

**“So Complete in Beautiful Deformity”, - The rare analysis of extreme metal
by Olivia R. Lucas**

Music analysis MU3V14008

3-11-2023

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Introduction

While music analysis is an old and well established craft, not all genres of music have received the same treatment within this scholarly field. In particular heavy metal, a genre conveniently ignored by analysts and left untouched in its own dark and noisy corner. Yet in this paper I will discuss a scholar, Olivia R. Lucas, who analysed music by metal band Meshuggah, a Swedish group known for their rhythmic intricacy.

Meshuggah might not be the biggest metal band on earth regarding album sales or sold out venues, nevertheless they are among the most respected bands in the metal genre. Having been around for over 35 years and having released 14 albums since their formation in 1987, they are a force to be reckoned with and a major influence on their genre. The attribute of their music most appreciated by metal heads and people interested in complex rhythm alike is their ability to combine aggressive playing with extreme rhythmic intricacy. In an interview with Loudwire drummer Tomas Haake spoke about the band's composition process, with Haake being the mastermind behind their complex metal music. The music is mostly composed on the computer, with Haake starting out by writing a riff (while not even being able to play the guitar). Then the drums are put in the computer program, Haake emphasizes them being in 4/4 meter but the riffs in 'odd cycles that kind of travel over the bar line'.¹ He then states that the composition on the computer gives him more freedom to experiment with their music because it is too complex to compose in a jam session, which according to Haake, the band has not done in over 15 years. After the song is completed in the computer program, the band will learn their parts separately and later practise them all together, a process that can, for certain parts, take them up to six months to complete.² Learning this about their composition was a surprise to me because Meshuggah is a band renowned for their precision on stage, Olivia R. Lucas alleges in her article that during the concert she witnessed the band make exactly one deviation from the recorded track.³

The album central to Lucas's article is *Obzen* released in 2008, ten years before the article "'So Complete in Beautiful Deformity': Unexpected Beginnings and Rotated Riffs in Meshuggah's *obZen*" was published in the journal of the society for music theory. Olivia R. Lucas is known for her interdisciplinary research, combining music theory with ethnography, sound studies and ecomusicology. Most of her work is focused on the issues that arise while analysing extreme metal music, such as extreme loudness, rhythmic complexity and screamed vocals. She evaluates and criticizes the tools used for music analysis as they are applied to non-traditionally analysed genres. Apart from metal music she enjoys teaching courses in popular music and has even written about

¹ Loudwire, "Meshuggah's Tomas Haake breaks down band's writing process", 27 september 2016, https://www.youtube.com/watch?v=n4Rn6_RjblQ.

² Loudwire, "Meshuggah's Tomas Haake breaks down band's writing process".

³ Olivia R. Lucas, "'So complete in beautiful deformity': unexpected beginnings and rotated riffs in Meshuggah's *OBZen*", Music Theory Online 24, nr. 3 (1 september 2018), <https://doi.org/10.30535/mt0.24.3.4>.

theory used for analysing artists like Nicki Minaj. She emphasises the importance of developing critical listening skills for analysing music, an aspect that is very crucial to the article I will be discussing in this paper.

Polyrhythm

Meshuggah is one of the very few metal artists to be discussed in scholarly articles, most notably by Jonathan Pieslak in his 2007 essay ‘*Re-casting Metal: Rhythm and Meter in the Music of Meshuggah*’, in this essay he discusses how he feels Meshuggah to not be polyrhythmic, as proposed by many before. Instead he opts for an approach based on combining the perceived multiple meters and treating the music as if it were in one large meter, which he refers to as a hyper measure, constructed from the beginning of a piece of music to a point where all metrical bars end at the same moment. He then shows how these created cycles often fall in line with a structure in the song, some clearly recognized by listening like a vocal verse beginning, and others less distinguishable, like an ABA song form, requiring some more explanation from Pieslak. He then clarifies his choice of song structure by involving the pitches used in the riffs and the way these are rhythmically organized.⁴ Olivia R. Lucas references Pieslak’s article and it is clear to see that her analysis builds off of his work. She, like Pieslak discussed, does not feel that Meshuggah uses polyrhythm but she deviates from his essay by her belief that the Meshuggah’s music is all in 4/4 meter. She approaches this issue of meter more hermeneutically, stating that the riffs Meshuggah utilizes seem to begin ‘in media res’. This term comes from literature and means to begin a narrative by plunging into a crucial point in a chain of events.⁵ Lucas uses this term to describe how where the riff audibly seems to begin is not aligned with the temporal beginning, which causes this sensation of the riff beginning in the middle.

‘In other words, in the process of listening to a song segment, the sense of where the repeating riff begins and ends changes, resulting in a retroactive sense that the riff “began in the middle.” I designate what is heard first as the riff’s “temporal beginning,” and what sounds like the beginning of the riff as the “rhythmic beginning.”’⁶

Central to Lucas’s analysis is her conviction that Meshuggah’s music is all in 4/4 meter with the riffs being used as an attempt to destabilize or break free from the rigid meter. However, these riffs never actually succeed in this attempt, Lucas states. They are brutally cut off whenever a new riff begins or a new song segment starts. The riffs never get to establish themselves well enough to actually change the meter. The article hermeneutically links this to the general consensus of the lyrics in Meshuggah’s music, with the theme centred on a desire for radical freedom and breaking free from intolerable

⁴ Jonathan Pieslak, “Re-casting Metal: Rhythm and meter in the music of Meshuggah”, *Music Theory Spectrum* 29, nr. 2 (1 oktober 2007): 219–45, <https://doi.org/10.1525/mts.2007.29.2.219>.

⁵ The Editors of Encyclopaedia Britannica, “In Medias Res | Epic Poetry, Ancient Greece & Roman Mythology”, *Encyclopedia Britannica*, 20 juli 1998, <https://www.britannica.com/art/in-medias-res-literature>.

⁶ Lucas, ““So complete in beautiful deformity”: unexpected beginnings and rotated riffs in Meshuggah’s OBZen”.

control. Lucas states that the struggle these riffs undergo can be interpreted as them attempting to break free from the rigid control of the 4/4 meter typically perpetuated by the drums, linking this interpretation of the music to the content of the lyrics.

Meter as Rhythm

Lucas bases her analysis on two types of very different analysis; spectrogram analysis and an analytical method based on the book *Meter as Rhythm* by Christopher Hasty. In his book Hasty attempts to separate our perception of rhythm and meter, stating that by restricting rhythm to meter we miss out on a very important aspect: our sensible rhythmic intuition. He states that our observation of metrical rhythm is based on the experience and projection of durational spans as they form into patterns of strong and weak beats. To be able to explain better what Hasty means by this we must look at the word rhythm and all things we apply this word to. ‘‘Central to our understanding of rhythm is the notion of regular repetition’’⁷, the article states. Anything we call rhythmic exhibits periodicity, the tendency to recur at intervals. This part of the definition of rhythm accounts for the projection of durational spans as we can expect the rhythmic pattern to repeat itself, this is what Hasty refers to as projection. This is reinforced by our perception of strong and weak beats, Hasty explains our experience of these beats being accented or unaccented in his article: ‘‘if the earlier beginning is still ‘present’ and active—this new beginning will be unaccented and ‘not-beginning’ in relation to the larger event that has already begun and continues to be in the process of becoming.’’⁸ A weak beat is the result of a prolongation of the mensural potential of a strong beat, or as said here an earlier beginning. The experience of strong and weak beats give the rhythmic pattern more means for projection as it is easier for us to predict how it will repeat itself. Strong and weak beats can also give us an indication of where we are structurally in a piece of music, as it, for example, feels natural to begin new musical material on a strong beat.

Hasty defines rhythm here as sensory and aesthetic experience while meter as a way to organize music into bars and determine the order of pulses and their subdivision. Meter itself is largely devoid of character as a neutral aspect of music, yet we can recognize meter when listening to music just as we can rhythm. However, we hear meter in a different way than we hear rhythm and rhythm can use meter to create its own character and expressivity by working with or against the meter. Hasty states: ‘‘In this way, meter can be conceived as a more or less independent structure that rhythm uses for its own ends. Rhythm freely plays with or even against meter.’’⁹ In her analysis Lucas utilizes this distinction between rhythm and meter to explain the mapping of Meshuggah's riffs against their 4/4 meter drum parts. She does not feel the need to make the music fit into one meter but also does not accept the term polyrhythmic to apply to Meshuggah. Instead she applies this aspect of Hasty's methodology, the

⁷ Christopher Hasty, *Meter As Rhythm*, (Oxford University Press, 1997), 1-13.

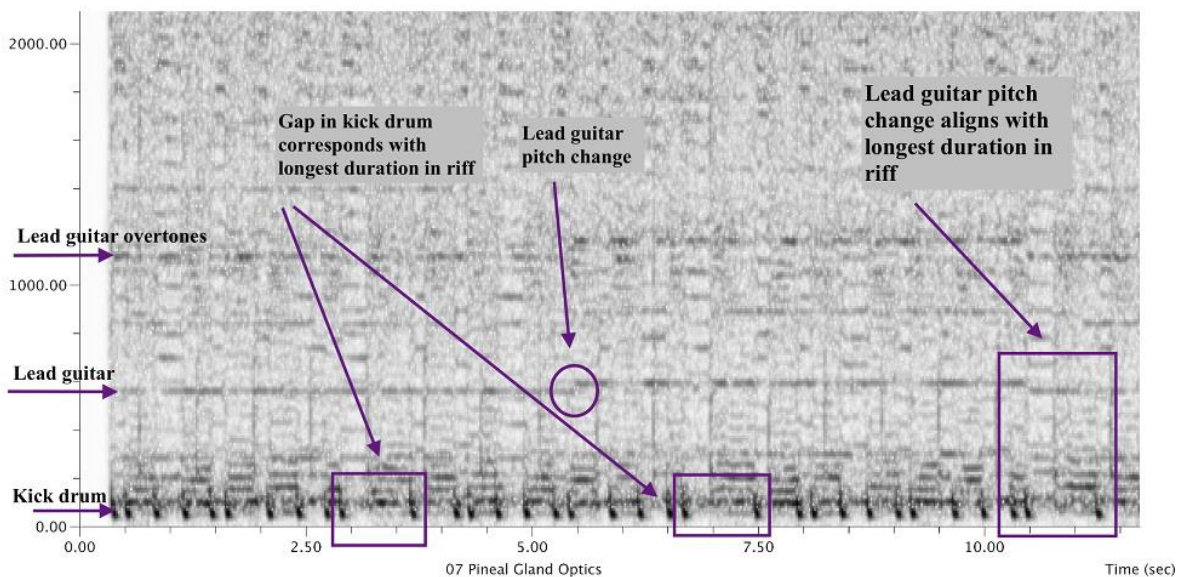
⁸ Hasty, *Meter As Rhythm*, 1-13.

⁹ Hasty, *Meter As Rhythm*, 1-13.

separation between meter and rhythm, to hermeneutically link this feature of Meshuggah's music to the broader meaning she perceives their music to possess.

Spectrogram analysis

The second analytical method Lucas uses in her article is spectrogram analysis. She uses these graphs to further legitimize where she points out the temporal and rhythmic beginnings of the riffs to be in the examples she gives. A spectrogram is a visual representation of an audio signal and they are used in many study fields like linguistics, seismology and musicology. On the vertical axis of the graph frequency is represented, giving us the frequencies used in an audio signal also including overtones. On the horizontal axis time is represented.¹⁰ By using the spectrogram analysis Lucas can give visual prove to her claims on the music she formed by analysing while listening. In the example I put below of one of the spectrograms she provides we can see how she points out moments in the graph, like here the gap in the kick drum and the lead guitar pitch change. She then shows where these moments align in the graph to back her notion of where this riff "begins in the middle", or the rhythmic beginning.¹¹ With this way of analysing she combines the very subjective method based on listening, presented by Christopher Hasty in his book, with the very objective representation of the music's audio signals made visual in a spectrogram.



Lucas analyses four examples of riffs used by Meshuggah to pinpoint where they rhythmically begin and end, and to identify how each one of them is confronted with the song structure's formal boundary in their own way. She discusses how these riffs never actually destabilize the 4/4 meter perpetuated by the drums as the song structure prohibits them from doing this, by, for example, blending the riffs into

¹⁰ Meinard Müller e.a., "Signal processing for music analysis", IEEE Journal of Selected Topics in Signal Processing 5, nr. 6 (1 oktober 2011): 1088–1110, <https://doi.org/10.1109/jstsp.2011.2112333>.

¹¹ Lucas, "'So complete in beautiful deformity': unexpected beginnings and rotated riffs in Meshuggah's OBZen".

a new riff or cutting them off completely. Lucas then references Robert Walser's 1993 book *Running with the Devil: Power, Gender and Madness in Heavy Metal Music*. In this book he speaks about how metal music is often set up, opposing the rigidly repeating drums, bass and rhythm guitar parts to the empowering voice or guitar solo. He connects this to the prevailing theme he recognizes in the lyrics of metal songs: a desire for the achievement of radical freedom from invasive, oppressive and deceptive systems. Here the voice and guitar are in pursuit of this radical freedom while the drum, bass and rhythm guitar parts act as an oppressor. Lucas believes this theory to also apply to the riffs against 4/4 meter structure Meshuggah uses in their music. In this concept the riffs are in pursuit of the radical freedom while the formal boundaries of the song structure play the defenders of the oppressive systems: the 4/4 meter.

Critiques

Overall I have great appreciation for Lucas's work, I strongly encourage music analysts to pay attention to the metal genre as it, in my opinion, contains extremely interesting musical material for analysis. I also rather enjoy part of her analysis being based on the act of listening and the importance of our physical experience of rhythm. I feel that musical analysis closely related to our experience of listening to the music gives a more accurate result because music is always meant to be heard. Lucas's analysis gives a perfect example of why analysis based on score can miss out on important elements of the music, which are only accessible by listening. The way we experience rhythm and meter differently and how Lucas uses this in her article we can only hear, not read on the score.

There are, according to me, points of improvement in the analysis exhibited in Lucas's article. Firstly, the lyrics being reduced to only their central theme. I perceive the aim of this analysis to be the explanation of Meshuggah's rhythmic intricacy by linking it to the meaning of the music, conveyed by their lyrics. It is why it makes little sense to me that Lucas does not discuss the music lyric by lyric and, in my opinion, insufficiently uses the lyrics to back her claims when demonstrating where the rhythmic beginning of a riff is. It feels unfair in general to me to lump all of Meshuggah's, and in general metal's, lyrics together into a single trope. It gives so much more hermeneutic opportunity to include more lyrical content in this analysis and could give a more thorough understanding of even a singular rhythmic beginning. Secondly, because the experience of rhythm is so physical and the way people move their bodies to metal music so unique, I would have liked to see this discussed more. In the conclusion of the article she does quickly mention how the listeners embody their rhythmic understanding of the music in the ways they bang their heads and hurl their bodies towards each other.¹² This concept is particularly interesting to me because of the multiple ways one is able to hear Meshuggah's music while dancing, by following the drums or the riffs, or maybe even both. It would

¹² Lucas, "'So complete in beautiful deformity': unexpected beginnings and rotated riffs in Meshuggah's OBZen".

have also been really interesting to include the concept of groove, a term mostly used to describe the way music can inspire movement of the body by its rhythmic elements. While Meshuggah's rhythm can be incredibly complex the music is still very danceable and beloved by concert goers who headbang the night away.

Conclusion

To conclude the statements made above, Olivia R. Lucas analysis the use of riffs against a rigid 4/4 meter in Meshuggah's music, in an attempt to explain why it seems that the riffs "begin in the middle". By using Christopher Hasty's analytical method to separate meter from rhythm she detects by hearing where the riffs begin rhythmically, not temporally. While using spectrogram analysis to give more evidence of where the rhythmic beginnings of the riffs are, she states that the riffs are continuously used in an attempt to destabilize the 4/4 meter perpetuated by the drums. This attempt is, however, always overthrown by the formal boundaries of the song structure as they blend to riff into another riff or cut off half way through its course. She hermeneutically links the struggle of the riffs against the 4/4 meter to the content of the lyrics, where the central theme is about pursuing radical freedom and breaking away from an oppressive system. While I admire Lucas's analysis of Meshuggah's and greatly encourage analysis based on listening and analysis of metal music in general, my two point of critique are the lyrics being reduced to a single theme and the article failing to include the way metal is moved to by listeners in the analysis.

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