

Vignette 1: Israeli metal band Orphaned Land headlines this evening as the fourth band, and the audience seems relaxed and excited at the same time. As the song 'All is One' begins with a toned-down iteration of the main riff, the band's singer, Kobi Farhi, claps along with the $\frac{7}{8}$ -time signature, emphasising the riff's 3+2+2 accent structure as heard on the studio version of the song. He animates the audience to join in, which works surprisingly well considering the unusual rhythm. As the song continues – while maintaining the rhythmic structure throughout various formal sections – people engage bodily with the music in different ways. The bass player, for example, seems to be the most avid headbanger of the band, throwing his head up and down in a slightly tilted manner in strict synchronisation with the riff's 3+2+2 structure. Meanwhile, Kobi Farhi, besides moving about on stage, performs his most expressive movements with his hands and, in part, with his shoulders. These include intricate hand gestures with minute finger actions, flowing movements and circular motions that extend to the shoulders. There is also a variety of movements among audience members, although the majority stands rather still. A few people continue clapping, others also headbang in synchronisation with the riff accents, but not as clearly as the bassist. Instead, heads are visible that are pointedly thrusting downwards on each downbeat, moving rather fluidly through the rest of the bar. Yet other audience members calmly sway from side to side, the shoulder leading the movement while slightly twisting the upper body according to the swaying direction.

Based on the author's field notes, 6 March 2018, Cologne, Germany

Vignette 2: During Orphaned Land's rendition of 'Sapari' in Vancouver, the band is joined by belly dancer, artist and musician Mahafsoun, who contributes a dance performance throughout the entire song. She positions herself in the centre of the stage, her left leg slightly bent and her arms raised above her head. Together with the singer, she animates the audience to clap along to the intro vocals that are heard via playback. As the entire band begins to play, she starts moving her arms in a circular motion, performing intricate gestures, and she accents the musical hits with jolts of her hips and a forward-directed motion of her left leg. This complex interplay between her movements and the music – including synchronicity, ornaments and more – also incorporates a headbanging motion during a number of pronounced musical accents played in unison by the band. These are embodied by Mahafsoun as she thrusts her head from one side to the other in synchronisation with the accents. After headbanging, her movement focus shifts back to her hips, with which she continues to emphasise and embellish the musical beat.

Video shot from the audience's perspective, uploaded to Mahafsoun's YouTube channel¹

As these introductory examples illustrate, people move their bodies to metal music and interact with it – they dance. Audience members and performers on stage do so in various ways, some of which have become iconic practices of metal, such as headbanging, and others that seem rather uncommon and are not as closely associated with metal at first glance, such as belly dancing. A dance practice that is not mentioned in the vignettes, but which has attracted considerable public and arguably the most academic attention of all metal dances, is moshing. The next section therefore investigates the social organisation of mosh pits and discusses them as contested communities because they offer communal experiences while simultaneously perpetuating existent obstacles to participation, especially in relation to gender identities. Revisiting the introductory vignettes, the final section's outlook points out blind spots in research to highlight the need and possibilities for further research. This especially pertains to an extended scope of dance-related phenomena so as to account for practices beyond headbanging and moshing in extreme metal. Such an extended focus would additionally include perspectives on digital dance spaces, the global distribution of dance practices, histories of metal dance and further studies on the aesthetic relations of music and movement in metal. In this way, this

chapter aims to provide an introductory overview of dance practices in metal, their social organisation and avenues for future research.

Contested Mosh Pit Communities

Moshing is one of metal culture's most common forms of movement. There is no single practice to which this term refers, as the terminology varies across metal scenes and cultures. In this chapter, moshing is understood as a conglomerate of different movement practices that are mostly, though not exclusively, performed at metal concerts, such as pushing, jumping, running or clashing into each other and more.² All these movements take place in the mosh pit (or just 'pit' for short), which is a performative, often circular, space that emerges in the audience, usually close to the stage. Depending on the size of the audience, there can be several mosh pits at an event, which are dynamic in that they can merge into a larger one, just as one large pit can separate into several smaller ones. Further practices that often involve the pit are 'stage diving' and 'walls of death'. In case of the latter, the pit opens up, and participants split into two halves that face each other. Following a musical and/or verbal cue by the band, the two walls run towards each other and clash into each other, often leading to further moshing. If audience members manage to get onto the stage, they jump off the stage's edge and dive into the audience below, which usually awaits them with outstretched arms, ready to catch them. Being caught by the audience opens up the possibility of crowd surfing, i.e., instead of dropping the stage diver, the audience continues carrying them and passes them on through the audience area, thereby surfing over the crowd.

Considering that pushing, running, jumping and clashing constitute a pit, moshing at first glance might make the impression to be nothing but violent chaos that happens to take place while music is playing. There is some truth to that in so far as participants might sustain injuries, and the numerous, fast-paced activities in a pit can be disorienting. Yet, research into the social workings of moshing has shown that it is more complex than that.

Mosh Pits as Communal Spaces

Moshing is indeed a regulated practice that enables experiences of communal bonding and individual identity work. The most overt means of regulating moshing is the so-called 'pit etiquette', which consists of a rather loose

collection of guidelines for how to act in a mosh pit. The etiquette's specifics can vary in detail because it is part of metal's informal cultural knowledge, which can change across times, locations, scenes and situations.³ Nevertheless, as pit etiquettes generally aim to prevent an escalation of violence and prompt moshers to be mindful of each other despite their transgressive interactions, there are basic elements that most, if not all, pit etiquettes share. These include, for example, limiting moshing to the pit so as not to involve those who do not want to participate, or the imperative to pick up moshers who have fallen down to prevent them from getting trampled and stepped on accidentally. The pit etiquette illustrates that while moshing involves violent practices, this violence is not uncontrolled. Although it might seem contradictory from an etic perspective, moshing's violent character supports bonding among moshers.

Early research on moshing from the 1990s already noted this complex interplay. Harris M. Berger, investigating mosh pits at US-American death metal shows, pointed out that there is a continuous and dynamic tension between violence and order.⁴ Moshing not only enacts but also represents violence, according to Berger, and when the enactment steps into the background, the representation and portrayal of violence can bring camaraderie and friendship to the fore. In examining and comparing UK metal, punk and ska subcultures, dance scholar Sherril Dodds observes a similarly ambivalent role that violence plays for metal's dance practices in fostering communal bonds among dancers.⁵ In another early ethnographic study, Katharina Inhetveen analyses movements and violence at hardcore concerts in Germany.⁶ Although hardcore's and metal's dance practices are not always identical, they do share similar movements that involve violence, and they have historical points of contact.⁷ Regarding the movements' violence, Inhetveen also stresses the existence of rules of moshing and identifies three different forms of violence at hardcore concerts: negative (i.e., intentionally harmful), necessary (i.e., sanctioning) and positive violence. Instead of aiming to dominate others, the latter tends towards symmetrical interactions of the participants and is rather supposed to guarantee that everyone involved has a good time.⁸ Inhetveen calls this rather playful violence 'sociable violence' (*Gesellige Gewalt*).⁹ In order to accommodate this positive and socially productive violence that is at odds with everyday life's conventions of bodily interactions, mosh pits have been conceptualised as 'liminal spaces'.¹⁰ As such, they suspend rules to a certain degree that govern everyday life and temporarily replace them with other rules specific to that space, such as pit etiquette.

According to Gabrielle Riches, these liminal spaces tend to form in backspaces, as these offer participants relatively little official surveillance, the possibility to indulge in practices that may otherwise be off-limits, and a sense that these practices are generally sanctioned by other people in that space.¹¹ Collectively producing mosh pits as liminal spaces within shared backspaces further contributes to moshing's capacity to provide communal experiences for those involved. While engaging in these spaces, dancers must strive to maintain a balance between suspending everyday life's rules of bodily comportment and not transgressing metal's own moshing conventions. Doing so is a continuous and dynamic joint effort with its own contingencies, and therefore the participants need to be able to rely on each other, which requires and, in turn, builds trust among them.¹² This illustrates that moshing's intense and sometimes violent corporeality furthermore entails and is inseparable from its affective charge. Affective intensities are crucial to the experience of moshing and have been largely neglected in earlier research in favour of a focus on mosh pits as representational means of bonding.¹³ Rosemary Overell, in her study of Australian and Japanese grindcore scenes, pursues the foundational and extensive role affect plays for moshing's ability to connect and collectivise people. When moshing, among other moments, 'scene members feel a collective sense of belonging with other fans at the event. The self, as bordered, individualised subject, is effaced via the affective intensity of the gig'.¹⁴

Taking the complexity of moshing as social interaction into account, it is moshing's ambivalent inclusion of violence, its liminal status and its bodily as well as affective intensity that enable the dancers' bonding experiences. Viewed from these interlaced perspectives, mosh pits are embodied manifestations of metal communality.¹⁵

Mosh Pits as Contested Spaces

Although the communal aspect of moshing is repeatedly emphasised by many dancers and theorised by researchers, moshing is not an all-inclusive space, and there remain obstacles to equal participation in the communal experience it can offer. Most notably, this pertains to moshing as a gendered practice. Most research on moshing's gender politics begins with the observation that far more men than women engage in moshing, thereby construing it as a male-connoted practice. For example, while Jonathan Gruzelier estimates that 70–75 per cent of moshers are male, Leigh Krenske and Jim McKay even observe a rate of 95 per cent or more male pit participation.¹⁶

Whatever the precise number, which is sure to vary over time, place and event, the quantitative dominance of men in the pit and their intimate interactions – including clashing, sweaty bodies – have prompted the theorisation of mosh pits as homosocial spaces.¹⁷ As such, the image of mosh pits as inclusive spaces that are open and welcoming to everyone is differentiated by the fact that they primarily foster male bonding. Crucially, Gabrielle Riches' nuanced analyses of gendered pit experiences stress the existence and interaction of multiple instead of one monolithic masculinity within mosh pits.¹⁸ By engaging with these competing masculinities, she is able to show that not all masculinities are unreservedly welcome in the pit, further shattering the notion of an all-inclusive space, and demonstrating that mosh pits serve as spaces for the negotiation of metal masculinities. In her research on Canadian pits, Riches proposes what she calls 'marginal metal masculinities' as those that do not have access to traditional sites of discursive power and are therefore opposed to mainstream or hegemonic forms of masculinity. These marginalised masculinities were valorised in the pit, which is why it was experienced as inclusive by the men concerned. In order to maintain this sense of inclusivity, however,

performances of a traditional hegemonic masculinity were negated in that men who used moshpits to demonstrate feats of strength, to size up other men or who intended to display their dominance over other men were considered unwanted outsiders, or what the participants referred to as 'meatheads'. These men embodied a hegemonic masculinity, which was understood as antithetical to heavy metal masculinity.¹⁹

As these so-called 'meatheads' exhibited what Inhetveen calls negative violence, it was legitimate for other moshers to engage in necessary violence so as to drive out the meatheads and ensure the maintenance of positive violence.

Although the predominance of men is especially striking at first glance, it is important to note that women also throw themselves into pits and engage in the transgressive whirlwind that is moshing. Riches and colleagues show that by doing so, female moshers can also inscribe themselves into this temporal metal community corporeally and experience themselves as part of a larger scene, in this specific case, the Leeds (UK) extreme metal scene.²⁰ What mosh pits also potentially offer women is to defy traditional gender roles and expectations by rejecting conventionally female-connnotated forms of leisure and instead participating in moshing's violence.²¹ This participation empowers them as committed subcultural members and heightens their visibility as such, especially in practices such as stage diving.²²

Moshing women not only transgress norms of everyday bodily interaction but simultaneously also the metal mosh pit as a male homosocial space. Male moshers' ambivalent reactions, in turn, highlight the pit as a contested arena, as interactions range from continued moshing through especially protective behaviour – so as not to harm the women who supposedly cannot compete in a 'regular' pit – to women simply being forced out of the pit or to its margins by men in order to restore homosocial stability.²³ These attempts are not always successful because female moshers do not simply accept but defy their exclusion by re-entering the pit and claiming participation.²⁴ Yet, pit ejection is not the only way the moshing experiences of female moshers are undermined by men. As Riches and colleagues go on to explain, pit participation is fraught with risks for female moshers because they are potentially subject to sexual abuse due to the anonymity granted by the blurring disorientation in pits, especially during stage diving and crowd surfing.²⁵

While conceptions of mosh pits as contested homosocial spaces already touch on aspects of sexuality, and Riches even suggests a (homo-)erotic perspective on pits,²⁶ the role moshing plays for queer metal fans has not received much academic attention so far. Yet, Amber Clifford-Napoleone's study on queer metal provides an account of how queer metalheads consume moshing.²⁷ About one-fifth of her survey participants claim to focus on moshing at metal concerts, and those who actually participate in the pit point out the contribution of moshing to their metal identity and sense of being part of a metal community, similar to the experiences described above. For those queer metal fans that focus on moshing without physically participating in it, mosh pits offer a spectacle that allows for queer desire because 'disorganized movements of sweaty, out-of-control bodies slamming into each other provides a way to consume bodies in physical action without being policed as a queer person in a heteronormative space'.²⁸

As the various perspectives on moshing's gender dynamics highlight, mosh pits are ambivalent spaces and not simply sites of an all-encompassing metal community. They offer communality, empowerment, good times and much more to metal fans, and therefore they occupy a central place in the lives of many metalheads. Yet, mosh pits simultaneously present themselves as contested and, at times, fragile social spaces where different masculinities compete; female moshers face additional physical risks and obstacles when claiming their place in the pit; and queer fans covertly navigate the mosh pit's heteronormative terrain. In doing so, mosh pits and their conditional inclusivity mirror a gap between metal's proclaimed inclusivity and its remaining

mechanisms of exclusion that have been observed in metal culture more widely.²⁹ While this chapter has addressed and illustrated moshing's conditional inclusivity in terms of gender, further aspects of identity and difference could and should be pursued, such as exclusions due to race or ability. These identities are likely to face similar challenges concerning pit participation as those relating to gender, although research on these issues is scarce in the realm of mosh pits.

Outlook and Avenues for Future Research

Research into metal's dance practices spans more than twenty years and provides numerous insights and sophisticated analyses, all of which further the understanding of these corporeal activities. Nevertheless, there are common foci that have established specific representations of dance and the resulting blind spots. The remainder of this chapter points beyond these representations and highlights desiderata for future research as well as first steps that have already been taken towards addressing them.

Beyond Headbanging and Moshing in Extreme Metal

When considering the majority of the literature cited so far in this chapter, one might be tempted to equate dance in metal with moshing practices and headbanging at live concerts of extreme metal bands, primarily in the Global North. As the introductory vignettes hopefully illustrate, there are more movements, cultural interactions and spaces involved in metal dance than that. Since headbanging and moshing are so prominently associated with metal, other forms of movement are easily overlooked. The intricate gestures and movements of Orphaned Land's singer or the performance of a belly dancer are striking examples and by no means the only ones. During my ongoing research on metal dance, I encountered numerous forms of movement: spontaneous circle dances during the performance of folk metal band Korpiklaani; humorous conga lines initiated and choreographed by the musicians of Trollfest; or the collective swaying of smartphones during metal ballads, to name but a few. Metal's movement repertoire is more complex than its depiction in research. Besides the prominence of headbanging and moshing, this is probably connected to the fact that the focus is mostly on extreme metal, which tends to be conceptualised as locally self-contained subcultures or scenes. The implicit depiction of moshing and headbanging as (extreme) metal's only dance

forms reinforces such a conception and, in effect, contributes to an essentialist notion of 'what metal is'. By broadening the scope beyond extreme metal and viewing metal's subgenres as porous formations that interact with other music cultures, different movements come into view. Such a perspective can also better account for the movement variety, as some fans literally move through different movement cultures – physically and via media – potentially disseminating and modifying dance practices along the way. Thereby, for example, belly dancing is combined with headbanging at metal concerts, and hip hop and electronic dance music cultures have adopted mosh pits as they see fit.

Digital and Global Dances

Another blind spot concerns the spaces where dancing in metal takes place. Due to dancing's embodied, interactive nature, facilitated by the loud music, the numerous potential fellow dancers and further social conditions, live concerts are the main dancing events in metal. Research has attended to them with insightful results, as described above. Yet, dancing is not restricted to physical spaces such as live concerts but also takes place digitally. This became especially apparent when the Covid-19 pandemic forced concert venues to close down, encouraging alternative formats such as live streams of bands performing while audience members sit individually at home and simultaneously inhabit a shared digital space via platforms such as Zoom or Twitch. Although physical bodily interaction is prevented that way – precisely the aim of these formats – audience members film themselves raising their horns, banging their heads or otherwise going wild in their homes. The workings of these hybrid dance experiences have yet to be explored, and their investigation might reveal fluid body/media constellations and contribute to dismantling nature/culture dichotomies. This possibility is slightly touched upon by Paula Rowe when her interviewees, some of whom have never physically participated in a mosh pit but have watched recorded performances, describe feelings of care and community in mosh pits.³⁰

Digital space is not the only dance environment scholars have scarcely paid attention to so far. Despite the fact that metal is heard, played and lived all over the world, metal studies have less to say about metal dance in the Global South, as significantly more of the usually ethnographic research has been conducted in the Global North, especially in English-speaking countries.³¹ A simple extrapolation of these findings to the Global South would reinforce a hegemonic overgeneralisation that assumes the Global

North as the universal norm. In order to prevent this, it is necessary to take the situatedness of dance practices seriously and investigate how they figure into the lives and experiences of metal cultures and fans from the Global South. A similar argument motivated Eliot Rivera-Segarra and colleagues in their research on mosh pits in Puerto Rico.³² Furthermore, the global circulation of metal and its movements also begs the question of how movements are consumed and how their meanings have shifted as they have travelled the globe. When Mahafsoon performs at a concert in Vancouver, as described in vignette 2, issues surrounding exoticising gazes, for example, emerge that warrant further investigation.

Metal Dance Histories

A further aspect that is crucial to dance as a cultural practice is its historical development, and a more thorough understanding entails grasping transformations and continuities throughout situated dance histories. However, since research on these embodied performances usually relies on ethnographic approaches with valid arguments, insights into metal's dance histories largely remain a desideratum. Two approaches that exemplify such a perspective are provided by Stephen Hudson and Wolf-Georg Zaddach. Hudson investigates headbanging with a focus on the US and argues that it can be viewed as a continuation and exaggeration of movements already present in earlier styles of African American rock and blues music, therefore positioning it as a legacy and not as an entirely new form that first arises in metal.³³ Zaddach's study of metal in the German Democratic Republic vividly depicts the potential consequences faced by moshers and the musicians, who instigated mosh pits, when confronted with a repressive governmental system.³⁴ This could include, for example, the forced break-up of bands because they were perceived to incite riot-like behaviour.

Relating Music and Movement in Metal

The last gap in knowledge to be briefly addressed in this chapter is the relation between metal music and metal dance as aesthetic and performative practices. While side notes frequently mention the central importance of music for dance, research has barely examined their relation in detail.

Stephen Hudson develops a construction-based theory of musical metre and turns to headbanging with the aim of identifying how music can invite people to headbang.³⁵ To this end, he investigates two of metal's most common metering constructions by which he means 'any conventional

association between a specific way of moving, a specific syntactic function or rhythmic interpretation, and specific sounding musical features'.³⁶ The metering constructions he turns to are backbeats and 3+3+2 phrase endings.³⁷ Analysing these by mainly focusing on the music of Metallica, Hudson relates headbanging movements to features of sounding music, especially rhythm. In this way, he is able to position headbanging as a cultural convention among metalheads while simultaneously considering the individual freedom in feeling and interpreting musical rhythm through the body as described in vignette 1.³⁸ In his discussion of groove in doom metal, Jonathan Piper similarly emphasises that headbanging is not just an automatic reaction to imperious music. Instead, headbangers respond variedly to musical developments, including modifications in headbanging style, and actively embody their temporal experience of the music.³⁹

A musical feature often associated with metal dance are so-called mosh parts, a term originating from fan and journalistic discourses and adopted in musicology. Generally, mosh parts designate sections in songs that seem to particularly invite moshing. According to Dietmar Elflein's extensive study of heavy metal's musical language, they are characterised by a perceived reduction in tempo, in that the pulse of at least one crucial sound layer (for example, drums or rhythm guitar) is halved or slowed down even further, and have gained in prominence, especially with the development of extreme metal in the 1980s.⁴⁰ Although it might seem like a paradox, it is the perceived slowing down of the music that is accompanied by heightened dance activity. Glenn Pillsbury, whose work Elflein partly draws on, lays out a similar notion of mosh parts, which he integrates into his description of cycles of (musical) energy that 'focus power and intensity into bodily experience'.⁴¹ Varying combinations of musical elements such as distorted and palm-muted timbres, rhythmic intensities, the register and range of riffs, and variations in the perceived speed amount to different levels of energy throughout a song. These are, in turn, embodied by musicians and audience members through headbanging and moshing as well as through rigid postures and jerking movements, for example.⁴² By considering the contribution of sound specifics and the register and range of guitar riffs, Pillsbury broadens the musical scope beyond the crucial role of rhythm and tempo for a bodily engagement with music.

Another formal section closely related to mosh parts and moshing is breakdowns. In his multifaceted analysis of breakdowns in twenty-first century metal(core), Steven Gamble observes that this musical structure stimulates moshing in a similar way to mosh parts and actually positions mosh parts as progenitors of breakdowns in recent metal music.⁴³ In his definition, breakdowns are characterised by a two-part

pulse structure: cymbals and snare drum create a solid backbeat that establishes a regular metre. The rhythm is set against this as a second structure that consists of potentially complex patterns of kick drum hits and guitar chugs played in unison and contrasting the regularity of the metre. This relation is asymmetrical in favour of what he calls a 'metrical hegemony', as audience members are more likely to engage with the regular backbeat. Gamble relates this musical tension between metre and rhythm in breakdowns to tensions and negotiations between local pit communities and 'wider society': 'Breakdowns invite listeners to mirror perceptual properties of the music in the listening process, acting out the tension between rhythm and metre with their own imagined contest against constraints'.⁴⁴

Despite these insightful contributions to the study of music-movement relations, further research is needed. Similar to the generally narrow focus mentioned above, a broader scope would be beneficial that extends beyond the relation of music to headbanging and moshing, beyond a focus on rhythm and tempo, and beyond 1980s extreme metal (particularly Metallica), although there is already significant work that addresses the latter two aspects. Finally, in terms of methodology, an integration of different research approaches would be a reasonable next step. While ethnographic investigations into metal dance as communities tend to neglect consideration of the music, musical analyses have tended to forego ethnographic fieldwork and rely instead on audio-visual recordings of concerts. Combining participant observation and approaches to music and movement analysis promises further insights into the interactive, embodied relationship between metal music and bodies.

Conclusion

As this introductory chapter has hopefully shown, research on dance practices in metal offers differentiated analyses and a rich understanding of these interactions. In the process, it becomes transparent that uninformed devaluations of dance and its practitioners are just as untenable as sweeping praise of aspects such as inclusivity and communality, as can sometimes be found in fan discourse. Nevertheless, considerable gaps and desiderata still need to be attended to. Although these have been described separately, they are actually intertwined, as, for example, the relationship between music and movement is not isolated from, but feeds into, the communal experiences offered by moshing and other practices. These intersections are what metal studies need to engage with if they are to further a notion of dance in metal as a heterogeneous, complex and culturally situated practice.

Notes

1. Mahafsoun, 'Orphaned Land Feat: Bellydancer Mahafsoun {Sapari} ~ Vancouver', *YouTube* (2020). www.youtube.com/watch?v=I7gX3TCyDPA (accessed 14 April 2022). More information on Mahafsoun is available at www.mahafsoun.art/about.
2. To give a contrasting example, in Germany 'moshing' can also simply denote headbanging.
3. An instance of such a 'corporeal etiquette' can be found in Sherril Dodds, *Dancing on the Canon: Embodiments of Value in Popular Dance* (Palgrave Macmillan, 2011), p. 157. Further numerous examples, provided by fans, can be found on video platforms such as YouTube.
4. Harris M. Berger, *Metal, Rock, and Jazz: Perception and the Phenomenology of Musical Experience* (Wesleyan University Press, 1999), pp. 70–3.
5. Dodds, *Dancing on the Canon*, pp. 152–9.
6. Katharina Inhetveen, 'Gesellige Gewalt: Ritual, Spiel und Vergemeinschaftung bei Hardcorekonzerten', in Trutz von Trotha (ed.), *Soziologie der Gewalt* (Westdeutscher Verlag, 1997), pp. 235–60.
7. For further early investigations on moshing practices in hardcore cultures see Bradford Scott Simon, 'Entering the Pit: Slam-Dancing and Modernity', *Journal of Popular Culture* 31 (1997): 149–76; William Tsitsos, 'Rules of Rebellion: Slam dancing, Moshing, and the American Alternative Scene', *Popular Music* 18 (1999): 397–414.
8. Inhetveen, 'Gesellige Gewalt', pp. 241–6.
9. *Ibid.*, p. 252.
10. Gabrielle Riches, 'Embracing the Chaos: Mosh Pits, Extreme Metal Music and Liminality', *Journal for Cultural Research* 15 (2011): 315–30.
11. *Ibid.*, p. 324.
12. Craig T. Palmer, 'Mummers and Moshers: Two Rituals of Trust in Changing Social Environments', *Ethnology* 44 (2005): 147–66.
13. Rosemary Overell, *Affective Intensities in Extreme Music Scenes: Cases from Australia and Japan* (Palgrave Macmillan, 2014), pp. 23–4.
14. *Ibid.*, p. 13.
15. Something that is generally acknowledged but hardly explored by the mentioned research is how crucial the music is to dance. After all, these are not groups that move randomly, but all the mentioned activities and processes take place during and interact with musical performances.
16. Jonathan Gruzelier, 'Mosh Pit Menace and Masculine Mayhem', in Freya Jarman-Ivens (ed.), *Oh Boy: Masculinities and Popular Music* (Routledge, 2007), pp. 59–76; Leigh Krensk and Jim McKay, "'Hard and Heavy": Gender and Power in a Heavy Metal Music Subculture', *Gender, Place, and Culture* 7 (2000): 287–304.

17. Gruzelier, 'Mosh Pit Menace'; Gabby Riches, 'Brothers of Metal! Heavy Metal Masculinities, Moshpit Practices and Homosociality', in Steven Roberts (ed.), *Debating Modern Masculinities: Change, Continuity, Crisis?* (Palgrave Macmillan, 2014), pp. 88–105.
18. Riches, 'Brothers of Metal!'.
19. *Ibid.*, p. 99.
20. Gabrielle Riches, Brett Lashua and Karl Spracklen, 'Female, Mosher, Transgressor: A "Moshography" of Transgressive Practices within the Leeds Extreme Metal Scene', *IASPM Journal 4* (2014): 87–100.
21. Riches, 'Embracing the Chaos', p. 327.
22. *Ibid.*; Gruzelier, 'Mosh Pit Menace', p. 67; Riches, Lashua and Spracklen, 'Female, Mosher, Transgressor', pp. 90, 96.
23. Riches, Lashua and Spracklen, 'Female, Mosher, Transgressor', pp. 94–5.
24. *Ibid.*, p. 95. Riches' interview partners all reported such resilient behaviour on their part. Yet, it should be noted that they seem to be experienced fans, who are more likely to be located at the core of the scene, as they 'engage in everyday scene activities' (p. 92). It is hard to tell whether less experienced novices who relate to the scene more casually might find it more difficult to insist on their participation.
25. *Ibid.*
26. Riches, 'Brothers of Metal!', pp. 96–8.
27. Amber R. Clifford-Napoleone, *Queerness in Heavy Metal Music: Metal Bent* (Routledge, 2015), pp. 123–4.
28. *Ibid.*, p. 124. As described above, moshing does not only consist of 'disorganized movements' and 'out-of-control bodies' but is constituted by a more ambivalent interplay of social regulation and experiential disorientation.
29. Rosemary Lucy Hill, *Gender, Metal and the Media: Women Fans and the Gendered Experience of Music* (Palgrave Macmillan, 2016), p. 4.
30. Paula Rowe, "'We're in this Together and We Take Care of Our Own": Narrative Constructions of Metal Community Told by Metal Youth', in Nelson Varas-Díaz and Niall Scott (eds.), *Heavy Metal Music and the Communal Experience* (Lexington Books, 2016), pp. 85, 87, 96, n7.
31. As a reminder: Berger: USA; Dodds: UK; Gruzelier: UK; Inhetveen: Germany; Krenske/McKay: Australia; Overell: Australia, Japan; Riches (et al.): Canada, Germany, UK.
32. Eliut Rivera-Segarra, Sigrid Mendoza and Nelson Varas-Díaz, 'Entre el orden y el caos: El papel del mosh en la comunidad metalera de Puerto Rico', *Revista de Ciencias Sociales* 28 (2015): 104–21.
33. Stephen Hudson, 'Metal Movements: Headbanging as a Legacy of African American Dance', in Toni-Matti Karjalainen and Kimi Kärki (eds.), *Modern Heavy Metal: Markets, Practices and Cultures: International Academic Research Conference, June 8–12 2015, Helsinki, Finland: Conference Proceedings* (Aalto University, 2015), pp. 445–53.

34. Wolf-Georg Zaddach, *Heavy Metal in der DDR: Szene, Akteure, Praktiken* (Transcript, 2018), pp. 195–7.
35. Stephen Hudson, *Feeling Beats and Experiencing Motion: A Construction-Based Theory of Meter*, doctoral dissertation (Northwestern University, 2019).
36. *Ibid.*, p. 54.
37. Hudson defines backbeats as a rhythmic pattern with snare drum accents on beats 2 and 4 of a 4/4 bar that simultaneously implies beats 1 and 3 as strong beats. His notion of a 3+3+2 phrase ending entails an accent pattern at the end of a musical phrase that is played in unison by guitars and drums, and which arranges groups of 3-pulses into phrase durations that are powers of 2 (*Ibid.*, pp. 57, 62–4).
38. *Ibid.*, pp. 54–65.
39. Jonathan Piper, *Locating Experiential Richness in Doom Metal*, doctoral dissertation (University of California San Diego, 2013), p. 60.
40. Dietmar Elflein, *Schwermetallanalysen: Die musikalische Sprache des Heavy Metal* (Transcript, 2010), p. 282f.
41. Glenn T. Pillsbury, *Damage Incorporated: Metallica and the Production of Musical Identity* (Routledge, 2006), p. 10.
42. *Ibid.*, pp. 10–14.
43. Steven Gamble, 'Breaking Down the Breakdown in Twenty-First-Century Metal', *Metal Music Studies* 5 (2019): 338, 347. On a terminological note, Elflein and Gamble define breakdowns differently, as they base their definitions on songs from different points in time. While Elflein engages with burgeoning 1980s extreme metal, Gamble develops his notion with respect to twenty first century metal and metalcore. The difference becomes tangible as both coincidentally analyse the same section of Slayer's *Raining Blood* for illustrative purposes: Gamble denotes a section as proto-breakdown which is a mosh part to Elflein, while the immediately preceding iteration of the riff in question without the drums is described as breakdown by Elflein (Elflein, *Schwermetallanalysen*, p. 285; Gamble, 'Breaking Down the Breakdown', pp. 342–3).
44. *Ibid.*, p. 349.