for example) has influenced recorded HM music directly. Compromise seems to follow suit; idealism implies that producers begin to compromise performance, live-ness, and decision-making. OC explores the act of compromise:

OC: Metal for example, metal guitars, you do have to make them sound of the ilk, what everyone else does. The kick drum does have to be a certain way, [...] no one wants to admit that, no one wants to say that's there because it implies limitation on what you can do and your hands are tied.

HM producers have a decision to make as to how they use technology and how to remain truthful to their own experience of HM production aesthetics. Accepted ideals support a 'normalised' view as per Taylor (2010) that works to please others, industry, and to keep HM records sounding 'of the ilk' (OC). Through the participant accounts a framework can be constructed suggesting that HM production is the

relationship between an accepted ideal, a somewhat social construction, and the compromises producers must make that inform their decisions whilst recording and mixing HM music.

This points to further study, working more closely with an expansive sample of record producers to ascertain whether or not the issues of idealism and compromise are as prominent as has been suggested here. One of the key outcomes is, of course, the unique nature of the participant's experiences; experiences that have been explored as a direct result of the use of Interpretative Phenomenological Analysis. The rich discussion, and interpretations made, have allowed us to begin constructing a conceptual framework based on the ideals of HM production and the compromises that have changed 21<sup>st</sup> century approaches to HM production. These views may not necessarily be expressed by producers who have significant credit in other genres of music and this study's intent was to promote the views of HM producers. There are however links to be made across the digital arts; coincidentally it could be argued that filmmaking and music production developments have been intrinsically linked at various points in recent history (Taylor, 2001, p.93). Both filmmaking and photography involve capturing a performance whether portrayed by actors on a soundstage or a moment in time captured by a stills camera. These mediums also make use of technologically influenced editing to change the original captured performance: music is quantised and tuned to perfect and improve the captured performance; film footage is edited together or trimmed to alter how the audience perceives the performance; and photographs can be digitally edited, or *photoshopped*,<sup>9</sup> to alter the image to the taste of the photographer. Compromise may be issues dealt with by artists working in these other mediums, suggesting a further link to the influence of technological development in the creative arts.

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<sup>9</sup> [http://everydayliteracies.net/files/DIY\\_Media\\_ms.pdf#page=109](http://everydayliteracies.net/files/DIY_Media_ms.pdf#page=109) [online] accessed 23/07/2015

Make the argument for GSPA:

The limitation is that the framework needs to be applied.

A pointer to working closely with Producers/Artists

Elephant in the room – HM – cannot apply this to other genres – however someone else could test the framework

Set out what the framework is

Set out what the future work is

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