Black Metal: 
Within the Sounds of Nature 

By 

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Abstract

This project explores musical composition within the black metal music subgenre. Nature and animal life form a very important aesthetic of this style, but one of the central aims of this project was to introduce nature and animal life as more than just a narrative concept. Here, musical mimicry was employed as a compositional tool to depict and represent animal life in a literal sense. The principal pitches and rhythmic patterns of certain natural sound samples were established, with the resulting structures forming the basis of musical ‘motifs’. These motifs became the foundations of the accompanying composition. To the author’s knowledge, this was the first time that musical mimicry had been directly used within black metal composition, which not only forged an even closer relationship with the nature aesthetic, but also opened the style up to the realms of what can be considered ‘programme music’.
# CONTENTS

1 Introduction 6

2 Methodology 9
   Qualitative Research 9
   Practice-led Research 10
   Practice-led Research in Musical Mimicry 11
   Empirical Approaches 11
   Theoretical Approaches 12

3 Literature Review 13
   Review of Literature Relating to Black Metal Culture 13
   Review of Musical Composition Literature 16

4 Artist Interviews 23

5 Creative Commentary 26
   Wind Motif 27
   Bees Motif 28
   Robin Motif 31
<table>
<thead>
<tr>
<th>Motif</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deer Motif</td>
<td>33</td>
</tr>
<tr>
<td>Insects Motif</td>
<td>35</td>
</tr>
<tr>
<td>Rodent Motif</td>
<td>37</td>
</tr>
<tr>
<td>Swan Motif</td>
<td>38</td>
</tr>
<tr>
<td>Female Tawny Owl Motif</td>
<td>40</td>
</tr>
<tr>
<td>Wings Motif</td>
<td>42</td>
</tr>
<tr>
<td>Fox Mating Call Motif</td>
<td>44</td>
</tr>
<tr>
<td>Male Tawny Owl Motif</td>
<td>46</td>
</tr>
<tr>
<td>Ravens Motif</td>
<td>48</td>
</tr>
</tbody>
</table>

**6 Conclusions**

References

Appendices

Appendix A – Arrangement Lyrics with Commentary 57

Appendix B – Construction of Motifs Using Mimicry 63
1. Introduction

Since 2013, the author has composed ‘atmospheric black metal’ music in a studio-based project named ‘Hryre’. Having recently released their first album, ‘From Mortality to Infinity’, with Aural Records in Italy, the author has embarked on a practice-based research project designed to represent animals and nature in the form of a musical arrangement. The written thesis considers how the work relates to underlying compositional theory and the musical style of black metal.

In parallel with the mimicry of animals and nature, the project’s lyrical content relates to folklore and the animal beings represented. Considered together, this provided the opportunity to research and interpret other significant British black metal music based on aesthetic folklore.

The project aims to achieve the following objectives:

- Representation of Animal Life – Using leitmotifs to develop animal ‘characters’ and to underpin their significant ‘characteristics’ through onomatopoeic mimicry.
- Lyrical reference to Animals in Folklore – Using English folklore relating to animals referenced in the musical mimicry to inform and establish a clear link between the music and the lyrical content.

The concept of this album develops the belief that, due to black metal lending itself well to the exploration of nature, it allows more scope and freedom to utilise a wider palette of conceptual influences. Likewise, these concepts create an exciting opportunity to bring an alternative focus to the representation of nature and animal life in black metal.

The genre of heavy metal has continued to expand since its advent during ‘The British Blues Boom’ in the United Kingdom in the 1960s (Bayer, 2016, p. 14). It is regarded by many to have its roots in the early 1960s, but heavy metal was not recognised as a standalone genre until the 1980s. Since then, it has evolved and developed a plethora of sub-genres, such as speed/thrash metal, death metal, nu metal, black metal, hardcore metal, grindcore, industrial metal, symphonic metal and post-metal. There are also several amalgamated sub-genres now, such as progressive death metal and symphonic folk metal. Heavy metal continues to develop to this day, with each band and sub-genre having its own degrees of extremity.

Considering the wide expanse of styles within the heavy metal spectrum, this project aims to represent animal and nature mimicry in the style of an atmospheric black metal musical arrangement. Historically, black metal was considered one of the most extreme and controversial sub-genres of heavy metal. However, in the early 1990s, the notoriety and sound of black metal, which became
known as the second wave of Norwegian black metal, superseded its previous incarnation. The
production and musicality took a great deal of influence from the aesthetics of the post-punk
movement of the early 1980s, as well as the thrash and speed metal influence from the first wave of
black metal during the same period. The second wave of black metal emphasised low fidelity (AKA lo-
fi) production values, largely due to a desire to abandon commercial and conventional studio
practices. By starving the music of low-end bass frequencies, it attempted to emulate the frozen
bleakness of the Scandinavian winter landscapes.

The controversies surrounding black metal have not only exposed it to the global arena, but they have
also inspired bands the world over to indulge their imaginations and explore creative possibilities.
Great Britain has been a significant contributor to the globalisation of black metal as a genre. To the
credit of a diverse, dedicated and talented following in the underground community, Britain has
introduced a wealth of black metal bands to a worldwide audience and has re-established itself not
only as a major contributor, but also as an innovator in its own right.

Well-regarded British black metal bands of recent years, such as Winterfylleth and Wodensthorne,
have received international acclaim and hold the ancient heritage of England at the core of their
creative influences. The fact that black metal is so deeply rooted in heritage and history means that
they are common influences for bands in the genre here in Britain and around the world.

With animals and nature having such a significant influence in black metal music, it was a natural step
to employ musical mimicry for this project. Classical composers, such as Sergei Prokofiev (*Peter and
the Wolf*) and Camille Saint-Saëns (*Carnival of the Animals*), explored the use of mimicry and
onomatopoeia in nature and animal sounds. Within their work, pitch, timbre, rhythm and
instrumentation were used to mimic and represent animals and their sounds. These have been
regarded as iconic pieces of classical music, which would suggest that such compositional
approaches are artistically valid and credible.

Given the range of diverse subjects and approaches evident within the British black metal scene,
holding animals and nature as central components of music via mimicry provides a largely
unexplored, but highly engaging avenue. Building on the notion that black metal is rooted in both
history and nature, the researcher’s aim is to bring nature to the very centre of the creative process
and literally ‘become’ the music. This not only determines a closer relationship between nature and
black metal, but, in doing so, also redefines an element of extremity in its own right.
The following chapters outline the main body of the research project:

- **Methodology** – A detailed overview of the intended research methods used throughout the project.
- **Literature Review** – A thorough review of research and literature related to compositional theory, black metal culture and folklore.
- **Interview Data** – A review of the interviews carried out as part of the primary field research.
- **Creative Commentary** – A thorough analysis of compositional techniques used in relation to animal and nature mimicry and representation.
- **Conclusions** – Final statements measuring the success the creative period has had in relation to the research objectives set out in this chapter.
2. Methodology

This chapter appraises the intended research methods for the project's investigation phase, discusses their limitations and effectiveness and suggests how these methodological decisions have shaped the research findings and outcome of the project.

**Qualitative Research**

The project is concerned primarily with the implementation of compositional techniques that successfully mimic and represent animal and natural life, whilst carrying out an in-depth analysis of how this was done. From this standpoint, it is obvious that the study required extensive research of a qualitative nature. During and after the practice-led research into the compositional process, it is important that the compositional techniques used have some degree of comparison to both artists’ the interviews of both artists, whilst demonstrating links to academic theory. In effect, this not only highlights how the music itself demonstrates relevance to the intended genre(s), but it also establishes a direct link to composition theory surrounding mimicry and onomatopoeia. Qualitative research methodologies also allow for exploration of English Folklore and superstition whilst identifying how animals play a prominent role in this folklore, thus informing the lyrical content. This form of questioning is considered to support an inductive research style, which is driven by individual meaning (Creswell, 2009, p. 4).

One method of primary qualitative research carried out was in-depth interviews with musicians involved in Britain’s extreme metal scene. The author’s intention was to explore other artists’ interpretations of nature and folklore to provide some detailed insight into practice-led methodology. This then develops further understanding of the previous use of the subject and highlights where this project is exploring some ideas yet to be attempted in the black metal style. The use of interviews provides the opportunity to directly question artists to determine their use of musical techniques, harmony, structure and lyrical themes. A significant benefit of ‘informal’ interviewing is that flexibility gives the opportunity to present follow-up questioning based on an individual’s specific answers. A significant disadvantage with interviews, however, is that they can be time-consuming. A large amount of time needs to be dedicated to the planning, undertaking, reviewing and transcribing relevant interview findings (Bell, 2010, p. 135). Interviews with individuals, a large portion of whom have not studied music academically, risk bias and abstract references to musical themes, which require clear contextualisation of the individual’s creative process to form a rigorous understanding of artistic practice. Taking this into account, the interview process and the cross-referencing thereafter need to focus on the findings, which present specific references to musical ideas and which can be attributed to a credible academic source. It is then possible to intertwine these comments with such reputable theories to support the conclusions with academic references.
Practice-led Research

Part of the nature of this project is the creation of a portfolio of original compositional works, which are informed by the research relating to programme music, mimicry and folklore. Therefore, practice-led research must be considered as the principal methodology for the project and the main driving force behind intertwining the subjects of qualitative research. The importance of practice-led research as a methodology lies in how it allows the interrogation of the process of creativity rather than viewing artistic practice merely as the outcome. Carrying out the application of theory and practice enables what Lucas (2012, p. 5) describes as a ‘real-world analysis’. This underpins the need to understand the creative process not only as the central element of practice, but also as a potential offering of new modes of knowledge and creative approaches to be presented. The importance of monitoring the process of creativity as well as the outcomes becomes imperative. It will be necessary to carry out a series of reflective entries that considers the creative process, whilst also understanding how this relates to the research subjects that influence the overarching concept.

In ‘The Philosophy of Music’, Kania (2007) discusses the plausible notion that music, unlike performance art and literature, is merely an interpretation of the work through performance. This is due to the lack of semantic content and Kania therefore asks why music is considered so valuable. A common philosophical value is based on the music’s apparent ability to express emotions whilst maintaining an abstract art in itself. This supports the notion that depicting nature and animal life in music is presented with certain barriers. Having no semantic or literal indication of meaning, but rather expressing emotions and feelings may prove problematic in determining exactly how the music can clearly express these core ideas. The issue of ambiguity and meaning could then be better comprehended by referencing the creative output to compositional theories to understand how these approaches are relevant to the interpretation of nature and animal life through reflective practice. Reflexivity helps to establish a comprehensible journey though the creative process and enable monitoring of progress linking to research and sources. The qualitative research of musical analysis towards original music compared to the responses of artists who were interviewed could be considered to facilitate and inform reflexive artistic analysis.

A key text that could provide some vital links between creative practice and theory is ‘A Practical Guide to Music Composition’ by Alan Belkin. It explores and illustrates an expansive range of compositional techniques used within contemporary composition and gives contextual examples of these in various pieces. It informed the present study and provided reputable examples of compositional ideas that form a valid platform on which to base the creative decisions and interpretations of nature and animal life.

Recent investigations into music practice methodology have positioned practice-led research in music as a form of qualitative research. This means that practice-led research with attention to music differs from word-based research and brings the investigation into the performance-based arena. Although
practice-led research presents issues relating to ambiguity in a conventional academic context, sonic-based research practice can present opportunities for the interpretation of qualitative research in a different language (Leavy, 2009, p. 260). Utilising and interpreting such methods of enquiry needs listening skills and an appreciation of musical form, rhythm, tempo, timbre, melody and dynamics. By relating to these primary musical principles, a connection can be made between theory and practice to alleviate ambiguity.

**Practice-led Research in Musical Mimicry**

Throughout the creative process of the project itself, the majority of practice-led research was based on musical mimicry and onomatopoeia. In the first instance, an audio sample of an animal or natural environment was obtained and analysed with particularly focus on pitch, rhythm and timbre using MIDI instruments and a spectrum analyser on Logic Pro. Once analysis of each sample was undertaken and the pitch and rhythm had been distinguished, a simple phrase was then developed with embellishment and phrasing such as slurs, tremolo and legato. This would then form a simple motif to create a workable musical idea allowing the appropriate addition of drums, bass, strings and guitars. Once achieved, the emphasis would then be on variation and structure to maintain interest, making use of linking phrases and sections, which serve the purpose of connecting salient motifs together. A significant contributor was the lack of emphasis on tonality, as each motif was developed based on isolated audio samples and formed without regard for diatonic chord relationships. The motifs were developed purely from the tones, which were presented from each individual sample.

There is no evidence to suggest that the animal kingdom does not adhere to a specific musical system, which presented a welcome creative advantage to presenting animal calls. Extreme metal often makes use of dissonant harmonic relationships; so developing musical ideas involving animal calls that have no relationship to western musical systems becomes achievable without requiring a major key with a mere seven diatonic degrees. This abandonment of tonal convention also presented a significant benefit in linking each animal's motif and it became possible to make use of the juxtapositions that these phrases presented. This worked in the interest of creating a unified work, which maintains interest whilst allowing for one cohesive arrangement to exist.

**Empirical Approaches**

The research outlines the need to carry out practice-led research and interviews as the two main modes of enquiry and research for the project. However, there are other potential approaches that look to inform the eventual project. A conscious decision has been made to divide these modes of enquiry into two sections of empirical and theoretical approaches. Both practice-led research and the execution of open interviews have been discussed and can exist within empirical approaches.
Documentaries and interviews carried out by third parties could also be used as an effective means of analysing the existing work of other journalists and media professionals. There is a wide range of documentaries surrounding the music and culture of black metal, which will serve to provide a strong background of the subject and to help establish its current state of prominence, at least in creating a context to form an introduction to the study.

The most significant mode of empirical exploration is through practice-based research. It is considered that mimicry and onomatopoeia will be the most significant methods, which will yield the most valid and substantial links to animal life and nature. To utilise these methods, it is intended that audio samples of the animals being represented will be obtained and analysed. From this, pitch, rhythm and timbre will be distinguished using appropriate instrumentation to form a link with a musical phrase and the animal being mimicked. From the most prominent musical elements identified in the audio samples collected, musical phrases and motifs will be developed to give a clear and specific representation of animal life through non-vocal/verbal instruments. Once these musical ideas have been developed, attention will then turn to representing the same animals through the lyrical themes. This will be done through the interpretation of English folkloric stories and fables in which the same animals are an important feature, thus presenting the necessary inspiration through which the lyrical content can emerge. This also presents the opportunity to forge a clear link between the lyrical themes and the motifs, which have been developed using mimicry and onomatopoeia.

**Theoretical Approaches**

The project needs to show that the ideas documented are well-informed and focused on studies that are well-regarded in academic literature. This applies in the context of music composition, creative practice and folklore. The project is heavily focused on empirical research, but there needs to be a basis of secondary research in the theoretical domain, which will inform the validity of the primary empirical research and testing.

Scholarly thought in academic books and journals must be considered as one of the most valuable and reliable sources of secondary information to be explored. This not only allows the gathering of background research on black metal and compositional techniques, but also offers a valid source of reference in respect to the exploration of English Folklore. The demonstration of competent technical composition and artistry is of paramount importance, but it is also crucial that such creative practices demonstrate an understanding of well-established creative theories and academic studies.
3. Literature Review

The following chapter identifies and appraises literature relevant to the central themes of this thesis. It also establishes how musical representation and mimicry research informed this project’s creative approaches.

Review of Literature Relating to Black Metal Culture

Martin Morris’ ‘Extreme Heavy Metal Music and Critical Theory’ (2015, p. 9) discusses ‘social suffering’ in terms of the ‘reality principle’ and highlights this as a core element of alternative popular music and culture. This transformation into music develops a sub-culture to which the individual listener may develop an affinity. However, this is considered the fulfilment of a system and not that of the individual. The individual may be involved in an alternative sub-culture, but their gratification is still derived in the same manner as that of the ‘pop idol’ culture, irrespective of their aversion to this. When related to the evolution of black metal and British black metal, the ‘reality principle’ considers how the genre has fallen foul of commercialisation, potentially diminishing its ‘true’ meaning and/or values.

Morris’s ‘Extreme Heavy Metal Music and Critical Theory’ (2015, p. 17) implies stress and cathartic benefits to aggressive music by relating to the frustrations of the real world through music. This brings a community of likeminded individuals together to channel their rage through the furious nature of extreme metal music. The author’s own arrangement at the centre of this academic study attempts to invoke a personal sense of frustration from the perspective of natural life at the hands of human society. This can be construed as predominantly negative, but it is delivered in a positive manner that glorifies nature and the animal kingdom. The lyrical content also explores the relationship between animal life in folklore to provide a connection between the lyrics and motifs.

Ultimately, the present creative output looks to address the aggressive yet cathartic expressions that are openly explored in black metal music, whilst delivering them through animal mimicry and folkloric references.

‘Extreme Metal – Music & Culture on the Edge’ (2006, p. 6) by Keith Kahn Harris has a central theme of transgression, exploring the idea that heavy metal pushes the boundaries of what is considered noise and challenging the very notion of what constitutes music. Sam Loynes from London Extreme Metal bands, Voices and Ted Maul, expressed a relevant idea in which he determined ‘extreme’ as a multifaceted entity. Whilst the common definitions of extremity make use of fast sub-divisions, velocity and timbre, extremity can also be none of these things. This concept or interpretation of ‘extreme’ is then considered to be something that breaks convention or conventional design.

1 The term ‘true’ referring to the Satanic/Heathen & Misanthropic stereotype rejecting all connections to any mainstream musical genre (Lucas et al, 2011: 280).
2 ‘Programme Music’ as defined by R. Scruton (2001, p. 1) is ‘Music of a narrative or descriptive kind extended
Although it is accepted that extreme may dictate a necessary level of paradigm breaking, it also creates a number of contradictions and pertinent questions. Firstly, where does ‘extreme metal’ transgress beyond where it is now? This could be considered a near-futile question, since, once a new level of extremity is achieved, a new boundary emerges and, thus, the same question is asked once again. Does extremity transgress to the point where it simply becomes noise? If so, can we still define noise as extreme metal? Can it even be considered music? Whilst it could be possible to write theses on these lines of enquiry alone, another important question comes to the fore: if extremity dictates a transgression from the ‘norm’, how is it possible to remain ‘True’ to black metal’s meaning and values? Again, this thesis does not seek to answer these questions, but rather lays bare the contradictions and/or interpretations of some concepts of extremity in black metal, thus creating their own boundaries and conventions in an attempt to refute the consequences of the above questions.

‘The Social Ontology of Music’ by Ion Olteteanu (2011, p. 254-255) addresses the philosophical relationship between music and language and our responses to musical works. Olteteanu presents a notion that our experiences of music depend largely on cultural learning. It states that music commonly occurs where music is not the only activity and places significance on subtle processes outside considered awareness. This gives some insight into the role of culturally integrated musical practice as part of everyday life. The text considers that an understanding of a piece of music as ‘pure’ is about recognising repetitions and variations. This argument states that music’s value lies in providing a sense of order, which we develop through listening. Humans in themselves can be considered habitual beings; we strive for order, thrive in routine and yet flounder when spontaneity exceeds order.

Olteteanu’s publication suggests that, although breaking conventional musical approaches is necessary in order to create new ideas, the need for familiar musical features is equally vital. Simply put, innovative musical ideas within a sub-genre are best received when there is a level of stylistic familiarity within them (Olteteanu, 2011, p 256). Relating this concept to the project’s aims, the harmonic and tonal qualities that are associated with black metal must occur to form tangible links to the style. The arrangement is aimed at exploring an unconventional concept by making use of animal mimicry to develop key motifs. Therefore, the use of comparatively simple musical patterns provides the familiarity to allow experimental and ‘left-field’ ideas to be interpreted.

In the context of this project, the sense of musical familiarity is achieved through rhythm, harmony and phrasing, thus making use of techniques that are deemed common in the black metal style. Techniques like up-tempo rhythmic phrases (referred to as ‘blast beats’ or ‘tremolo’), discordance and dissonance within the harmonic structures of accompaniment and melody would provide these ‘typical stylistic’ or ‘true’ traits. This would then provide the basis on which to develop the motifs, which are mimics of animal sounds and calls. This then supports the view of not only ‘pushing the envelope’, but also provides a solid acknowledgement of typical stylistic traits associated with a black metal style or genre. It could be considered that Christian Metz’s 1993 theory on genre provides some relevance in terms of how this portfolio observes conventional nomenclature surrounding black metal music,
whilst also exploring and implementing new ideas and designs outside of the genre as discussed within the ‘Experimental Stage’ of the theory (Kingsley-Jones, 2015).

The popularity of heavy metal in social studies and the consideration of extreme metal as a subject area for potential academic work is highlighted by ‘Heavy Fundamentalisms: Music, Metal & Politics’ by Rosemary Hill & Karl Spracklen (2010) and ‘Heavy Genealogy’ (2011) by Andy Brown. This idea is further supported in a study entitled ‘Folklore Studies in English Higher Education: Lost Cause or New Opportunity?’ by J.D.A Widdowson (2010, p. 125). Therein, Widdowson discusses the difficulties of establishing English Folklore in UK Higher Education, but highlights opportunity and potential to secure a place within academia. The journal identifies plausible reasons behind the diminishing use of folklore, which are explainable by a misconception of “nationalist” or “right-wing” beliefs within folklore. Spracklen et al (2012, p. 49) discusses the need for social and/or traditional identity in a modern and changing world in which ‘roots’ could be considered somewhat bigoted, distorted or even rendered “obsolete”. From a different perspective, ‘Grim Up North: Northern England, Northern Europe and Black Metal’ (2011) by Lucas et al (2011, p. 287), discusses the popularity of heritage and the desire to rekindle these traditions along with folklore. This plays a vital role in expressing pride in our own individual identity and belonging to a wider community and especially focuses on regional belonging. A further related study carried out by Caroline Lucas (2012, p. 5) discusses narratives of identity in extreme metal. These articles provide a creative resource for heritage as a representation of tradition and also show how geographic and symbolic identities relate to myth and folklore.

Through exploration of national identity and integration in like-minded social groups, a sense of communal belonging is heightened (Hill et al, 2010, p. 5). The author’s creative output is deeply rooted within the black metal style of which folklore, fantasy and heritage are important themes. In the first and second waves of black metal, the imagery and aesthetics were almost entirely concerned with Satanism and the Occult, this being a direct rebellion against Christianised European systems. There is still a very strong anti-Christian element in modern black metal, but there is, particularly in the United Kingdom, more emphasis on celebrating pre-Christian heritage (Heathenism). This represents a progression of maturity from the externally unsociable attitude of traditional black metal and the inward-looking attitude of modern black metal in encouraging individual exploration to be able to identify with their natural and historical environments. In consideration of this, it seems an obvious choice to use the folkloric aesthetic to forge a solid cohesion between the musical motifs and the lyrical themes.

In summary, the studies of Spracklen, Widdowson, Hill, Lucas and Brown provide a contribution to the project as lyrical works with creative output inspired by British folklore. They also support a discussion regarding the difficulties of academically integrating British folklore studies in the United Kingdom. This provides a link between the musical mimicry and the lyrical concepts validating the connection and attempts to address the aesthetic relationship between British black metal and traditional identity. The concept of traditional identity exists within the project’s arrangement with lyrical narrative exploring the folkloric association with the animal kingdom of Great Britain.
Review of Musical Composition Literature

This section critically appraises academic debate surrounding musical onomatopoeia and mimicry. It also serves to identify and resolve a working link between musical onomatopoeia and modern black metal musical approaches.

With varying degrees of success, contemporary western music has featured numerous attempts at representing animal life and/or nature through music. Within the context of black metal, however, this is a musical style that has never been the stage for such a creative approach. This might be partly due to the concept of music mimicking animals and nature raising mixed emotions and controversy. The absolutist composer, Claude Debussy, for example, considered all forms of musical mimicry unacceptable (Dayan, 2005, p. 217).

Classical composer, Ludwig Van Beethoven, defended programme music\(^2\) as “an expression of feeling”, whilst Paul Dukas claimed music onomatopoeia to be a valuable source of musical inspiration (Castelões, 2009). Likewise, rather than ‘representation’, Dukas suggests the term ‘influence’ could be a more suitable descriptor. This begs the question: is scholarly discourse in this field so rigid that it has rendered concepts of representation in music as narrow-faceted? On a similar point, Tomas Svoboda claimed “Musical reference makes sense even if the reference is not appreciated by the listener” (Castelões, 2009, p. 4). This bears a close resemblance to the role of the listener explored by Stanford. The composer’s intentions do not need to be validated or even interpreted by the listener to determine the composer’s intentions when a musical idea was created. The composer, ultimately, has little control over how the listener may perceive their ideas.

Sergei Prokofiev’s ‘Peter and the Wolf’ is a notable piece of programme music. This uses the concept of motif to develop an aural relationship between specific characters and the listener. Throughout the piece, the music narrates the story, employing the aural association of instruments with characters and the depiction of their actions (Great Performances, 2008). Prokofiev meticulously constructed a noteworthy piece in ‘Peter and the Wolf’, which shows how music can influence the interpretation of specific imagery, and depicts specific moods, actions and atmosphere. An independent investigation into musical imagery was carried out using Prokofiev’s ‘Peter and the Wolf’ together with Camille Saint-Saëns’ ‘Carnival of the Animals’ with two groups of young children (three and four years old). After listening to the piece, the children were given pictures of animals and they were asked to identify salient motifs in the music and what they felt were the appropriate animals being represented in the piece. This experiment looked to bring into discussion two contrasting views:

- Absolutist view – Music only exists within itself and from itself.
- Referentialist view – Music can and does relate to, interpret or represent extra-musical concepts.

\(^2\) ‘Programme Music’ as defined by R. Scruton (2001, p. 1) is ‘Music of a narrative or descriptive kind extended to all music that attempts to represent extra-musical concepts’.
The study of the findings concluded that children (particularly the older of the groups) were, indeed, able to appropriately liken musical motifs to the intended characters presented, showing that we are able to forge musical links to non-musical concepts (Trainor et al, 1992, p. 455). This supports the overarching principle behind the creative output of this body of works.

Animal mimicry was heavily evident in the work of Saint-Saens when he composed and published ‘Le Carnaval des Animaux’. Similarity to the compositions of Sergei Prokofiev, Saint-Saëns’ work presents a series of musical excerpts that represent animals like tortoises, elephants, birds and monkeys. Saint-Saëns’ music also focuses on elements of each animal’s synonymous characteristics, such as pitch to represent size and tempo/rhythmic phrases to represent an animal’s speed of motion. In addition, irregular and erratic rhythmical phrases are utilised in order to represent the unpredictable movements of small birds in the ‘Aviary’ movement of the composition. Although these compositional approaches are both valid and effective in terms of artistic representation of animal life, they could be considered abstract and lacking specific links to their intended representations. This reinforces the points made above, which, although lacking a firm scholarly basis, do highlight the merit of artistic representation and interpretation.

Krause’s (1993) publication, ‘The Niche Hypothesis’, discusses the apparent disconnect between humankind and the animal kingdom in claiming that we have lost touch with the sounds of nature. He discusses the relationship between the Native American people and their observance of a ‘Symphony of Natural Sounds’ in which every animal’s voice plays a vital part. This notion is not exclusive to the Native American people, as there are a number of indigenous communities that herald the importance of animals and natural sounds (Krause, 1993, p. 1). This raises the notion that, as westerners in a largely mechanical world, we could be preventing ourselves from connecting to our own natural surroundings and natural sounds. Black metal culture is strongly rooted in natural environments and defiant towards a materialistic and commercial society. A significant contribution to the black metal aesthetic is deeply set in a pastoral and harmonious vision of nature. Second wave, particularly British black metal bands, draw a great deal of their inspiration from the natural and rural environments. Album artwork often bears imagery of natural landscapes or phantasmagorical dramatisations. With that in mind, Krause (1993, p. 1) presents a pertinent link between black metal music, natural sound and traditional pre-industrial, Western culture.

WJ Treutler’s 1898 study, ‘Music in Relation to Man and Animals’, considers the relation of music, in its more limited sense, to man and animals. Although animals use their calls to communicate messages, Treutler insists on such sounds being regarded as ‘music’ because, by definition, music is a series of organised sounds that are used to communicate a message or express a representation of emotion. Unlike speech, which is generally delivered in a monotonous manner, musical phrasing requires a great deal of pitch variation, which suggests there is greater meaning than the words being sung (Treutler, 1898, p. 80). Perhaps animal song is reliant on pitch variation due to the absence of vocabulary or the ability to vocalise as humans do. Although the
musical phrases focused upon in the accompanying composition are not conveying the same messages or signals as the animals themselves, they are iconic representations of those animals.

Howard’s 1972 publication, ‘On Representational Music’, discusses onomatopoeia as a basis for the mimicry of a variety of sounds encompassing environmental or non-musical ideas, such as, but not limited to, bird twitters, cannon shots, water swirling, drum rolls and wind howls. It is noted, however, that although these sounds seek to imitate, this does not necessarily mean they are entirely representational. Onomatopoeia is considered in this study to be non-representational (Howard, 1972, p. 41). It could be considered in Howard’s view that onomatopoeia is defined as something true or close to the actual sounds and tonal characteristics of what is being mimicked, whereas representation holds a much less specific and arbitrary relationship. Although not entirely contradicting research in this field, it does present some valid arguments for the use of arbitrary artworks.

Luiz E. Castelões’ ‘A Catalogue of Musical Onomatopoeia’ (2009, p. 14-15) explores the notion of ‘iconic’ musical phrases that mimic the sounds of particular animals. This requires that musical phrases are ‘aurally iconic’, implying that salient motifs explicitly mimic and supplement a mental visualisation of the subject.

Arbitrary and Iconic musical onomatopoeia are distinct notions. Arbitrary notions are subjective and can represent an understanding that is unique to a particular listener and, indeed, to the composers themselves. Iconic notions present a distinct and universally recognisable image of the subject in question. Castelões (2009, p. 17) provides further insight that proposes that musical onomatopoeia needs to be aurally iconic and the composer must be clear about what the sounds are intended to represent. This requires that all significant motifs provide explicitly identifiable links to the sources that the music is representing.

Stanford’s work in ‘Onomatopoeic Mimesis in Plato’ discusses the view of Socrates’ speaking in 397BC on mimesis. He referred to the effect of imitations in leading to the conclusion that mimesis was merely imitating the sound rather than presenting a true likeness of what was being mimicked. Aural mimesis is, therefore, devoid of feeling and emotion and simply cannot represent the complexities of feeling achievable in, for instance, acting (Stanford, 1973, p. 186). This highlights the limitations of animal kingdom musical mimicry. With this in mind, none of the motifs developed could be considered as truly authentic as they have not been performed by animals in their natural acoustic space. Likewise, the listener requires a level of translation, reception and interpretation and this is something that composers have very little control over.

An article published by Vernon Blackburn named ‘Onomatopoeia in Music’, poses the idea that, in superficial considerations, music, far more than literature, lends itself to reproduction (Blackburn, 1903, p. 164). This occurs because the music is a reproduction of an initial sound sample, which has
been refined as a musical idea and/or motif and then subsequently communicated through musical score.

In Koji Matsunobu's 2013 work, 'Performing, Creating and Listening to Nature through Music', the discussion predominantly surrounds the aesthetic relationship between nature and musical performance. It discusses practitioners of the organic Shakuhachi, a Japanese flute that is personally harvested from bamboo by its practitioners. The process of making the flute involves what is considered to be a sacred connection with the environment and resembles the natural state of each piece of bamboo. Performing on the Shakuhachi is to become entwined with nature in that very time and place (Matsunobu, 2013, p. 73). This is a rather intriguing concept regarding the aesthetics of representing nature through the music, presenting another valid perspective of representation and expression.

Milena Petrovic's study, 'Imitation of animal sound patterns in Serbian folk music', explores the inclusion of animal sounds in traditional Serbian folk music and how these sounds are incorporated into songs, dances and rituals. The report discusses the relationship between humans and animal life and how it is believed that imitation and use of animalistic sounds is where language is derived. In doing so, Serbian folklore is intertwined with the music, which not only demonstrates a bond with animal life through the music, but also integrates heritage (Petrovic, 2011, p. 107). The study demonstrates that singing and dancing are some of the oldest forms of expression and are universal modes of communication.

Roger Scruton published a study entitled 'Representation in Music' in 1976, which postulates that, whilst music is used to artistically express emotion, it is nonetheless an abstract art that bears no true representation to life and its surrounding environment. This, therefore, presents the notion that, in music, the term 'representation' does not belong. It is felt that representation of an emotion or living being cannot be represented accurately through sound in a way that it could through a painting or a literary work. This presents issues with potentially arbitrary musical thoughts and imagery, so it places great importance on the provision of supporting or supplementary representation using lyrics in order for successful representation to occur (Scruton, 1976, p. 273).

Alan Moore’s 2016 book, ‘Song Means’, focuses on the technical analysis and interpretation of what song means in popular culture, giving specific attention to timbre, texture, harmony, structure and rhythm, but also discussing vocal performances and lyrics. These factors not only contribute to conveying a musical message, but also are central to the interpretation of the musical ideas that the writer is looking to convey (Moore, 2016, p. 1-11).

Roy Sorensen’s study, aptly entitled ‘Vague Music’, addresses the subject of vagueness in music. Here, the author suggests that music is meaningless or, absolute; that music has no other meaning or purpose other than to be music (Sorensen, 2011, p. 231-233). However, those who refute this notion cite the significance of musical quotation, onomatopoeia and leitmotifs in order to reclassify music as...
something more than simply ‘music’. Sorensen’s study looks at these points intently, which provides some strength in the validity of programme or concept music and, in doing so, supports the validity of the project’s approach.

Phil Tagg’s work, ‘Music’s Meaning’ (2013), is a comprehensive document that brings into focus a large number of relevant research topics. The book focuses intently on musical meaning and, in particular, semiotics and signs. Signs are distinguished as representing something other than itself, whereas semiotics is classified as the study and understanding of sign systems. These concepts are deeply intertwined with the nature of the author’s project in taking musical phrases as a sign to represent animals, beyond the fact they are a succession musical notes and rhythms (Tagg, 2013, p. 91).

Tagg’s publication also addresses the concept of absolute and non-absolute music, in which he states that, in order to avoid contradiction, absolute music must rely on the non-absolute to have any significant meaning and, thus, is a contradiction of its own distinction (Tagg, 2013 p. 405). This supports the project advocating non-absolute music and production of music, which attempts to utilise animal calls to create musical patterns in the black metal music style.

Tagg also discusses what is, in his opinion, the extended duration of a large piece of music like a symphony that needs to be composed of smaller movements to focus on important motifs. The author’s project seeks to represent nature and animal life and mandates that all musical ideas will exist in a single arrangement of work over 25 minutes in duration. Salient motifs and phrases occur throughout various ‘movements’ within the arrangement and are joined through ‘linking’ phrases that allow the piece to progress naturally and ‘organically’ without interruption, in much the same way that the seasons change and day turns to night.

In Coker’s 1972 publication, ‘Music & Meaning: A theoretical introduction to musical aesthetics’, he uses the term ‘congeneric meaning’ in the same category that is identified in Rahn’s review as non-aesthetic, because musical gestures as signs may express or represent feelings and, thus, are concerned with pure emotions of sensations (Cokers, 1972, p. 255).

Robinson’s ‘Music & Emotions’ (2008) explores the concept of expressiveness and emotion in music. It argues that expressiveness is not ‘confined’ to characteristics of emotion such as musical gestures resembling physical and verbal gestures. It can be said that music can represent the characteristics of an emotion, such as the slow pace and melancholic tones of the funeral march or up-beat and joyful tones associated with happiness. This is to establish an emotional connection between the listener and the music (Robinson, 2008, p. 71). It is important to note, though, that while music may be representative of these emotions, it does not necessarily invoke these emotions in a physical sense.
Four of the key principles explored in Robinson’s study are directly relevant to the present project:

1. Whether our sense of the expressiveness of music can be explained in terms of the expression of genuine human emotions by music.
2. Whether it is ever appropriate in music to hear or imagine a fictional or virtual persona in the music, an implied agent experiencing genuine emotions, with whom we might identify or with whom we might sympathise.
3. How we might understand expressive meaning in music.
4. How the arousal of emotions in listeners might have aesthetic significance. (Robinson, 2008, p. 72)

The exploration and development of this project relies extensively on the creative process as a means of practice-led research. Therefore, academic investigations of compositional approaches and philosophies in music are essential. As a starting point, we need to form a clear understanding of what is of actual academic value in regard to a creative project. Caroline Lucas (2012, p. 2) presents the notion that capturing the process and actions carried out during periods of creativity offers more substance and meaning than the outcome itself. This underlines the need to refer to the creative process as not only the central element of practice, but also offering the presentation of new modes of knowledge and creative approaches. Practice as research can facilitate a making of a multitude of modes of understanding and meaning, whilst avoiding conventional research theories. Traditional disciplines of research endeavour to find an absolute or ‘true’ conclusion. This, however, cannot be said for the creative process, as the intended outcome could be determined as absent. The obscurity within the creative approach offers new ideas and notions that, in turn, enable a constant process of meaning to occur (Lucas, 2012, p. 3).

Kania’s 2007 web publication, ‘The Philosophy of Music’, presents a notion that acknowledges the limitations of music as a true and absolute “expression” of emotion. Kania determines that music, unlike performance art and literature, is merely an interpretation of the work through performance, which are interpretations. This is due to the lack of semantic content and, therefore, underlines why music is considered so valuable. If music is considered to have no semantic or literal indication of meaning, but rather expresses emotions and feelings, this presents problems in determining exactly how the music clearly interprets these core meanings (Kania 2007). In the case of Kania’s project looking to represent animal life and nature, this very issue soon becomes apparent. A common philosophical value is predicated on the music’s apparent ability to represent emotions whilst maintaining an abstract art in itself (Kania, 2007). If this is true, then depicting nature and animal life in music is presented with barriers. It presents the philosophical question of how music can convey emotions and, indeed, further questions the emotional response of the listener. As discussed previously, theorists relegate themselves to ‘pure’ or ‘absolute’ outcomes. However, it could be considered that music with an accompanying text makes it easier to establish this connection. On the contrary, it may be necessary to understand how the composer has set their chosen text to music. The article goes on to discuss the validity of emotions in music by determining that expression is
something people do as an outward projection of their own emotional state, whereas expressivity is something artworks possess. Although music does display expressivity, it is not considered expression in its truest sense (Kania, 2007).

Despite the wealth of research relating to musical onomatopoeia, representation and mimicry, there is no available evidence to suggest such approaches have been applied to black metal composition.
4. Artist Interviews

This project has relied upon the successful undertaking of primary research to present relevant and usable results. The two main modes of investigation used throughout the project have been the execution of interviews and practice-based research applying compositional concepts in the context of the style and genre used in this portfolio. Primary research has been conducted in a manner that provides links to relevant academic theories, but also considers aesthetic links with the music of the artists interviewed.

In the early stages of the project, detailed interviews were carried out with artists active in the UK extreme metal scene. The intended purpose of these interviews was to understand the compositional techniques and creative processes used and their relationship to the broader context of the extreme metal aesthetic. Using social media and email, musicians and artists within the extreme metal genre both inside and outside of Britain were asked to take part. Selection of contributors took place on the basis of prominence within the extreme metal underground scene, but also collective coverage of a wide expanse of sub-genres. Musical themes representing Satanism, Victoriana, spirituality, nature, heritage and fractious mental instability presented the opportunity to explore how these themes coincided with similar senses of dissonance and abrasive chord tones. The interviews were conducted using a variety of face-to-face via Skype, telephone conversation and email. This offered the sincerity of real-time responses to questioning whilst also benefitting from responses, which were carefully considered and crafted. All respondents were happy to be named individually as well as having their bands/pseudonyms openly discussed and referenced within the text of the main body of the study. The collected data expresses some of the key musical traits in extreme metal and establishes how artists exploit these in their creative output. This provides insight into the representation of nature, animal life and folklore in their music, providing clear and direct insights into my own practice-led research. The following narrative provides a brief summary of each artist’s answers and discusses how these findings may inform the creative output in terms of the practice-led research.

What would you consider to be the main concept/message of your band/project?

This question generated some intriguing answers that showed some accord with the project’s overarching themes. Jason Mendonca of Akercocke discussed how his lyrics cover a great deal of the carnal aspects of human nature, as well as how they relate to individuals as animals and the animalistic essence in the psychosexual domain. This does give some reference to animals, linking this to the most carnal features of human nature and likening such behaviour to that of animals. Though not directly related to the project’s theme, this does give some links to the animalistic themes presented in Akercocke’s music. Dan Eyre (A Forest of Stars), Michael Blenkarn (Ahamkara & Inmost Blight) and Andrew Scott (Nordenglander) all consider the main themes of their music to be based on
folklore, ghost stories and tales of warning. A clear link to fantasy and supernatural literature is prominent in their work and, although this is not particularly aimed towards folkloric tales of animals, it does serve to solidify the link to folklore and fantasy in the work of the aforementioned artists.

Has your work ever made particular reference to folklore, nature or philosophy/theology?

This question presented some relevant findings supporting the notion of exploring folklore and nature in the UK extreme metal music scene. Helena Stern & Taz Corona-Brown (Undersmile) discussed how their music lends itself to an abstract representation of nature, such as the sun, the moon and the sea, whereas Matthew Davidson (Repulsive Vision) explores the meanings behind folklore stories rather than the stories themselves. Andrew Scott (Nordenglander) also discusses how his music is heavily focused on folk tales, with the lyrics of the Wanderer EP created as an adaptation of the folklore tale, The Wanderer. The track Blackhill is a reference to the small village in which Andrew resides, so not only is his music focused on folklore, it is also geographically specific in representing the folklore of his own local area, which is a key characteristic found in many examples of extreme metal in Britain. The research project intends to adapt folklore depicting animals, which are then mimicked through the music. However, it is clear from these responses that folklore is a significant contributor towards the music of the above-mentioned artists.

In your work, has there been any particular representation/interpretation of animal/supernatural life?

This question raised a number of interesting responses, especially those of Dan Eyre (A Forest of Stars) who described his own lyrical references towards animal and supernatural life as carrion birds and the image of being picked apart by them. He further elaborated on this by discussing how his lyrics also depict worms and insects eating flesh, thus exploring the theme of the cycle of life by which the remnants of physical life go back into the earth and the animals occupying it. Michael Blenkarn discusses how the ‘cycle of life’ is a constant theme through his work and stated in his interview that “We came from the animals and to the animals we can return”. This project’s arrangement itself has themes and connections related to the cycle of life, as it sees the feeding on decaying cadavers as a grotesque yet necessary part of the living cycle of nature.

In your own opinion, what do you consider to be the most important musical characteristics in extreme metal?

This question elicited one of the most significant findings from the interview process. Apart from all of the expected musical techniques associated with extreme metal styles, the concept of ‘extremity’ itself became a central discussion point. Sam Loynes (Voices) discussed how he considers that the concept of extremity exists by breaking the paradigms of conventional approaches. He stated that
“Once you start doing something that’s been done before, then you cease to be extreme”. Manhiem (Ex-Mayhem & Order) discussed how he feels extreme metal does not come across as extreme due to the fact that what was once shocking is now common practice, thus obscuring the very essence of extremity. Rick Blakelock (A Forest of Stars) believes one of the most important aspects of extreme metal is creative freedom and not strictly abiding by the ‘rules’ of blast beats, growls and detuned guitars. This, in turn, provides some supporting evidence to this project’s possible contribution to an understanding of extremity. Though nature, folklore and extremity have remained prominent elements in extreme metal in the UK, there are grounds to suggest that animals and nature have never been mimicked before, which presents the opportunity for this project to be a direct deviation from the norm and conventional practice.

The interviews could be considered to have been laborious in determining links between the project’s intended outcomes and what are largely ambiguous and abstract associations to artists working in the UK extreme metal music scene. Though the artists were able to discuss lyrical themes and give arbitrary comments on their music, the quality of findings were limited by the respondents’ ability to talk specifically about their music from a technical and/or academic perspective. The responses do show, however, that folklore, nature and extremity are constantly recurring themes in extreme metal in the UK. This validates the objective of the project to mimic animal life and to intertwine this with lyrical content inspired by folklore connected to the animals mimicked as aesthetically relevant and, therefore, authentic.
5. Creative Commentary

The primary creative focus utilised in this practice-led research was to place animal mimicry as the central concept from which musical ideas would emerge. The creative elements also include extensive research into the folkloric associations of animals depicted in the work. The results of this research informed a process of lyric writing to form a tangible link between the musical mimicry and the references to folklore therein. The following presents, at significant points within the arrangement, a reflective analysis of the creative concepts implemented.

A significant factor in the development of musical ideas and mimicries is to surround the work with the use of dissonance and atonality. Extreme metal and, in particular, black and death metal, places a great deal of importance on the use of dissonance and atonality to the extent that they are considered synonymous with the extreme metal sub-genre(s) (Kahn-Harris, 2006, p. 29-30). Dissonance in music associates ‘a mingling of discordant sounds and a clashing of unresolved notes and/or chords’ (MacWilliam, 2017, p. 89). Black Sabbath pioneered the use of the diminished fifth (The Tri-tone) as a prominent feature in what became ‘Heavy Metal Harmony’ (Kahn-Harris, 2006, p. 20-30). Unlike Blues music, which would make use of such tones as the tri-tone in passing phrases, heavy metal music places dissonant and non-diatonic harmony at the centre of its construction (Lilja, 2009, p. 1-5). With this in mind, the initial musical exploration allowed the opportunity to be able to interpret an array of animal samples free from the confines of five/seven note diatonic scales, which are not necessarily applicable in the mimicry of calls throughout the animal kingdom. This is due to our western musical system having no apparent influence on whatever musical ‘systems’ may or may not exist within the animal kingdom (Tagg, 2013, p. 277).

The representation of animal life throughout the portfolio has not been restricted to musical mimicry and the text embodied in the work further highlights this fact. The project takes substance from the aesthetic imagery of British black metal, which is rooted deeply in heritage and folklore (Lucas, 2010, p. 1). The decision was then to present an arrangement that represented animal life through musical mimicry. This would be accompanied with lyrical works, which have been crafted from folklore tales and customs that are centred on the animals in question. This was considered imperative to the successful delivery of an arrangement of work that not only represented animal life through mimicry, but also incorporated a lyrical representation of animal life using such folklore. This not only satisfies the need to provide a heritage and folkloric aspect to the lyrical work, but also provides the opportunity to intertwine the motifs and themes developed through musical mimicry with a relevant and complimentary lyrical narrative. A significant aspect of the structure of the arrangement is to observe the progression of the four seasons (spring, summer, autumn and winter). A lyrical narrative supports this and the arrangement’s motifs are designed to coincide with their respective seasons. For example, foxes are generally most active in terms of mating during the winter months; therefore, the winter season section of the arrangement is the obvious place to locate this representative motif.
Wind Motif
The project thus far has presented a number of challenges and representing the environment in a non-abstract or non-arbitrary musical way is not the least of these. Unlike other forms of extreme metal, black metal does not rely on propulsive rhythms but rather places emphasis on ‘swirling’ and indistinct ‘atmospherics’. This is largely due to the low fidelity production, which results from vocals and other ‘lead’ instruments sitting further back in the mix. This blurs all instruments together to create an ‘atmospheric wash of noise’ (Bennett & Wakesman, 2014, p. 186). Whilst other forms of extreme metal focus on the lower frequencies and textures to achieve heaviness, black metal does so by emphasising the higher frequencies. This achieves ‘harshness’ and ‘timbral density’, representative of the bitter coldness of the Scandinavian environment (Bennett & Wakesman, 2014, p. 186). In order to be able to present a body of work that has academic credibility it, it was important that the representations showed a clear link to the animals being represented. This being the case, it was decided to approach the representations through mimicry as it successfully provides specific clarity throughout the arrangement. Using a frequency analyser and MIDI instrumentation such as timpani and flute, the author has focused the lower frequencies on the timpani around the note of D1 as well as the whistles of the wind, which is on the flute around the note of F4. It is duly noted that the D1, which the timpani are performing, is at its lowest possible pitch resulting in the skin being slacker and therefore adding a natural rumble from the skin heightening the texture of thunder. The D1 forms the root, so the F4 gives a compound minor third interval. The flutes have then been further developed into a section of flutes, which gradually build throughout the wind section to an eventual F minor triad using the voicing F3, C3, F4 and A4. The decision to choose the timpani was a rather simple one to make. The low frequencies that the timpani commonly occupy coupled with the subtlety in attack from the soft-felt mallet beaters gives the timpani a smooth yet overarching quality like that of thunder or heavy wind. The flutes were put in place to mimic the high-pitched whistles from the wind. The flute was deemed the most suitable choice for this as the breathing, like the choice of beaters with the timpani, offered a smooth quality whilst having the required sharpness in its metallic texture and pitch range to ‘cut through’ without the need for additional volume or velocity.

A significant aim for the wind theme was the implementation of electric lead guitar swells, created by adding volume automation to the lead guitar. This would mirror the same pitch as the flute and would be faded in whilst the flute was sounding. Once again, the metallic tone from the strings would complement the flute and the whistle of the wind whilst the automation would smooth the attack of the plectrum striking the string. The attack, decay and release were faded out using volume automation, which emphasises the sustain of the guitar blending in with the flute. Since the attack, decay and release were automated, the guitar could simply add presence to that of the flute. This was created by having the guitar play in unison with the flute and worked by panning from the flute to the guitar in a manner reminiscent of how Soundgarden crossed the feedback guitar with the vocals in the introduction to their song ‘Loud Love’ from their 1989 ‘Louder Than Love’ album. This is reflected in Philip Tagg’s publication ‘Music’s Meaning’ (2013, p. 31) in which he describes timbres as having four basic phases: Attack, Decay, Sustain and Release. The properties of each of these elements and
how those properties vary as the sound of a note is produced, continued and ended determine the specific qualities of what we hear as timbre. Heavily manipulating the electric guitar’s natural timbre through automation has affected the perception of the guitar in this section and is working in closer cohesion with the flute to provide timbral density.

This serves as the introduction to the portfolio, with the flute and guitar sharing the role of playing the F4 note whilst merging with each other. The guitar is then used as a means of transcending from the flute and timpani to the guitars, bass and drums. Thus, moving from the flute-led, atmospherically driven introduction to the first heavy section. The timpani make use of tremolo (illustrated in the score below) taking the role of the thunder, building up in intensity through the crescendo, which gives the perspective of thunder approaching from a distance. The flute and guitars, however, are sustained over the period of four bars, playing the role of the wind. Single notes then perform this with volume automation, which gives the impression of wind slowly building up and dying down. The two representations then add to the original sample and provide a sonic texture bearing a striking resemblance. The musical idea is illustrated in figure 1 below.

**Figure 1 – Wind Motif**

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<td>Timpani</td>
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**Bees Motif**

In order to explore the creation of musical ideas to represent a swarm of bees, the author obtained a sound file for analysis, which formed a basis from which the musical representation would emerge. The author was able to distinguish pitch using a section of MIDI strings as well as an EQ analyser and, in doing so, could narrow the prominent pitches to A flat 2 and A2 occurring simultaneously. The process adopted was as follows. Firstly, the author wanted to express the broad range of frequencies evident in the original bee swarm sample and, therefore, made the decision to utilise two guitars (using distortion to further saturate the signal) to perform the A flat and A (diminished second)
phrases an octave apart (A flat 1, A1, A flat 2 and A2). The bass guitar is also centred predominantly on the A0, not following the same pattern as the guitars. This facilitated the representation of the swarm as it allowed the mimicking phrase to be played over a three-octave range. This also afforded the opportunity to take advantage of the dissonance between the A flat and A (diminished second) to give an authentic musical phrase that is synonymous with the black metal style. The author coupled this with the tremolo technique on the violin in order to give the rhythmic representation of a swarm of bees before transferring this musical phrase to the guitars with added distortion. It was deemed appropriate to use the MIDI violin for initial exploration in this section. The bees gave an impression similar to the ricochet technique, which shared a close likeness to the equivalent guitar technique. This was incorporated into the arrangement as tremolo picking. Once the musical phrase had been transferred to the guitars, the decision was made to separate the two guitars by an octave to give a greater frequency range across the instruments, which resulted in a closer representation of the initial swarm sample. This formed a musical section fitting the fundamental stylistic fingerprints of the black metal style, as the musical phrase has dissonance in the diminished second and tremolo picking on the electric guitars. The bass guitar is then introduced around the root notes of A flat 0 and A0, further adding to a broader frequency range with the addition of the drum kit presenting a typical black metal pattern in semi-quavers (blast beats). This gives not only an accurate representation of a swarm of bees, but also a musical phrase of which is clearly associated with the black metal style. With the representation of white noise being performed predominantly by the distorted guitars and bass guitar through the range of frequencies at a constant rhythm and velocity, this provides an accurate mimicry of a swarm of bees and presents the music in a way that is not too dissimilar to the black metal style. It is common for black metal pieces to include musical passages that are constant in terms of rhythmic intensity (blast beats and tremolo picking) across guitar and bass guitar passages, which creates a dense concentration of musical sound. In Howard’s (1972) publication ‘On Representational Music’, onomatopoeia is defined as something true or close to the actual sounds and tonal characteristics of what is being mimicked (Howard, 1972, p. 240). The approach used in the bee section provides a specific link to the white noise that is evident in the sound of a swarm of bees and also the rhythmic intensity that can be found in an array of musical samples from the black metal style (Kahn-Harris, 2006, p. 31). In terms of bearing the closest resemblance and keeping with the stylistic context of black metal, the bees theme is considered to have the closest likeness. The bees motif is illustrated in figure 2 below.
The passage below shows the lyrics that accompany the ‘bees’ section of the arrangement. These are performed using a higher pitch, albeit in monotone form of vocal growls, which are synonymous with the black metal style. Other than the fact that vocals have been performed in a fashion typical of black metal, the significance of the vocals solely rests on the lyrical content that is highlighted in Appendix A.

‘White noise’ is a reference to the typical sound of a swarm of bees and the sonic similarities to white noise it holds. ‘At the heart of all creation’ and ‘We bring life into this world’ are references to the folkloric idea that bees, though not exclusively, are associated with fertility and the replenishment of life (Prior Lake et al., 2017).
Robin Motif
As with many of the representations so far in this project, the author has based this representation on pitch and rhythm. Interpreting a musical pattern from the robin sample was particularly complex and challenging to distinguish, due to irregularities in the rhythm of the original sample. When a phrase that mimicked the original sample had been developed, the rhythm was heavily based on the offbeat. This presented the ideal opportunity to break from the typical black metal musical form and implement a breakbeat metal section that is akin to the style of UK blackened death metal band, Akercocke, which is well-regarded for its fusion of urban electronic elements within extreme metal (Mendonca, 2016). From the initial robin’s call, the author’s own representation was loosely based on the pitch (within a 12-note western chromatic scale) and rhythm in order to create a coherent musical idea. The pitches the author was able to transcribe from this particular robin call using a MIDI flute were based around a descending D flat 5, C5, B4, B flat 4 with an octave between an A sharp 3 and A sharp 4 and followed an F sharp 4 to E4.

The author experimented with some lead guitar lines based on the rhythm and melodic phrase of the robin call, but based on those rhythmic complexities and their pitches, it did not seem an appropriate phrase for an instrument like the electric guitar. Instead, the flute’s individual characteristics lend themselves much more appropriately to the representation (Tagg, 2013, p. 54-55). Composers such as Sergei Prokofiev have demonstrated their use of the flute to represent birdcalls to an exceptional standard. Recognising this, the author decided to adopt the approach and keep the flute as a central part of the salient musical idea. Ivan Kinny described the birdsong of the Butcherbird as ‘very tuneful and diatonic and the sound is bright and pure, like a flute’ (Taylor, 2011, p. 10). Treutler (1898, p. 75) regarded such bird sounds as ‘music’, because by definition, music is a series of organised sounds that communicate a message or express a representation of emotion. Birds have long been the centre of inspiration for music with composers such as Olivier Messiaen, who famously copied birdcalls in his music. This arrangement has placed the same importance on birdsong in the context of the Breakbeat/black metal style carried out in this particular section.

The task was then to ensure the two guitar parts presented a workable chord progression appropriate to the flute melody. On the first guitar, the chord progression was based on Bbsus2 to Esus2 with the second guitar on Bmadd9 to Esus2. The chord progression provides a harmony that supports and compliments the main melody. The initial robin sample was used to construct the melody where all harmonic and melodic elements of this section have been developed from it.

Taking account of the rhythmic complexity of the original MIDI flute representation of the robin call, the author decided that the composition would benefit from simplifying the rhythm of this call so it would work in the context of a more comprehensive musical idea. A tremolo picking variation to this musical idea was developed using fast subdivisions across the bass and guitar sections. The author has, however, maintained a desire to incorporate elements of other styles and genres into their musical output. This was taken as an opportunity to assert a predilection for dark and new wave with
a drum pattern rhythmically akin to breakbeat. The author also wanted to implement a synthesiser string patch using Native Instruments’ Kontakt sample library to add some atmosphere, which adds sonic depth and layers to the music. This does not aim to represent the environment as such, but rather adds additional layers to enhance the salient motif. The project places heavy emphasis on representing nature and environments and, as a result, positions the keyboard at the centre of it. The robin motif is illustrated in figures 3.1 and 3.2 below.

Figure 3.1 – Robin Motif Part 1

![Figure 3.1](image1.png)

Figure 3.2 – Robin Motif Part 2

![Figure 3.2](image2.png)
As previously mentioned, the author has developed a variation of this theme centred on typical black metal techniques, such as fast subdivisions (commonly referred to as blast beats) and tremolo picking on the guitars. This is to keep this theme in touch with the core musical aesthetic of the portfolio. The chord progression has been simplified to a Bb5 to E5 with the bass emphasising the root note of the same progression also making use of the tremolo picking technique. Adding this further solidifies the significance of the blast beats and the semiquaver groove set out in this section of the arrangement. The rhythm and tremolo in this section do not create any links to the imagery of the robin, but rather allow for an interpretation of the theme in the black metal style. The lyrical content that accompanies the robin can be found in Appendix A.

**Deer Motif**

The representation of the deer used a sample of a deer call and was derived using the MIDI violin to distinguish pitch between the two notes in the call. These were determined as F#3 and B3 (a perfect fourth).

Having ascertained the pitch through mimicking the deer call on the violin, the harmonic content was explored further instead of creating yet another melodic phrase. This presented an opportunity to use the perfect fourth between F#3 and B3 and invert that interval to create a perfect fifth.
a B5 power chord and developed a musical phrase with this as the primary chord. The Badd9 was added to the second guitar in order to present harmonic variation to the section, whilst applying the rhythm of the deer call to further shape the musical phrase. The rhythm of the deer call was approximately one crotchet tied to a quaver followed by a quaver tied to a minim, which, in turn, is also tied to a semi breve. This rhythm was then adapted as the main rhythmic phrase, which is repeated throughout the introduction of this section. The bass was added to emphasise the primary chord (B5) through a descending arpeggio of the same chord voicing, whilst the drums added cymbal hits emphasising the rhythmic references in the original deer call. Also added to this was a ride pattern with fills in a section, which would imply this musical idea is best presented in a ‘breakdown’ section. To put this into context, the breakdown section should be distinguished here as a significant break in musical pace or direction (Belkin, 2008, p. 8). This section conforms to both of these distinctions and presents a sharp juxtaposition in tempo, whilst maintaining a similar velocity and volume. The break in pace and key allows for the gradual progression into the acoustic variation of the deer theme. In terms of the rationale for this approach, in the (1972) publication ‘On Representational Music’, Howard regarded onomatopoeia and representation as two different constructs. Onomatopoeia focuses on producing sound that is true or alike to the intended subject, whereas representation forms a more arbitrary connection (Howard, 1972, p. 42). In the case of this musical idea, the connection is a more arbitrary representation than it is onomatopoeic. The rhythms and notes have been loosely adapted to form the musical idea, but it is not explicit or immediately obvious. Both parts of the deer motif are illustrated in figures 4.1 and 4.2 below.

Figure 4.1 Deer Motif Part 1
The lyrical phrases specifically aimed at the deer section of the arrangement are situated in Appendix A.

**Insects Motif**

An extensive bank of samples was gathered in order to create a musical theme, which was aimed at mimicking insects, in particular, the sound of a cricket stridulating (rubbing its wings together). A MIDI violin was used to match pitch, distinguishing notes predominantly around E5 and F5 occurring simultaneously. This once again presented the opportunity to make use of the clashing diminished second intervals between the two prominent pitches within the establishment of a salient musical theme. With similarities to Howard (1979), Luiz E. Castelões’ ‘A Catalogue of Music Onomatopoeia’ (2009) also discusses onomatopoetic/iconic musical phrases that mimic the sounds of particular animals. Like the bees theme, the insects theme also looks to present iconic musical phrases that mimic the sounds of insects and, in particular, crickets.
The diminished second intervals using the ‘double stops’ on the lead distorted guitar work very effectively in providing an aural likeness to mimic the sound of crickets rubbing their wings together. The diminished second emphasises the clashing dissonance, which was evident in the original sample, and this has, therefore, become the primary factor in the representation of the crickets in this section. The initial exploration sought to mimic the ‘shaking sound’ along with the representation of the crickets through the use of some MIDI percussive shakers. However, continued use of the shaker was decided in the context of heavier sections, as this seemed an inappropriate choice of instrumentation for the genre. The shaker has a stronger place in folk, rock and roll and in Latin music and this worked well in terms of establishing the initial mimicry of insects. However, the shaker was simply out of context and did not add anything to the section, so it was removed. It was more effective and appropriate to emphasise the shaking by using tremolo picking on a distorted guitar based on a muted F. This gives it a more appropriate context in terms of a blast beat section, with the diminished second and tremolo techniques present across the guitar and bass sections and semi quaver patterns present in the drums. The second guitar emphasises a simple F5 power chord (with the root note on the fourth fret on the D flat string), which is accompanied by a bass guitar part adding the F root note. The power chord is defined as a dyad (two-note chord), which contains only a root note (F) and a fifth above the root (Bb). Unlike common chord tones, which are built on a triad (three-note chord), having no third degree negates the chord tone from being major, minor, augmented or diminished. These are common chords used in rock and heavy metal because their lack of tonal chord quality as a result of the absence of a third allows them to be used effectively over any diatonic or non-diatonic of a Western scale. The guitars themselves are simply distorted and do not make use of any specific effects in the duration of this section. The insects motif is illustrated in figure 5 below.

Figure 5 – Insects Motif

The lyrical content that accompanies the section of the arrangement representing insects are found in Appendix A.
Rodent Motif

Like many of the other musical ideas, experimental mimicking of the vole again uses pitch and rhythm. This was developed using a MIDI flute, as the prominent pitch of the flute could be considered to give a fitting characterisation of the vole’s size in a similar manner to the robin. Both the robin and the vole are smaller creatures and, as Prokofiev’s work has demonstrated, pitch and texture play a huge part in the characterisation of music mimicry of animals (Castelões, 2009, p. 332). The pitches have been narrowed down to F sharp 5 and G5, which presents a diminished second interval between the two adjacent notes. This once again provides tonal dissonance, which is very useful in developing a motif or theme in a discordant style like black metal (Loynes, 2016).

Having once distinguished this pitch using MIDI instrumentation, the phrase was transferred to the distorted electric guitar to develop a lead guitar line based on those two notes. Having worked with the two identified pitches for some time, neither were felt to be either appropriate or necessarily beneficial to focus the melodic features of the vole call through the lead guitar. No amount of phrasing or emphasis on the lead guitar would add any significant interest. Working with a limited scope of two pitches at F#5 and G5 was somewhat contrived and ineffective. With this in mind, it was decided that it would be in the best interest of the composition to base this animal call on the flute and to develop a chord structure to compliment the flute as the lead instrument in this theme. Expanding on this starting point, it was decided to place a Gm chord on the second guitar to allow this to resonate whilst playing a G5 with an additional diminished fifth to further the dissonance and bring to the fore the clashing of the diminished fifth on the flute. This not only expands the harmony, but reinforces the dissonance in that particular section and, by relieving both guitars from the responsibility of carrying the motif, gives them the opportunity to emphasise the dissonance in the G5add flat 5 on guitar one against the G on guitar two. This gives a greater expanse of harmonic quality throughout the instrumentation in this section, so the simple diminished second motif on the flute is enhanced by the instrumentation that accompanies it.

The drum groove is performed in half time, with hi hats stressing the offbeat and single strokes giving more power and significance to the tempo of the section. The tempo and drum phrases suggest the entire section could work as a breakdown rather than a central musical section in itself. The rodent motif is illustrated in figure 6 below.
The vocals in this section have been performed in a style similar and synonymous with black metal in a high-pitched growl, which is monotonal but appropriate given the style in which it is performed. The lyrical content that accompanies the rodent motif of the arrangement are located in Appendix A.

Swan Motif

This representation takes pitch and rhythm using the MIDI clarinet to help distinguish the prominent pitch. This was done in a manner consistent with that implemented throughout the initial exploration process of the project. Using MIDI instrumentation to distinguish a likeness in Western pitch made it possible to match the pitch of the swan call to E4, B flat 4 and A4. Taking into consideration the three-note pattern (the E4 ascending to the B flat 4 down to the A4, the E4 and the B flat 4), this creates a diminished fifth interval that is ideal for creating dissonance intrinsic to the writing of extreme music and black metal in particular.

Following the creation of the initial swan sample using the MIDI clarinet, the same musical phrase was used on the distorted electric guitar. Having experimented with the swan call on the distorted electric guitar, the initial motif was developed using the clarinet first inspired by Prokofiev’s approach to animal mimicry using pitch and texture to characterise the represented animals. The bills on the ducks were represented by the reed in the mouthpiece to give a distinguishable quality to the ducks (Tagg, 2013). Following this, the decision was made that the clarinet did not pose a great deal of significance in terms of texture and the aesthetic integrity of the section. With this in mind, the author decided to use the phrase, which was developed from the MIDI clarinet as a lead guitar part. It was always intended that the motif would be the prominent melodic phrase, but upon finding that the clarinet was not a suitable choice in instrumentation, a significant improvement was made by applying...
the phrase to the lead guitar. The additional slurs in phrasing and stimulation made for a far superior representation of the swan call, albeit non-onomatopoeic in terms of timbre.

The idea is not specifically synonymous to the style of black metal, but it was deemed very important to include elements of a wider sphere of musical influences within extreme metal, such as groove metal. Groove metal's richest characteristics reside in strong yet rhythmically complex musical phrases, which provide more variation. This breaks the monotony of repetitive quick subdivisions, such as blast beats and tremolo, as typically found in black metal. Furthermore, this gives the opportunity to experiment with a wider palette of rhythmic phrases to avoid potential monotony, but there is a typical blast beat variation on this theme within the portfolio. Whilst it was desirable to integrate other influences from styles outside of the prominent genres within the portfolio, it was necessary in this case to present a variation on this theme using techniques more akin to the black metal style. This allows a connection between the two variations to exist and prevents unnecessary juxtapositions from taking place when transitioning into the next theme. Figures 7.1 and 7.2 provide illustrations of both musical ideas below.

Figure 7.1 – Swan Motif Part 1.
Despite wishing to explore elements of other genres outside of black metal, it is important to remember that the aim of the project was to ‘represent animal life and nature through black metal’. Therefore, it was of great importance to develop a variation of this theme with emphasis on uneven measures. To do this, phrases were built on two bars of common time followed by a bar of 7/4. This provides the rhythmic stability to act out blast beat phrases, whilst there are still uneven measures that retain interest in the section. This could show a direct relationship to Olteteanu’s (2011) discussion in the publication ‘The Social Ontology of Music’, where, in order for new musical ideas to emerge, the paradigms of musical norms must be broken. Olteteanu suggests that, while this is necessary, it is equally important to do so with a level of musical familiarity (Olteteanu, 2011, p. 254 – 255). Though the blast beats are present in this section, the fact the section is in 7/4 presents a relatively innovative idea that blast beats can and do occur over odd meters. The lyrical content that accompanies the swan section of the arrangement can be found in Appendix A.

**Female Tawny Owl Motif**

In similar fashion to previous ideas, interpretation of a musical phrase was based on an audio sample of the female tawny owl. These ideas enabled the production of a number of variations on the owl calls and allowed identification of a call consisting of (to the closest pitch in the Western musical system) perfect fourth intervals (C#5 to F#5 and D5 to G5). This then presented a simple yet effective
representation of the female tawny owl call. In the mimicked representation, it was necessary to make use of both the melodic and rhythmic elements (the closest workable representation being staccato dotted quavers tied to semi-quavers) of the original call. It was possible to present a short musical phrase that also served as a ‘break’ or ‘ending’ phrase (due to the staccato and repetitive rhythm) as well as a significant musical phrase. The resulting electric guitar phrase used the F# as a leading note to the D5 and G5 perfect fourth pattern. The C# was omitted, as it simply was not needed in the final phrase. By omitting the C#, this allowed me to use the F# as a leading note into the D5 and G5, upon which the eventual motif was built.

The representation and lead line are evident in this section, which is accompanied by semi-quaver blast beat drum pattern with the bass guitar following this pattern over the root note. This once again placed rhythmic emphasis on the blast beats as opposed to the harmonic characteristics of the phrases. This provided another opportunity to make use of fast sub-division patterns and tremolo picking, thus portraying stylistic techniques that are clearly akin to the extreme metal style. Tremolo picking is a guitar technique synonymous with the sub-genres of extreme metal, too. It involves the act of playing single notes rapidly (usually demisemiquavers/32\textsuperscript{nd} notes). This complements songs that are played at particularly high tempo and, in this case, mirrors the blast beats on the drums. The technique provides continuity and rhythmic rigidity, which, in turn, helps provide a sense of ferocity in the section. It creates a link between what is a specific representation of the tawny owl call in terms of pitch whilst retaining techniques appropriate for the intended style and purpose of extreme metal. The female tawny owl motif is illustrated in figures 8.1 and 8.2 below.

Figure 8.1 – Female Tawny Owl Motif Part 1
The lyrics that accompany the female tawny owl section of the arrangement can be found in Appendix A.

**Wings Motif**

This musical representation is based on the rhythmic elements associated with wing movement, using a muted tremolo picked F#1 on the first guitar. A small number of samples were collected, which contained usable examples of the sound of birds’ wings. The sample selected for further work was that of a wood pigeon. The choice of bird, other than the desirability of it being a bird commonly found in England, was not of great importance but rather the sample had an explicit reference of sound from which a motif could be developed. The idea that was eventually forged was derived predominantly from a rhythmical perspective, as any pitch matching was not only monotonal, but also loosely based on the identified pitch in the western musical system (F#1). The rhythm that was highlighted was translated to semiquavers, though this rhythm was somewhat elaborated to take account of some rhythmic inconsistencies that would bring the motif into question musically in the context of extreme metal. It was decided that it would be in the best interest of the motif to further solidify the use of semiquavers through tremolo picking techniques on the guitar.

It was desirable to use the project research as an opportunity to explore more progressive rock and metal influences, such as Yes, Altar of Plagues, Akercocke and Pink Floyd, within the creative practice together with other extreme and black metal sub-genres. In response to this notion, the tremolo picking section needed to exist within a more gentle and soft musical idea. The tremolo picking technique needed to be more significant than merely something associated with extreme metal music, such as black metal. In performing tremolo picking in such a way, it demonstrates a non-conventional use of a conventional black metal technique. It is particularly pleasing to have been able to use this technique in such instances, rather than call upon it only when developing particularly
heavy sections within this style. This section has automated volume and panning on the tremolo picking guitar channels. By placing emphasis on gradual changes in volume and stereo placement, the listener is provided with some perspective of distance and location as if the bird is flying around the general vicinity. Figures 9.1 and 9.2 below show the automation used to achieve this result.

Figure 9.1 – Panning

![Panning figure]

Figure 9.2 – Volume

![Volume figure]

The second guitar is based on an F#m7 to a Bsus2 pattern, the drums set the half-time groove, whilst the bass line further embellishes the chord tones and harmonies set out by the second guitar. This then creates what could be considered a very important and contrasting musical idea using techniques associated with black metal (tremolo picking) with alternative dynamics to those commonly used. Added to this, the representation of perspective and surroundings through the production makes for one of the most significant phrases in the portfolio. Figure 10 illustrates the wings motif in musical score form.

Figure 10 – Wings Motif

![Wings motif figure]
Fox Mating Call Motif
The mimicking of animals through the sound of their calls was proving successful and effective, so a decision was made to represent the fox mating call in very much the same way. Once again using MIDI instruments to establish relationships in pitch, it was possible to determine that the notes in this call were very close to D#4, F4, E4 and A3. This does not imply that the pitches used in the musical sense are exact mimeses; rather that they resemble the closest pitch in relation to the Western musical system. The sequence of pitches was then transferred to a distorted electric guitar and presented as a starting point for a lead guitar phrase focused on a root note of A.
The entire section once again presents itself musically as a suitable ‘breakdown’ section, given the emphasis of drum fills at the end of each bar and lack of a ‘groove’ between the snare, hi-hat and kick drum. This allows the establishment of some rhythmic interest in this section in order to break the monotony and occupy the spaces at the end of each bar. It also provides a closer rhythmic relationship between the rhythm section and the lead guitar in which the mating call motif is evident. The guitar melody is related to the initial four-note phrase of the original sample, but it is necessary to show how the initial four-note pattern has been developed into a fully comprehensive musical idea.

In developing this particular section as a rhythm guitar part, the focus was on an Amadd#11 (A, E, A, C, D#), relating to the root note of the lead melody, moving to Dbmadd9 (Db, Ab, Db, Fb, Eb). These chords had been built predominantly based on the initial melody to facilitate both the leading phrase, but also to accentuate the dissonance of the musical phrase, which features as the focal point of the theme. The bass further strengthens the chord progression by emphasising the root notes from the rhythm guitar section. Figure 11 illustrates the fox mating call motif in score form below.

Figure 11 – Fox Mating Call Motif
The lyrical content for the fox mating call section of the arrangement can be found in Appendix A.

**Male Tawny Owl Motif**

Five different samples of the owl call were collected, including some that were captured locally using a Tascam DR-40 handheld recorder. This array of samples enabled the extraction of a particular call using MIDI instrumentation and a spectrum analyser in order to match the pitch to the closest Western pitches. This transcribed to A#4, A4 and G#4 in a chromatic pattern, allowing the production of an accurate mimicry of the male tawny owl through those pitches.

Following identification of the notes, they were applied as a sequence mimicking the owl on the lead electric guitar, thus creating a lead guitar phrase. This, in turn, inspired the creation of a four-bar musical idea, which bears a striking resemblance to the original owl sample in the four notes distinguished in the call at the start of the lead phrase. The present phrase, which has been developed directly from the owl call, is evident over the first two bars with a tremolo picked lead phrase performed over bars three and four. Given how the electric guitar is considered to be a significant and common instrument, which brings forth lead phrases, it was considered necessary to present the male tawny owl phrases in much the same way. Not only are the pitches well suited to lead guitar phrases, but the added expressions of muted notes and pitch slurs further embellish the entire phrase. Tagg (2013) discusses the various functions of communication between their distinct animal calls, which are used as a basis for a musical idea and presented as motifs by composers. Though the project’s arrangement does not necessarily address nor contain aspects of direct communication between animals, the themes developed between the male and female tawny owls illustrates the significance of their distinct calls in a way that supports the intended targets of the research project.

This phrase is accompanied by the rhythm guitar performing a chord pattern of A#m and Am (adding a diminished ninth in the last two beats of the bar). Adding the diminished ninth once again
complements the dissonance of the entire section, whilst the bass guitar focused predominantly on the root notes of the progressions provides stability, thus allowing the guitars the opportunity to deviate slightly to further embellish the chords and harmony in this section. This is a common element of heavy metal music; the bass is often used to provide a solid backbone in order to maintain harmonic strength to the core progression of a section/piece. Mynett (2013, p. 44) discussed how lower frequencies carry more strength than higher frequencies and, therefore, our association of strength in sound tends to exist in the lower registers of the frequency spectrum. The drums maintain a typical crotchet hi-hat and snare rock pattern along with a sextuplet double kick drum pattern to provide some rhythmic variation in a groove somewhat typical of extreme and black metal. The bass guitar mirrors the rhythm of the kick drum (sextuplet), which adds a sense of focus and significant strength to the sextuplet rhythm without detracting away from the main motif performed on the lead guitar. The bass guitar pattern is harmonically centred on the root notes of the rhythm guitar section, further underlining the importance of the rhythmic components of the bass guitar section. The entirety of the male tawny owl section is rather simplistic in terms of the rhythm. This not only complements the lead phrase, but also makes appropriate use of the harmonic characteristics that are very effective in the black metal style, such as transposing in major thirds and minor seconds between minor keys. Figure 12 illustrates the score for the male tawny owl below.

Figure 12 – Male Tawny Owl Motif
The lyrical content that accompanies the male tawny owl section of the arrangement can be found in Appendix A.

Ravens Motif
The reference to the ravens has both a mimicry advantage as well as an archetypal advantage. The raven can be considered as a somewhat prominent figure in the black metal genre, featuring as the focal point of a number of works, such as ‘A Raven’s Song’ by Satanic Warmaster and ‘Blashyrkh (Mighty Ravendark)’ by Immortal. The raven theme can be considered to relate closely to the work of Porter et al (1981), entitled ‘Animals in Folklore’. This publication links the role of animals in witchcraft, in which the raven is a prominent figure. It explores the nature of man’s relationship to animals in connection with the folkloric theme of metamorphosis into animal form. This is evident in the lyrical phrase “in a black veil may I elude persecution from the wicked fools”, which is a reference to the belief that witches were able to transform into animals like rabbits and ravens to escape potential captors. The full lyrical works for this section can be found in Appendix A.

Using the established approach, the closest pitch of the raven calls was ascertained from an array of samples using MIDI instrumentation and frequency analysis in Logic. Through experimentation with the raven call, it was possible to identify that the notes were based around A3 and Bb3. Again, this presented the opportunity to utilise the dissonance in the diminished second. The rhythm of the
specific raven call sample, which was used in practical exploration, presented more problems than benefits in terms of a tangible musical idea. The raven calls were very sporadic and short, which failed to inspire or leave a great deal of scope for further rhythmical exploration. In consideration of this, the decision was made to focus solely on the dissonance that the A3 and B flat 3 notes provided in the diminished second and this served as the most significant musical characteristic of what becomes the theme for the raven section.

The lead section is accompanied by a rhythm guitar line arpeggiating an Ebmaddb9 with alternating bass notes between E flat, D flat and A, which the bass guitar duplicates. The chord itself contains a B flat note, which is evident in the diminished second guitar lead, allowing the A from the lead guitar part to emphasise the dissonance. The aim of this section is to create a sense of unease by using the dissonance, which was found in the original raven sample call, but also presenting this idea in 11/8 timing. This then achieves the desired effect because the theme is centred on a simple diminished second and the added irregular time signature influences the rhythm of the arpeggiated Ebmaddb9. Another benefit of doing this also allows the drums pattern to take a 'central' focus in the section and allowed me to draw from a wider pallet of musical influences, such as progressive rock and urban rhythmic approaches, rather than to settle for a ‘typical’ blast beat section. Figure 13 illustrates the musical score for the ravens motif below.

Figure 13 – Raven Motif

Throughout the course of this chapter, the creative approaches have been clearly illustrated and discussed in order to demonstrate the representations of animal life in the arrangement. Though the processes that created these representations have been somewhat repetitive, the project’s objectives have been met. Within this chapter, it is clear how the mimicries have been developed into workable musical ideas. Furthermore, it is also clear to see how these ideas have been implemented using appropriate techniques to present such mimicry in the black metal style. Finally, linking the musical
ideas to the folklore surrounding the animals in question has allowed the provision of a clear correlation between the musical mimicry and the lyrical themes, which, in turn, achieves both of the primary outcomes of the research project.

Throughout the composition process of this research project, there has been extensive use of mimicry of animal calls and natural sounds to achieve the intended outcome. This is almost in its entirety to draw a clear link between animal life and musical ideas in the extreme and black metal style. The project’s artistic aims can be considered successfully achieved because the salient themes throughout the arrangement were developed using mimeses. Though not a true physical or emotional likeness of the animals being mimicked, these themes were developed from fundamental notes in their calls, which then inspired fully forged musical themes. This links with Stanford's (1973) work in ‘Onomatopoeic Mimesis in Plato’, which documents Socrates 397BC speaking on mimicry. Within this talk, Socrates concludes that mimesis is merely imitating the sounds rather than presenting a true likeness. This means that aural mimeses are devoid of feeling and emotion and simply cannot represent the complexities of feeling achievable in, for instance, acting (Stanford, 1973, p. 189). It was never the aim to make use of actual animal call samples to provide a true likeness of animals and nature; indeed, the aim was to represent such sounds using artificial mimicry. The outcome of this project, in spite of its limitations, embraces the attitudes towards the place of programme music, as discussed in Sorensen’s (2011) work ‘Vague Music’. Sorensen suggests that music is meaningless and cannot be or portray anything other than music, taking the absolutist view (Sorensen, 2011, p. 231). This is ultimately true, but it is important to consider the value that conceptual or programme music offers the arts. With programme music, it is possible to explore musical quotation, onomatopoeia, leitmotifs and songs that tell stories and enhance a visual image. The final composition created through methods of practice-based research has taken advantage of such things. It has made use of expansive and unconventional structures and juxtapositions to traverse an expansive arrangement as well as the mimicry of animal and nature sounds in order to fashion core musical ideas. The arrangement of this project has used folklore and traditional depictions of Britain’s animal life to draw together a body of lyrical work, which not only provides another representation of animal life in the music but also links the musical mimicry together with the folklore surrounding each animal. In addition, the fact that musical mimicry and onomatopoeia has been used in the context of black metal music shows not only that programme music has artistic relevance, but also that this very project has explored musical concepts that have never been used in extreme metal before.
6. Conclusions

The project’s outcome and its approach towards representation have connections with the works of Sergei Prokofiev and Camille Saint-Saëns. This connection lies mainly in the attempt to represent animals through musical composition, but the means of achieving these ends differ somewhat. Prokofiev based his representation on mimicking the characteristics of each animal, whereas Saint-Saëns created his representations of the physical attributes of animals using pitch to highlight size and tempi and sub-divisions to emphasise the pace at which an animal moves. The representations in this composition exist almost exclusively from direct mimicry of animal calls and sounds. Although they are iconic, the works of Sergei Prokofiev and Camille Saint-Saëns presented abstract ideas of representation in which a clear link between the animal and musical idea could not be established without supplementary commentary or narrative. That said, there is a case that the same argument could be made in regard to this project, as direct though the mimicry may be, it cannot be guaranteed that genuine links to animal life would emerge, should it be listened to without the accompanying thesis paper.

The most significant advantage for the successful transformation from animal call to a motif lay within the dissonance, discordance and atonality that one would associate with the black metal style. Animal calls do not follow a human musical system, so being able to represent such calls required a large degree of deviation from diatonic harmony. This allowed the music to transgress the confines of diatonic harmony. This showed in the musical mimicry, as not only were the musical passages bearing a likeness to their intended representations, but they also provided the necessary dissonance and atonality required to present accompaniment that was in keeping with the black metal style.

Though the compositional intentions of the project, particularly in the project’s inception, posed a legitimate attempt to represent animal life, the eventual approaches used were somewhat repetitive and could be considered a ‘gimmick’. This does not necessarily negate the place of mimicry within composition, as it provides an alternative perspective of generating new musical ideas. It transgresses the usual approach to songwriting, as it forces one to approach intervals and rhythm structures from a different perspective. When forming musical ideas specifically from animal calls, it removes the emphasis of tonality and key as a primary feature or concern. Musical ideas were reliant only upon the pitches and rhythms found within each individual audio sample. With this in mind, the musical mimicry aspect of this project is considered to have been successful even if the earlier abstract ideas of the project were not and the project has presented a satisfactory representation of animal and natural life through mimicry, which is further strengthened by the composition’s lyrical themes.
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Appendices

Appendix A

Arrangement Lyrics with Commentary

Spring

Wind Theme
A blanket of warm rain glides from the sky, nourishing the terrain.
Feeding all life as it awakens, engaging the cycle of life once more.
Greet us in your new lease of life; awaken us with energies of healing and renewal.
Blessings of Eostre, bring fertility.
As we await the lark’s call, bring us light and hope.
The wind, blowing away the last remaining morsels of the winter’s grand rest.
The phoenix gives flight, emerging from the underworld in all her majesty.
Each passing sun bares promise to life renewed.
The air is filled with the smells of freshly turned soil.
May the goddess lead us to new life and magic, mark our path with a white clover to the new dawn.

Bees Theme
White noise, at the heart of all creation.
A swarm.
We bring life in to this land.
Ill omen to those we swarm.
Within the rot, impending demise.
Every sting a betrayal from a cherished heart.

'Il omen to those we swarm. Within the rot, impending demise.' are also references to another folkloric belief that if bees were to swarm a dead tree or the external wall of a house, death would affect the home’s inhabitants ("Omens of Death in Folklore & Superstition - Superstition Dictionary", 2013). The final folkloric lyrical reference in the bees section is ‘Every sting a betrayal from a cherished heart.’, which is centred on the belief that every time a bee stings is a warning you were about to be betrayed by a loved one (Chaomhánach, n.d. p. 5). Once again, the vocal performance is that of a typically high-pitched growl, however, the significance is in this lyrical content, which ties the musical mimicry of the bees with a lyrical narrative.

Robin Theme
No burial these babes received, covered in leaves.
Now hear us tap upon the glass.
Weak and weary, each breath near the last.
As we take flight.

There are significant references to the story of 'Babes in the Wood' in which Robin Redbreast covered the bodies of the lost children in leaves; this is quite clearly evident in the phrase 'No burial these babes received, covered in leaves' (Caldecott, 2006, p. 32). The phrase 'Now hear us tap upon the glass, weak and weary, each breath near the last' is a reference to the folkloric belief that should a robin tap upon the glass of a house, its inhabitant(s) will soon die (Turner, n.d.). This lyrical content creates a valuable link between the musical representation and a folklore narrative surrounding the robin, thus, in part, achieving the project's intend outcome. This section, as previously stated, is heavily influenced by breakbeat and dark/new wave, in particular Akercocke, and therefore made the decision that a vocal section with harmonies would be the most appropriate musical accompaniment.

Summer
The land is awash with colour and light, as the veil between worlds is thrown open wide.
The swallow returns, swift in flight.
Celestial dancers upon the sun kissed moorland.

Deer Theme
A wild chase, a people evading persecution.
The wells overflow, as the fear of their superstition deceives them.
May they not drink?
Must they suffer?

Hilltops adorned with fire, exalting the unity of darkness and light.
Seeking protection from the ashes of the fire of Litha.
The midsummer sun, its power most potent.
As lord of the forest and the wilderness, shall I forever be heralded as the symbol of their horned god.
Scorned by the men of kings, idolised by the heathens.
They come in pursuit of my flesh but not of my wisdom,
Fools upon their equine thrones.
My coat bears tomes of a realm they cannot yet cross.
Seek me not for I endure man's transgressions.
My fortune favours those of kind will and heart.
Wondering alone, a ghost on the moors.

The phrase 'As lord of the forest and the wilderness, shall I forever be heralded as the symbol of their horned god. Scorned by the men of kings, idolised by the heathens' is a reference to the custom that the deer represented the Pagan god, Cernunnos (Kendall, n.d.). 'They come in pursuit of my flesh but not of my wisdom' is a reference to the folkloric belief that deer are regarded as symbol of knowledge and wisdom yet are hunted for sport amongst human society. The phrase 'Wondering alone, a ghost
on the moors’ is a reference to the folkloric belief that the sighting of a lone deer is linked to that of a ghostly apparition taking the form of a deer (Evans, 2014).

**Insects Theme**

*Fertility of the land we make,*  
*Feast upon the dirt and the filth.*  
*Transforming and growing,*  
*Shedding old selves to start anew.*

The lyrical phrase ‘*Fertility of the land we make, feast upon the dirt and the filth*’ is a reference to the cycle of life in which insects play a pivotal role in their propagation, fertilisation and consumption of waste (Wigington, 2016). The phrase ‘*Transforming and growing, shedding old selves to start anew*’ is a reference to the physical transformation some insect life forms experience unlike many other animal life forms, but this is also a hidden reference to the concept of personal growth and repenting for past mistakes (Wigington, 2016). The significance in the use of the term ‘grotesque’ is not only a reference to how some may receive the concept of insects feasting on waste, but it also presents the opportunity to explore grotesque in a similar sense of imagery associated with extreme metal bands, such as Cannibal Corpse (Kahn-Harris, 2006, p. 27). This, therefore, allows the concept of grotesque to be both artistically and aesthetically appropriate.

**Autumn**

**Rodents Theme**

*Entangled we are bound together,*  
*Revered as a grotesque king of the vermin.*  
*The downfall of humankind,*  
*An epidemic among the pests.*  
*Plagues may ravage their villages,*  
*Affliction nestled on our cursed fur.*  
*May filth unite us,*  
*Arise to the king of the underground.*  
*Until a great fire shall blaze, and the days give way to the dark,*  
*May we terrorise them with fear and disgust.*

The phrase ‘*Entangled we are bound together, revered as a grotesque king of the vermin*’ is a reference to the legend of the rat king in which the tight living conditions of some vermin have said to have become tangled together by the tail with dirt and faeces (this is also evident in the phrase ‘*May filth unite us*’) (Dhwty, 2016). The phrases ‘*The downfall of humankind, an epidemic among the pests. Plagues may ravage their villages, affliction nestled on our cursed fur*’ is a reference to the plague epidemic in which rats and similar rodents were responsible for a great deal of the disease spreading across Europe (Mizokami, 2017). This reference is also evident in the phrase ‘*Until a great fire shall*
blaze, and the days give way to the dark, may we terrorise them with fear and disgust', which brings attention to the Great Fire of London and once again acknowledges the disgust and fear with which vermin were greeted as a result of spreading such a terrible disease (Mizokami, 2017).

Swan Theme
Harbinger of death, in a distant vision I come.
Through the dark clouds,
Among your ancient deads.
Long may we reign,
In her majesty and grace.

With strength, wisdom and beauty,
The ethereal mistress shall be exalted.

The phrase ‘Harbinger of death, in a distant vision I come’ is a reference to the traditional custom in which some believed that swans were omens of death and ill fortune particularly if visited by one in a dream (in a distant vision I come) (“Omens of Death in Folklore & Superstition - Superstition Dictionary”, 2013). The passage ‘Through the dark clouds, among your ancient dead’ is a reference to the folkloric tradition that swans served as carriers between our land and the ‘otherworld’ through the mist and the lakes (Kneale, 2016). In addition to this reference, the passage ‘With strength, wisdom and beauty. The ethereal mistress shall be exalted’ is a further reference to the swan’s place in folklore as an animal with links to the land of the dead; it is also admired as a bird of strength, wisdom and beauty (Kneale, 2016).

Female Tawny Owl Theme
Through the smoke-filled eyes,
Everlasting in velveteen beauty.
The soul of the divine,
In magic shall I thrive amidst the forest.

I unveil the false and shallow of heart.
In my vision may you trust for I see the dark and its infernal suffering.
A blessing to an unborn babe, whom hears my cry.

The phrase ‘Through the smoke-filled eyes, everlasting in velveteen beauty’ is a reference to Arianrhod, the Welsh Star and Moon Goddess that is said to shapeshift into a large owl (Shaw, 2013). The passage that states ‘The soul of the divine, in magic shall I thrive amidst the forest. I unveil the false and shallow of heart, in my vision may you trust for I see the dark and its infernal suffering.’ is a reference to the folkloric observations that owls were considered superior and magical beings amongst the animal kingdom and a symbol of wisdom (“Owls - Mythology and Folklore - The White
Goddess*, n.d.). The phrase ‘A blessing to an unborn babe, whom hears my cry’ is a reference to another folkloric belief surrounding owls that should a pregnant lady hear the call of an owl, her unborn child shall receive its blessing (“Owls - Mythology and Folklore - The White Goddess”, n.d.).

**Winter**

**Wings Theme**

We bid farewell to the light, as we welcome the coming darkness.  
As the trees shed their leaves and the land soon to be subdued in a blanket of unrelenting grey.  
The earth’s flesh is sodden, and gives way to the oncoming cold of winter.  
Transcending from the spectres of colour to the darkened tones of the underworld.  
A sign of necessary change.  
May the harvest yield the promise of a summer’s blessing.  
The ashes of a past blossom fall from the sky, and come to rest amongst the ground,  
The shedding skin of the birch and the oak entwine, a medley of viridian, amber and sienna.  
Exceeding the decadence of our majestic forests.

**Fox Mating Call Theme**

Allow me to lead you in to your journey, in to nature’s essence.  
As a symbol of cunning, fertility and transformation.  
Home, amidst the trees and the earth,  
Wise beyond any comprehension.  
May my cunning and wisdom forever keep them in my shadow,  
I am master of my own surroundings.  
Heed my call as I entice new seed,  
In nature’s slumber, a distant call screams promise of new life.  
Appalling human sport, exacting violence and debauchery.  
Hunted by man as an object of their vile leisure,  
Torn apart, ripped limb from limb.  
In red and black celebrating their vile victory, they daub the crimson that once ran through my veins on to the heads of their young.  
The blooding completed, their ascension at hand.

The phrases ‘Allow me to lead you in to nature’s essence. As a symbol of cunning, fertility and transformation. Home, amidst the trees and the earth, wise beyond any comprehension. May my cunning and wisdom forever keep them in my shadow, I am master of my own surroundings’ is a direct reference to the folkloric belief that foxes resemble cunning, fertility and transformation (Windling, 2017). As stated previously, the lyrical content throughout the arrangement does inform the seasonal progression, as does the placement of particular themes and motifs of animals associated with such seasons. Mating season for foxes is during the colder months of the year and, therefore, this has been placed in the winter quarter of the arrangement’s structure, which is referenced in the
words ‘In nature’s slumber, a distant call screams promise of new life’ (‘Foxes at the British Wildlife Centre’, 2012). Another significant theme the author wanted to explore within the fox section of the arrangement was the topic of fox hunting. This is reflected in the phrases ‘Appalling human sport, exacting violence and debauchery. Hunted by man as an object of their vile leisure, Tom apart, ripped limb from limb.’ This is reference to the historical hunting of foxes as a sport and the author’s personal feelings on the subject. It was deemed necessary to express these lyrics in favour of the foxes, given that they are so highly regarded symbolically and within British folklore (Windling, 2017).

Male Tawny Owl Theme

A vision in light, demise in sight.
A sound from above doth warn a dear loss.
A virgin lost of innocence, deflowered and tainted.
Death is calling from the rooftops, bringing tidings of misfortune.
Extinguished are the embers of a long-lost kinship with the earth.
And here I stand before you, a creature of nightmares and the dead.
The corpse bird.

The phrase ‘A vision in light, demise in sight, a sound from above doth warn a dear loss’ is a reference to the belief that if an owl is spotted or heard during daylight (a vision in light) this would be a sign that death was imminent to a loved one. This is also evident in the passage ‘Death is calling from the rooftops, bringing tidings of misfortune’ (‘Omens of Death in Folklore & Superstition - Superstition Dictionary’, 2013). The passage ‘A virgin lost of innocence, deflowered and tainted’ is also a reference to popular folkloric belief that should an owl be heard amongst the buildings in the town then a girl had lost her virginity outside of wedlock; at such a time, this was considered a significant taboo and a consequently punishable offence (Lewis, 2006). The phrase ‘And here I stand before you, a creature of nightmares and the dead, the corpse bird’ is, with similarities to the raven, a reference to the folkloric belief that owls held a significant link to evil, death and the underworld and, therefore, are revered due to this belief. This link is also said to have been influenced by a barn owl’s white, ghostly appearance (Sinn, 2012).

Raven Theme

In a black veil may I elude persecution from the wicked fools,
Piercing silence in holes left by a superior primate, evolving discordance.
A call to arms, deceive, disarm.
The cold mist envelopes the land, shrouded in black,
Harkened to the winter’s embrace.
They walk their path of righteousness, illuminated by the fires of Pendle.
Bodies of hysteria hang from gallows of trees.
Appendix B

Construction of Motifs Using Mimicry

The enclosed CD includes audio commentary and demonstration of how each motif was developed. This Appendix serves to supplement the ‘Creative Commentary’ chapter that discusses how each animal and natural sound were mimicked and how these informed fully developed musical ideas.

Appendix B1 - Track 1 - Construction of the Wind Motif
Appendix B2 - Track 2 - Construction of the Bees Motif
Appendix B3 - Track 3 - Construction of the Robin Motif
Appendix B4 - Track 4 - Construction of the Deer Motif
Appendix B5 - Track 5 - Construction of the Insects Motif
Appendix B6 - Track 6 - Construction of the Rodent Motif
Appendix B7 - Track 7 - Construction of the Swan Motif
Appendix B8 - Track 8 - Construction of the Female Tawny Owl Motif
Appendix B9 - Track 9 - Construction of the Wings Motif
Appendix B10 - Track 10 - Construction of the Fox Mating Call Motif
Appendix B11 - Track 11 - Construction of the Male Tawny Owl Motif
Appendix B12 - Track 12 - Construction of the Ravens Motif