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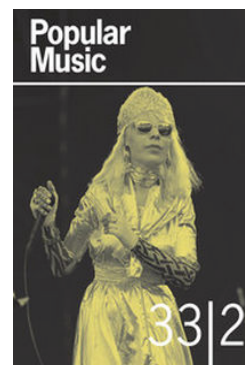
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Death metal tonality and the act of listening

HARRIS M. BERGER

In recent years popular music scholars have paid increasing attention to musical sound. From Robert Walser's landmark work on heavy metal (1993), to Alan Moore's important analysis of rock style periods (1993), to a number of shorter studies (Whiteley 1990; Josephson 1992; Bowman 1995; Ford 1995; Hawkins 1996; Edström 1996), more and more scholars have recognised that all levels of scholarly focus must be pursued if we are to gain purchase on the phenomena of popular music. With no exceptions of which I am aware, all the popular music scholars concerned specifically with musical sound seek to explore the connections between sound and its social contexts. My goal here is to show how attention to musical perception can forward this project and to argue that perception is best understood as a kind of social practice. The act of perception constitutes musical forms and musical meanings in experience. The act of perception is where the rubber of sound meets the road of social life, and by treating perception as a practice we can draw more intimate connections between songs and subjects, sound and society, than would be possible if we were to start from musical structures and then search for linkages to social context. None of this, of course, is to deny the value of studies focused on musical structures, performance events, broad social contexts or large-scale social history, but to argue that the constitution of musical perception by musicians and listeners deserves greater attention and to suggest how this kind of scrutiny might serve the larger aims of popular music studies.

As a case study in the practice of perception, I will examine a particularly revealing set of data from my recent fieldwork on death metal in Akron, Ohio. Based on feedback interviews with musicians, the data will show how a seemingly elementary musical analysis of a section of a song completely failed to account for the musical experiences of performers and listeners. Relying on ideas from Husserl's phenomenology of internal time consciousness (1964), I hope to show that the tonal dimension of music, and the meanings that emerge from it, are constituted by the subject's active, perceptual organisation of the sound in time. Such a discussion will suggest some of the difficulties present in analyses of musical sound that are not based on ethnographic work with the musicians and listeners. In so doing, I hope to illustrate some of the complex, intimate dialectics of social context and agency that vivify perceptual practices and musical experience in general. By treating perception as practice and bringing greater ethnographic attention to studies of musical sound, we can, I believe, secure a more stable foundation for our research and gain new insights into the social life of popular music.

Perspectives on sound: from text to perception

From performance theory in folklore studies (for example, Bauman 1977), to reader response (Radway 1984), to practice theory (Giddens 1993), and participatory discrepancy theory (Keil and Feld 1994, pp. 1–30, especially p. 17), the last thirty years have seen a wide variety of theoretical orientations that treat experience and action, rather than autonomous texts, as the study object of the humanities and social sciences. Viewing musical meaning as encoded in culturally specific texts, popular music scholars have pursued this project by exploring the ways in which ideologies of race, class and gender are perpetuated or challenged in video and song. A good example of this kind of research is Stan Hawkins's recent analysis of Annie Lennox's music video 'Money Can't Buy It' (1996). Relying on Susan McClary's musical semiotics, Hawkins treats the harmonic, timbral and videographic dimensions of the texts as signs and interprets those signs to reveal the complex representations of gender and sexuality that Lennox's video constructs. Hawkins's reading is insightful and has real explanatory power. A careful reading of the paper, however, suggests contradictions between Hawkins's interpretive methods (specifically, level of focus and implicit definition of study object) and the larger programme of grounding musical analysis in social life. The discussion of the harmony is a case in point. In the first stage of the analysis, for example, Hawkins observes:

Harmonic organisation in 'Money Can't Buy It', on a macro-level, involves a gradual progression from the minor flavoured C Dorian mode in the chorus (constructed around Cm⁷) to the brighter E-flat Lydian which is followed by a shift to the subdominant chord of F Major. . . . Qualities *inherent* in this harmonic movement correspond in a number of interesting ways to the song's narrative. Following a six-bar instrumental introduction, during which a pensive, dreamy mood is established, the vocals enter with the hook 'Money can't buy it, baby'. Lennox insists that neither money, sex or drugs can buy *it*. These lyrics, in representing the central ideological sentiments of the song, are cushioned by the melancholic C Dorian mode, consisting of chord shifts in each bar from Cm⁹ (I) to F (IV). (1996, p. 22, emphasis added on the word 'inherent')

In the overall structure of Hawkins's argument, this abstracted passage is meant to show how Lennox employs harmony to evoke particular moods and how those shifts in moods are the building blocks from which a gendered representation of the singer is constructed. Hawkins takes both the harmonic analysis of the passage (the chorus is in C Dorian with Cm⁹ as a tonic and F as a subdominant) and the effect that this harmony evokes ('melancholic' and 'cushioning') as 'inherent' and unproblematic features of the musical sound itself. The meanings of that harmony are then taken as data upon which larger conclusions about what the video means, and how the video means it, are based.

The broader conclusions which Hawkins draws are both logically valid and intellectually compelling. The difficulty, however, is that the harmonic analysis and affective contents which he presents are not unproblematic data, there for any listener to hear; on the contrary, they are constituted by the listeners in the act of perception. While perception is not capricious imagination – the listener constitutes perceptual experiences from the physical givens of acoustical sound – it is the listener's perception that establishes a collection of simultaneous pitches as a tonic or a dominant and that assembles the chords just grasped as 'melancholic' rather than, for example, phlegmatic. Perceptual experiences of effect and harmonic tension and release are never fully determined by the sound waves, and listeners may constitute substantially divergent musical experiences from the same recording. There is no

doubt that many listeners hear 'Money Can't Buy It' in the way that Hawkins's analysis describes, but in reading work of this kind I am forced to wonder if some listeners might hear the C minor as a supertonic of B flat major and the F as a dominant, independent of any harmonic implications the vocal melody might suggest. Heard in this way, might the Cm⁹/F move emerge as vague and mysterious rather than 'melancholic' and 'cushioning', an endless motion toward the B flat that is never resolved? And if reinterpretations of the harmony cause us to hear the affective contour of the piece in a different way, might not these different affective contours cause us in turn to reinterpret the larger representations of gender in the video? Such questions are in no way meant to damn Hawkins's excellent analysis. In all inquiry, the researcher must take some level of data as basic and proceed to conclusions from there. In fact, Hawkins's popular musicology and the entire recent interest in musical sound have been pursued as critical correctives to past scholarship that has ignored musical sound in general and specific songs, videos and performances in particular. Hawkins's analysis is, however, predicated upon his own constitution of the musical sound in perception. My field experiences indicate that, while scholars may perceive the musical sound as the listeners do, there can be substantial and unpredictable divergences between scholars' constitution of musical sound in perception and that of the people they interview. Such divergences cannot be written off as mere individual idiosyncrasy; they are confined to neither the structural nor affective dimensions of the music and may often cause scholars to substantially revamp their broader interpretations. While many valuable studies of musical sound have proceeded without ethnographic inquiry into musical perception, problematising the use of affective or structural descriptions unsupported by fieldwork can only fulfil a grounding function in popular music studies.¹

My interest in perception emerges from a long-standing set of concerns in ethnomusicology. Here, a critique of text-based approaches arose from the fundamentally comparative nature of the field. Exploring musical sound cross-culturally, ethnomusicologists with theoretical orientations as diverse as phenomenology (Stone 1982, 1988; Friedson 1996), structuralism (Blacking 1970; Feld 1982) and auditory cognition (Fales 1995, 1997; Wegner 1993) have not contented themselves with simply describing the musical structures produced at their field sites. Explicitly or implicitly, such scholars have sought the 'native perspective' on the music and tried to unearth culturally specific systems of perception. While fieldwork itself is not an unproblematic activity, it is a basic tenet of the discipline that the scholar may not be hearing what the others in the event are hearing. Though phenomenology, structuralism and auditory cognition could not be further apart in basic assumptions, methodologies or programmatic goals, the common ethnomusicological concern has been to understand the musical experiences of the people who make and listen to the music. Since at least the late 1970s, however, the notions of 'native perspective' and 'system' have received substantial critique. With globalisation and ever more complex interactions between cultures, the notion of a unitary 'native' perspective has become harder and harder to maintain (Clifford and Marcus 1986; Marcus and Fischer 1986). Other scholars have observed that expressive culture often emerges at the border between cultures, rather than 'within' cultures or subcultures (Bauman 1972; Abrahams 1981; Meintjes 1990, see below). Even within clearly defined cultures, subcultures or performance events, there exist complex internal organisations and differentiations for which generalisations about homogeneous cultural systems fail to account (Berger 1997, 1999). Structuralism in particu-

lar has long been criticised for replacing the agent with subconscious mechanisms and thus dehumanising social research.

The great value of the notions of 'native perspective' and 'systems of perception' is that they highlight the social basis of perception. We can, I believe, retain this basic insight and address the phenomena of cross-cultural interaction, intra-cultural differentiation and agency if we treat perception as a kind of practice. I use the term practice in the dialectical sense elaborated by practice theorists such as Anthony Giddens (1984, 1990, 1993). In his formulation, society is not an external force that descends upon individuals and controls their action; society is constituted by the agents' practice – their concrete activities – and practice is the agent's achievement. That achievement, however, is constrained, and enabled, by the actor's social and cultural context and in turn serves to constitute the context for future practices, producing and reproducing social structure in general and power relations in particular. By treating perception as a kind of social practice, we can account for the social basis of perception without reducing listening subjects to mere bearers of culture, to typical listeners in homogeneous musical communities. With its interest in the processes by which large-scale social forms are constituted in situated events, practice theory also addresses *micro/macro* problems. At the end of this discussion, I hope to show how the focus on perceptual practice is not the parochial concern of so-called 'micro-level' social research, but how such a focus can help to address 'macro-level' phenomena as well. As always, a fuller understanding of theory emerges when it is connected with data, and we can gain a richer perspective on these ideas by exploring some specific examples of musical perception from the death metal musicians of Akron, Ohio. The analysis will be greatly enhanced by pausing briefly to explore the larger social context in which their lives are embedded.

Death metal in the American rust belt: Akron, Ohio's Sin-Eater

Both quantitative studies (Hakanen and Wells 1990, pp. 62–63; 1993, pp. 60, 66) and qualitative research (Walser 1993; Weinstein 1991; Gaines 1990; Cashmore 1987) on metal have shown this music to be largely the domain of white, working-class youth. Starting from widely divergent perspectives and serving widely divergent conclusions, most scholars of metal have interpreted the music as an expression of the frustrations of the blue-collar young in a de-industrialising society that neither requires their labour nor values their presence. Sociologist Deena Weinstein describes death metal as a kind of heavy metal 'fundamentalism' (1991, p. 48), a subgenre that distills from metal's complex mixture of themes and musical forms only the most chaotic and aggressive elements (*ibid*, p. 51). The music is most often characterised by its non-pitched, growly vocals; complex song forms are common but not required in this genre, and the lyrics centre on themes of critical thinking, personal responsibility and the supernatural.

Akron, Ohio is a case study in de-industrialisation, and its death metal scene is a particularly clear example of these broader arguments. Once synonymous with tyre-making, Akron has long since lost all of its major rubber manufacturing, and the only tyres currently made in the city come from a small speciality shop that produces tyres for auto racing. Where their parents held unionised jobs in the tyre industry, many Akron metalheads hold poorly paying jobs in the service sector or non-union factory jobs. The rest rely on ever-shrinking government support, and

most live with their families well beyond their teens. Not enough shows, bands, venues or fans exist in the Akron area for a death metal scene to be constituted with the completeness that the contemporary commercial hard rock or alternative scenes possess. Because of this, death metal fans attend thrash and hardcore shows, socialise with other underground metal fans, and, to outsiders, are merely a part of the larger underground metal scene. Nevertheless, many death metal fans feel a measure of difference at thrash and progressive metal shows, and most thrash and progressive metal fans actively avoid the death metal shows and recordings available in the area. As a result, death metal forms a semi-independent 'scene-within-a-scene' in the north-east Ohio underground of the 1990s. In my fourteen months of participant observation and several hundred hours of feedback interviews, no one I spoke with was more committed to the death metal scene or eager to discuss its music than Dann Saladin.

Songwriter, singer, guitarist and keyboardist, Saladin had been in a variety of hardcore and metal acts before finding his niche in death metal. While he attended a wide variety of shows and socialised with people from every segment of the punk and metal underground, Saladin strongly identified with death metal, and, whenever I mentioned his name, he was associated with the growly vocals and scooped-mids guitar sounds that identify the style.² During my fieldwork, Saladin was between bands, his most recent being a five-piece death metal outfit named Sin-Eater. 'The Final Silencing' (written in memory of his grandfather's death, henceforth referred to as FS) was by all accounts the band's most successful and ambitious piece.

Saladin composed most of the sections of the song on his own. During the first rehearsal of FS, Saladin played the sections he composed for the drummer, second guitar player and the two bass players. He missed the second rehearsal, and in his absence the other players arranged the various sections into a tentative form. Later, they showed Saladin the overall song form and bridging materials they composed, and during the next few rehearsals the last details of the song were finalised. Saladin composed the lyrics as well, fitting them to the music during the final stages of arrangement with the band. Sin-Eater performed FS several times, and recorded it in the studio on two occasions – once for a poor-quality demo and once for a seven-inch record laid down under much-improved conditions at a local home studio. In all, I spent over ten hours discussing FS with Saladin, and several more hours discussing it with other members of the band.³

'The Final Silencing'

The introductory section will provide a useful starting point for the analysis of the musicians' perceptual practice. The seed idea for the introduction is the keyboard part that begins the song (Example 1); this part is played four times, accompanied



Example 1. Introduction to 'The Final Silencing'.

only by a flow of semiquaver strokes on the high hat and thunder and rain sound effects. As objective pitches, the notes are only a starting point for the ethnography of perception. To go further, we must ask: Is there a tonal centre to the part? If so, where is it? What are the scalar or tonal qualities of the part? Is there a pulse behind the part? Are the pulses grouped, and if so, how? Is the part heard as a melody, as an outlining of chords, as pure texture, or some other form? What is the affective quality of this part and how is it constituted? How does this part connect to others in the section and to the next section? In short: how is the part heard?

Saladin and I interpreted the first section of the song in somewhat similar ways, and these musical experiences correspond in a relatively unproblematic fashion with Jack Harrell's observations on harmony in death metal and thrash (1994). Harrell has observed that death metal bands tend to modify metal's stock vocabulary of chord progressions, inserting non-diatonic tritones and minor seconds to unbalance common tonal expectations and provide a more chaotic and aggressive sound. While Saladin's formal training in music theory is limited to high school music classes and guitar lessons in a local music store, his compositional and interpretive skills are highly sophisticated, and he was both sure-footed and unambiguous in discussing his music. In our discussion of the introduction, Saladin was well familiar with the idea of tonality and had no trouble asserting that the E was the tonal centre. The scalar quality of the line, however, required more exploration. Playing the part at home before the interview, I saw several possible ways in which it might be heard. All the notes in the initial keyboard part but the B flat are part of the E natural minor scale. An elementary analysis would suggest that the B flat was merely a chromatic neighbour note, a tension note releasing to the B natural; in this case, the entire line would be in E minor. Alternatively, the passage could be in the fourth mode of B harmonic minor, with several notes missing; in this case, the B flat would be a raised fourth, a scalar tension note to the natural fifth. The objective pitches never fully determine our constitution of perceptual experiences, however, and neither of these options correspond to Saladin's experience.

Assured that I was only interested in a description of his experience of the line, Saladin explained that he does not hear the B flat as a tension to the scalar B. As a result, the B flat is neither a chromatic neighbour note nor a weak scalar note, but a structural note in its own right. As a note choice that 'strengthens the feel of the riff', Saladin said that the B flat sounded 'drastic' and 'lends itself to being a little more eerie sounding, a little more . . . moody', than if he had used the A natural or the B natural in its place. As a result, the B flat, a tritone from the tonic E, is crucial to the part's sound. Saladin recalled that one of his many guitar teachers described the tritone by comparing musical intervals to the steps in a stairway; unlike the other intervals, the melodic tritone gave the listener the unsettling impression of going down the stairs and skipping a step. After this discussion, it was not difficult to establish that the G was a chord tone to the central E, and the F# a weak scalar note that heightened the E's centrality. As a description of the harmonic functions of the pitches, Saladin concluded that the part employed an altered scale similar to E Aeolian, but with an additional structural B flat. In such a view, the B natural is insignificant, a weak scalar note which could be omitted or replaced.

The importance of the melodic contour was highlighted as we turned to the harmony guitar lines that come next in the song. After the keyboard part is played

four times, the rest of the band enters, repeating the part four more times. Here, the drums play a ten-eight groove, two basses double the keyboard line an octave below, one guitar plays in unison with the keyboard, and a second guitar plays in parallel (non-diatonic) minor thirds. Trained in a music theory where diatonic harmonies are the default case, my concern was to discover if the parallel minor thirds change the part's tonal implications. Parallel harmonies are common in both death metal in general and Saladin's music in particular, and he said that with the keyboards, first guitar and both basses playing the original melody in unison, the second guitar's harmony line fails to change the original tonality. Saladin explained that because the part is dynamically faint, it acts almost 'subconsciously' and gives the section an 'eerie' feel; further, he said, a non-parallel harmony would draw too much attention to the harmony line and diminish the desired effect. I suggested that parallel harmony may emphasise the most important aspect of the part, its melodic contour, and Saladin agreed strongly.

Even this brief passage suggests important differences between an elementary musical analysis and the participant's musical experiences. Still, Saladin's style of perception in the introduction does not differ radically from the one implied by elementary theory, and if divergences between perspectives were as limited as this, the question of perception would only be of secondary importance to popular music studies. The accompanying part for the solo section (Example 2), however, proved to be a different story.⁴

After the relatively exotic harmonic materials of earlier sections of the song (such as Example 3), I expected our discussion of the accompanying part for the solo section to be straightforward and was surprised when Saladin explained that he heard this part as wildly chromatic and unpredictable. Responding to my inquiries, Saladin explained that the part has two tonal centres. The notes of the first three beats of the bar (E, G, F#, E, C and B) all fall neatly within E minor, with the F# as



Example 2. The accompanying part for the solo section of 'The Final Silencing'.



Example 3. The verse section of 'The Final Silencing'.

a scalar passing note leading to the E and the entire part concluding on the E's dominant – B. The second part, lasting just one beat, is a D/D# trill, which Saladin hears as an embellishment of the D. Saladin was intent on disabusing me of my idea that the D and the D# lead up to the E; for him, the first three beats of the bar and the last beat were quite unrelated. After three repetitions of this bar, the D/D# trill is replaced by an F chord, which sharply marks the form.

From a traditional music theory perspective, the pitch collection of the solo section seems clear and straightforward. Based largely in E minor, the part seems solidly centred in E, and the extraneous pitches can be easily explained by basic ideas from theory: the F chord could be seen as a flat second chord, or, more likely, a flat five substitution for the dominant B; E minor can accommodate both the D and D# in melodic minor (ascending and descending) and both pitches can be seen as leading towards the E. *The difficulty of the traditional description of this section – and non-phenomenological approaches to musical structure in general – is that it treats tonality as an objective aspect of the sound itself, rather than as an artifact of the subject's constitution of the sound in perception.* Removed from the context of other notes, of course, no one pitch can be a tonic or a dominant. Pitches only take tonal designations when they are related to other notes. As a result, tonality depends, not just on the notes themselves, but upon a listener to relate them, to organise them into coherent units and to relate the units to one another and the piece as a whole. We can gain a more concrete and detailed set of insights into these perceptual practices if we pause for a moment and interpret Saladin's comments in light of Edmund Husserl's notions of internal time consciousness.⁵

Constituting experiences in time and the harmonic dimension of music

In *The Phenomenology of Internal Time-consciousness* (1964), Husserl was concerned with understanding the temporal dimension of experience, and the central concept of Husserl's discussion is the notion of the living present. In casual conversation, the present is usually depicted as an infinitely thin moment, a temporal hair's breadth that glides endlessly from past to future. While recognising that the present is dynamic, Husserl observes that our experience is not confined to such a temporal hair's breadth; all experiences exist for us as a dynamic continuity of facets – facets that are about to occur, facets presently occurring and facets that have just passed. Not merely a continuous stream, our experiences of the possibilities of the near future and the certainties of the immediate past *exist simultaneously* with the experienced events of the hair's breadth present. All experience exists, therefore, not in the infinitely thin present of the traditionally conceived now, but in a temporal thickness that Husserl called the living present. This living present is the temporal window of the phenomenal world, the arena within which experience transpires. The halo of possibilities that constantly lurk before us in the future are referred to as protentions, and experiences that have just passed through the now-point are referred to as retentions. Within this living present, experiences exist for us as numerous facets synthesised together, dynamic gestalts moving from protention to retention.

An example will make the point clear. Imagine that you are holding a conversation and that your interlocutor says to you 'Eat the fruit'. Taken by themselves, the individual words are nothing more than isolated images and concepts; only when I experience them together, when I take them as one temporal unit, do I

experience the full sentence-meaning rather than three discrete words. In terms of Husserl's basic insight, I only experience the full sentence-meaning when my awareness of the word that is currently produced is simultaneously accompanied by the dim awareness of the future word I expect may be uttered and a background awareness of the word my interlocutor has already produced. When 'fruit' is in the now-point, I retain 'eat the', and this dim, background awareness in retention informs the foregrounded 'fruit' in the now-point and makes it meaningful.⁶ Mutually informing one another, the backgrounded experiences in retention and foregrounded experience in the now-point form a gestalt in the same way that the dark silhouette shapes inform the light goblet shape in the famed Rubin's Goblet drawing. If I did not retain 'eat the' while 'fruit' was in the now-point, I would experience 'fruit' by itself, no matter how quickly the words were pronounced. The hair's breadth now of our common-sense understanding only admits the words into awareness individually; the experience of the sentence, however, is a coherent unit with temporal breadth, an organisation of elements grasped together in the temporal thickness of a living present (see Ihde 1976, p. 897).

It is crucial to see that the numerous temporal facets of experiences in the living present are organised. As phenomena flow through the living present, they are parsed into units and the facets of those units are arranged into gestalts of foreground and background. These acts of temporal organisation constitute the form of our experiences and are crucial for their meanings. While experience is not infinitely malleable, we have a level of control over this organisation, and another analogy from language will make the point clear.⁷ Imagine someone speaking the sentence 'Donna is a white house wife'. In everyday conversation, stress, pause and pitch contour are used to help us parse a sentence into phrasal units. For the sake of argument, however, imagine that this sentence was spoken in a complete monotone or by a speech synthesiser. In such a situation we may parse and organise the sentence in two different ways to give two different meanings. If we tightly conjoin⁸ 'white' and 'house' – that is, if we strongly retain 'white' while 'house' is present, and take the two as a unit in retention as the rest of the sentences processes through the living present – then the sentence in our experience means, 'Donna is the spouse of someone that works at 1600 Pennsylvania Avenue'. If, however, we disjoin 'white' and 'house' – that is, if we do not form a single gestalt of 'white house' but allow them to stay distinct as they process into the ever more distant retention – then the sentence in our experience means 'Donna is a woman of European origin who works in the home'.

Two features of this analogy are particularly relevant to the present situation. First, it is important to notice that the full sentence in experience is not a simple gestalt composed of monadic elements synthesised in a fore- and background structure; on the contrary, the elements of the sentence, the words, are themselves gestalts synthesised from individual sounds and in turn are synthesised together to form larger phrasal and sentential units. This phenomenon of nested organisation will be particularly important for our analysis of Saladin's organisation of the living present in musical perception. The larger point, however, is that different acts of foregrounding/backgrounding and conjoining/disjoining yield different temporal gestalts and, therefore, different meanings. Our ability to organise experiences in different ways, and the radically social nature of those perceptual abilities, is what transforms aural perception from a mechanical response to the physical world into a kind of social practice.

With the Husserlian notions of protention, retention and living present in mind, we can more easily come to grips with Saladin's experience of the solo section and understand perception as a kind of social practice. Taken by itself, notes or chords have no tonal function; only when placed in the context of other notes and synthesised into meaningful aural gestalts do notes become ones or fives, tonics or dominants. A student in even an introductory level music theory class performing a harmonic analysis on the score of the solo section of FS would assume that the line is an unproblematic example of E minor. Such an analysis, however, is neither natural nor inherently implied by the notes. The analysis makes implicit reference to the perceptual experiences of the analyst, and that perception is an artifact of the analyst's taken-for-granted practices of perception. To constitute the section as a simple example of E minor, the listener must take the phrase as a coherent unit, conjoining all the notes in the bar together as they process from protention, through the now-point and into retention. Throughout the period, the notes of E minor are protended as a constant halo of possibility; the structural tones (E, B, G) are strongly protended and the other scalar tones (F#, A, C, C#, D and D#) are more weakly protended. At each moment, the notes in the now-point and retention slightly modify the intensity with which particular notes from E minor are protended; for example, at the third beat, the leap up to the C causes our traditional listener to expect a change in direction, and, as a result, the B is protended with slightly greater intensity. Across the span of the bar, however, the notes of E minor are protended in a relatively stable fashion, and it is precisely this background of relatively stable protentions that constitutes the experience of the harmonic quality of the line.

But this is not the only way to hear the line. Just as the listener in a conversation parses the ongoing flow of sounds of their interlocutor's words into coherent gestalts (conjoining sounds to form words and conjoining the word units into phrases and sentences), so Saladin parses the bar into two units – the notes of beats one to three are conjoined to form one unit and the notes of the D/D# trill on beat four are conjoined to form a second unit. Further, Saladin sharply disjoins these two units from one another in the thickness of the living present, disallowing the harmonic protentions of the first three beats to colour his tonal expectations of the D and D#. The traditional harmonic interpretation tacitly implies a listener grasping all the notes of the bar as a unit and allowing the first three beats to effect the tonal designation of the fourth beat; Saladin's experience of the part depends instead on constituting two separate units and radically disjoining those units from one another in the living present. Such a perceptual organisation might seem wilfully odd, but both perceptual practices emerge from culturally based assumptions about the organisation of musical sound. The perceptual practices that underlie the traditional interpretation take single key areas as the default case and require a non-scale pitch to constitute a new harmonic unit; Saladin's perceptual practices allow melodic leaps to trigger new perceptual units.⁹ Nothing inherent in the pitches make one style of perceptual practice more valid than the other; they are simply two different ways of constituting musical experiences.

But there is more to Saladin's experience than the presence of two key areas. Even after I had assimilated Saladin's bifurcated vision of the part, he continued to emphasise the extreme chromaticism of the line. This seemed very strange to me. Given E and D as centres, it is not clear that any notes are outside the scale, because Saladin did not specify the scalar quality of the D area. Even given E natural minor as the centre for the part, a very narrow reading, only the D# and the F chord at

the end of the fourth bar are outside the scale. The part in experience can be understood as chromatic, however, if we focus, not on the scalar structures as a whole, but on the play of semi-tones. The experienced 'chromaticism', and the attendant implications of a weak tonality, is increased if we conjoin the pairs of adjacent minor seconds (G and F#, B and C, D and D#, and later E and F) to one another more tightly than we conjoin the broader part in its two tonal area units (E, G, F#, E, C and B versus D and D#). Further, if we foreground the *pairs* of semi-tones in our experience (highlighting the pairs as they move from protention, through the now-point and into retention) an entirely different sound emerges – one that by definition emphasises the semi-tones and is, in an unexpected sense, 'more chromatic'.

Perception as practice and the importance of musical sound

One idea to be garnered from this discussion is that experience of tonality – and the affective meanings that spring from it – is an artifact of the organisation of the listening present. Treating tonality as the outcome of perceptual acts is not to confuse perception and fantasy. Where fantasies are *constructed* as whole cloth from the actor's social imagination, perception is *constituted* through the perceiver's interactions with the immediate physical world – a physical world that constrains and enables their resulting experience. Saladin's experience is not a fantasy. He does not, for example, imagine these notes against a tacit G pedal tone, converting the part into G major. While his organisation of protentions and retentions does not produce the experience upon which the traditional analysis is predicated, his experience still emerges from an interaction with sonic givens.¹⁰ The ethnography of musical sound, I believe, problematises the idea of musical text as data and calls us to conceptualise texts as the outcome of culturally specific styles of perception. While I am in no way suggesting that we dismiss non-ethnographic studies of musical sound, I believe that we must always conceptualise musical sound as a product of constitutive processes, however else we proceed in our research.

The second point to observe is that perception is not capricious, personal or idiosyncratic, but is deeply informed by the perceiver's social context. However unusual Saladin's style of perception may seem from a traditional music theory perspective, that style of perception is not unique to him. The other members of Sin-Eater with whom I spoke all described the part as highly chromatic and random and were surprised that I heard it as a straightforward example of E minor. This style of perception makes perfect sense in the context of both the musical forms and larger social world of death metal. As I suggested above, unexpected non-diatonic intervals, wide melodic leaps, fractured variations of stock chord progressions, and brief forays into atonality are common in death metal. It is no surprise that a listener constantly exposed to such melodic techniques would interpret the wide leaps and unresolved trill of this part as a sudden shift to a new key area, rather than enfolding the D and D# within the larger key area of E minor. Likewise death metal's emphasis on themes of chaos and disruption not only lead the songwriters to compose chromatic and unpredictable parts, but they also impact upon perception as well, predisposing the listeners to hear lines in a highly fragmented fashion. Both the general sonic context and the main themes of the genre are informed by the everyday social experiences of death metal's main constituency – white, working-class youth. Confronted with limited job opportunities, a collapsing indus-

trial base and ever-shrinking representation in the workplace and the government, the metalhead's life is one of profound frustration. That metal's lyrics should emphasise images of chaos and aggression, that metal's compositions should fragment traditional rock chord progressions and that the participant's perceptual apparatus should constitute sonic fragments whenever the givens of the musical sound allow it is easy to understand.

Such observations come close to positing the 'native perspective', an underlying perceptual system of the type I discussed above. But while perception is deeply informed by social context at a variety of levels, it is also situationally variable and actively controlled by the participants. Perception is not the mechanical reaction of the culturally trained nervous system to physical stimuli; it is an active, bodily achievement, informed but not determined by social context. That is to say, perception is a kind of social practice. Discussing the part with Saladin, I learned to conceptualise it as two separate, sharply distinct units. Singing the part in my head, I laboured to emphasise the D/D# trill and disjoin the notes of the fourth beat from the notes of the first three beats; working against the sedimented influences of my music school training, I used these mental rehearsals to hear the recordings as a wildly chaotic part, constantly shifting between E minor and an unrelated trill of ambiguous tonality. Similarly, Saladin learned to hear the part as a unified line in E minor; though the line was still heard as grim and foreboding, constituted in one key area it did not evoke feelings of fragmentation or chaos. In a recent article on heavy metal drummers (Berger 1997), I have tried to show how musicians actively shift their attention between different temporal levels in the perception of drum grooves to achieve different goals in the situated context of musical performance. While Saladin would not toggle between these two different styles of harmonic perception as the drummers do in rhythmic perception, the larger point is that Saladin, and all musicians, have the ability to listen in different ways. Such an ability to 'have acted otherwise' is the hallmark of agency (Giddens 1990, p. 56). While much of musical performance depends on the active control of perception, the musician need not constantly adjust perception to make it qualify as a kind of practice; it is merely potential to do otherwise that transforms a type of behaviour from mechanical reaction to social practice.

Taking perception as a paradigm, we can understand musical life in general as a kind of practice. While it would be impossible to understand heavy metal without reference to de-industrialisation, joblessness and the ever-increasing difficulties of the working class, heavy metal cannot be seen as a mere product of these circumstances. That metal is the participant's active response to social conditions is most clearly understood when framed in the negative and seen in light of the participant's larger projects. Not all blue-collar youth become interested in metal, and some metalheads do not come from blue-collar backgrounds; those blue-collar youth that get involved in metal do so of their own choosing and engage with the scene with varying levels of intensity. The practices of composition, rehearsal, promotion and performance, of consuming and listening to recordings, of correspondence through letters and fanzines, and of casual socialising in the scene form an actively pursued social project. The death metal fans I spoke with were all too painfully aware of their lack of economic opportunities. Over and over they explained to me that the greatest danger in their world was apathy – a stultifying hopelessness that descends like a fog and incapacitates as surely as a bullet to the brain. The energy of a death metal performance, and the attendant subcultural

community-building that these musicians so enthusiastically participated in, is pursued as a pro-active response to the apathy, a way of overcoming hopelessness.

But metal cannot be conceptualised as a mere steam valve for psycho-social pressures, even if the turning of that valve is conceptualised as an active process. The notion of perceptual agency is at the heart of the death metal participant's ideology. While much of metal in general and death metal in particular is energetic and aggressive, the musicians I spoke with were quick to disabuse me of the misconception that metal is merely angry music. Saladin explained that metal was about exploring all the emotions that hold a person back in their life. Though a quick listening to Saladin's various demos would leave the listeners with the impression that his songs are an endless arena of aggression, more careful attention reveals a far wider affective palette. Discussing his songs, Saladin pointed out how the music constantly shifts among passages of frantic energy, dirge-like depression, medium tempo anger, expansive grandeur and a wide range of other emotions too fine-grained and numerous to be listed. Such passages are not merely intended to evoke simple cathartic release, but to help listeners to explore their emotional life actively, to examine the feelings that hold them back and to overcome these. Over and over again, the metalheads explained that music listeners must not merely let sound wash over them, but they should listen to music *actively*, engaging with the music and making it meaningful. What distinguishes death metal and underground metal in general from commercial hard rock and pop metal, they said, is that the music requires active listening. In short, perceptual agency is a basic element of the musical culture of death metal. While not all musical cultures emphasise the active dimensions of perception (I am thinking of religious musics in which the performer and listeners conceptualise themselves as conduits for the divine), death metal cannot be understood without attention to the active dimension of perception. In any area of study, treating perception as practice will enable us as scholars to explore the complex dialectics of perceptual activity and passivity in all musical experience.

None of this, of course, is intended to suggest that death metal perceptual practices somehow transcend their social context. While we cannot understand death metal without accounting for the agentive dimension of musical practices in general and perceptual practices in particular, the informing social context of de-industrialisation is similarly elemental. Without context, practice is meaningless. Similarly, these remarks are not meant to champion metal as the musical solution to the predicaments of working-class youth. In other contexts I have suggested that such death metal practices have both progressive and regressive consequences for social lives of metal heads (Berger 1999, ch. 11). Here, it is important merely to emphasise the distinction between arguing that a social phenomenon is the product of agency, and arguing that that phenomenon is a good thing. Both the advances of the civil rights movement and the terrorism of the Ku Klux Klan, for example, came about through the agency of their practitioners. Observing that a social phenomenon is the outcome of the participant's active, contextualised involvement returns our focus to the world of concrete events and unfolding possibilities; such an approach allows for both the humanist's celebration of the achievement of social life and the critic's demands for social accountability. As one part of the larger theoretical concern with practice, the idea of perception as practice focuses the attention of popular music study at the chiasm of the musical media and the social subject.

While the discussion so far has emphasised the coherence and systematicity of meanings within a group, the notion of perception as practice can serve the needs of scholars concerned with the fragmentation of meaning within cultures and the emergence of meanings at the interstices between cultures. In the contemporary scene, such scholars are legion. For example, in her well-known study of American and African interpretations of Paul Simon's *Graceland* (1990), Louise Meintjes reminds us that musical forms in the twentieth century often emerge as a synthesis of different cultural elements, and musical meanings are differentially interpreted in different contexts. George Lipsitz's foreword to the interviews from the *My Music* project (1993) addresses the issue of internal differentiation within a society and exhorts us to attend to the variety of ways listeners pick and choose among available musics, creatively employing music to serve their needs. In their fusion of social history and ethnography, scholars like Christopher Waterman (1990) and Barry Shank (1994) urge us to think of musical meanings as emergent within and contingent upon historical context.

The vision of perceptual practices constituting musical meanings in events is consonant with the phenomena that these writers highlight and can help us to gain insights into the concrete activities which underlie them. Understood as the situated act that constitutes musical forms and meanings, the notion of perceptual practices implies mobile social actors in performance events engaging with any music that confronts them, familiar or unfamiliar; the semiotics of Meintjes's various *Graceland* listeners can be conceptualised as various perceptual practices of musical participants with various social experiences differentially engaging with partially unfamiliar sounds in various ways. Understood as a social activity, the notion of perceptual practices implies actors operating in the real world of multi-dimensional social contexts (contexts of race, class, gender, sexual orientation, ethnicity and so on) and creatively interacting with musical sound. The self-reports of the *My Music* interviewees can be understood as reflexive attempts by the participants to describe the complex motivations that underlie their acts of musical perception. The wide divergences in musical uses illustrate both the actors' creativity in employing musical perception and the complexity of the social contexts that inform those perceptual practices. By the same token, many of the abstract similarities of musical uses between the interviewees (for example, the preponderance of participants who use music to achieve some kind of emotional end) suggests the persistence of local patterns of practice in the face of globalisation (for a different perspective, see Nettl's vision of musical use (1983, pp. 147–61)). Understood as social activity, the notion of perceptual practices implies actors operating in both the short-scale time depth of the event and the long-scale time depth of history. The various genres and style periods that Waterman and Shank describe so effectively (for example, Lagos's highlife bands of the 1920s and 1930s and Austin's cosmic cowboy period of the mid-1970s, respectively) can be understood as descriptions of musical meanings constituted by various perceptual practices of musical participants in performance events; as documented in the texts, such practices are relatively stable across events on the span of months, but emerge and dissolve over the span of years. Such a practice-oriented perspective is more or less explicit in the ethnographic sections of these works (Shank 1994, pp. 91–118, 162–238 and especially 237; Waterman 1990, pp. 180–213). My goal in this paper has been to add my voice to those of these scholars and provide a set of ideas useful for furthering their concerns.

Finally, the notion of perceptual practices constituting musical meanings can,

I believe, serve the interests of scholars concerned with the larger social and political dimensions of music.¹¹ While it may be inconsequential for global capitalism that Dann Saladin and other Akron death metal fans hear the bridge part of 'The Final Silencing' as a chaotic shift from E minor to an atonal D/D# trill, these perceptual practices are one small moment in the much larger social and aesthetic project of metal. In bars and rehearsal rooms across Akron (and throughout many countries), blue-collar youth employ perceptual practices to explore the emotional contours of their everyday lives and overcome their feelings of hopelessness and frustration. Though it is beyond the scope of this paper to argue the point in detail, I believe that the details of musical perception and the experiences of musical sound they constitute have political significance because they operate through a logic of consequences. Experiences of musical sounds entail rich meanings that, in context, may be consequential for the participants' lives and, through their lives, for the broader society.

This is to not say that we must naively accept the research participant as the sole arbiter of the political significance of their musical experiences or related practices. Meanings arise in experience as a complex gestalt of sound, lyrics, other expressive forms in the performance event, audience/performer interaction and contextualising cultural practices, and neither the participants nor the scholar can fully capture that richness in words. As the followers of both Freud and Marx remind us, our interpretations of our own experiences are often affected by stresses and power relations. Likewise, the social consequences of those musical meanings may ripple outward in ways that the musicians and the listeners may have neither thematised nor intended. If they realise it or not, for example, the metalhead's focus on individual emotions and individual motivations may draw attention away from the larger social causes of their frustrations, and this feature of their musical lives may have the consequence of blunting the humanistic potential of death metal. Whether or not this is the case is, of course an empirical question, but the larger point here is to problematise styles of political interpretation of music that seek only the scholar's reading of the text. While the scholar may have unique insights into the participant's musical experience, the politics of musical sound is grounded in the consequentiality of the music for the lives of the participants and other members of their society, and that consequentiality is mediated through the participant's experience, however well or poorly they describe it. If a meaning is not present in the participant's experience, how can it be consequential for their lives or the broader society?

This emphasis on consequences is not meant to replace rich interpretation with simplistic pragmatism. Rich interpretation of sonic experiences is essential because lived meanings are polyvalent and the consequences that arise from them may be highly complex. For example, where the protest music of the 1960s may have been directly consequential for increasing anti-war sentiments, other musics may be consequential solely by introducing a style of rhetoric or interaction into later groups.¹² The very absence of musical action itself may be highly consequential for a particular society.¹³ A music's social consequences may terminate in the lives of a few individuals or boil out into the widest contexts of social life. While consequences may be difficult to predict, this should not lead us into despair and back towards *a priori* interpretative schemes; it is just the world of experiences, practices and consequences that those schemes are meant to explain. It is precisely because different elements of our lives may affect one another and because others' lives can

be consequential for our own that the study of musical sound and situated meanings is more than vocational education for artists or tedious formalism for the idle. While it is not clear to me if the motivating power of death metal is generating a vanguard of energetic youth or drawing artistic and creative young people into a trap of naive individualism, I believe that the political significance of musical sound is rooted in the meanings that the participants constitute and the consequences of those meanings for the participants' lives and the larger society. Ethnographic attention to musical perception and musical meanings can only serve to ground popular music studies more readily in the concrete reality of musical practices in the world.

Endnotes

1. This is not to suggest that inquiry into the musical participant's perceptual constitution of musical sound is unproblematic. Feedback interviews with musicians and listeners are probably the most direct method of examining how musical sound is constituted in perception by a particular group of people. Though many musicians and listeners find it difficult or disagreeable to discuss their musical experiences, others are often willing and articulate, and such situations afford the easiest entrance into perceptual practices. Difficulties multiply when no single audience can be identified for a music, as may be the case with 'Money Can't Buy It'. In such a situation, research into perceptual practices would have to explore the various ways in which different actors (musicians, the various listening audiences) engage with the sound and search for similarities and differences in perceptual practices. Secondary sources and inferences from scores may be helpful with research into the perceptual practices of musicians and listeners from the period outside living memory. For a fuller discussion of methodological issues in the study of perceptual practices, see Stone and Stone (1981), Berger (1999, especially chapter 1).
2. One of the features of early 1990s death metal is its guitar timbre. Beyond the high amounts of distortion, the timbre is characterised by a boost in the extreme high and low overtones and a sharp cut in the mid-range overtones; this timbre is often referred to as the 'scooped-mids' sound.
3. For a more complete discussion of 'The Final Silencing' see Berger (1997, 1999).
The transcriptions of FS provided here are written an octave and a fourth higher than they are sounded, and it is worth noting the reason for this. The lowest string of the guitar is traditionally tuned to a concert E. In metal, however, the bands often tune lower; the guitarists and bassists in Sin-Eater tuned their instruments down a perfect fourth. Regardless of the actual tuning used, most metal musicians refer to the lowest note on the guitar as an E, and Saladin followed this practice in our conversations. Further, the guitar is traditionally transcribed an octave higher than it is sounded; combining these conventions, I have transcribed the music an octave and a fourth higher than it is sounded. Unless otherwise noted, the basses play an octave below the guitars on the recording.
'The Final Silencing' is copyright 1991 by Dann Saladin, Erik Rueschman, Rob Toothman, Brandy 'Chuck' Smith and John Ziats. A new version of this song was recorded by Blood Coven and is copyright 1998 by Dann Saladin. All transcriptions are made from the 1991 version and are used by permission.
4. When Saladin originally composed this section, he intended it as a verse or a chorus. In the final version of the song, the part is played by both guitars four times and then repeated at a slower tempo to accompany the main guitar solo.
5. Husserl's work on time consciousness is laid out in *The Phenomenology of Internal Time-consciousness* (1964). These ideas have been applied to sound and music in a variety of ways. See, for example, Schutz (1976), Ihde (1976), Stone (1982, 1988) and Berger (1995, 1997, 1999).
6. Schutz's analysis of meaning and his subsequent interpretive sociology is based on a related interpretation: see *The Phenomenology of the Social World* (1967), especially chapter 2.
7. Using a visual analogy, Steven M. Friedson's excellent discussion of multi-stability in the rhythms of Tumbuka healing music (1996) makes related points about the role of the subject in the constitution of perceptual experience. Both Friedson and I build upon the work of philosopher Don Ihde. In his classic introductory text, *Experimental Phenomenology*

- (1977), Ihde uses multi-stable visual diagrams, such as Rubin's Goblet, to illustrate the subject's role in perception. Similarly, Ihde's *Listening and Voice* use examples from everyday aural perception to show how the subject can actively shift the 'temporal focus' of attention within the living present (1976, p. 89). For fuller discussions of Ihde's work, see Friedson (1996) and Berger (1999).
8. The concepts of conjunction and disjunction come from William James. For a discussion of the relationship of James's radical empiricism to Husserl's phenomenology, see Edie (1987).
 9. The notion that different assumptions about melodic organisation might underlie these parsing practices was suggested to me in personal communication by Robert Walser (1995).
 10. Interestingly, the 'Donna is a white house wife' sentence is a particularly good analogue for this perceptual example. Just as a casual speaker should pronounce the words in the sentence to make the semantic ambiguity of the sentence resolve to one meaning or the other (emphasising 'white' to indicate the President's home and emphasising 'house' to indicate a homemaker of European origin), Western art musicians usually perform tonally ambiguous passages in such a way as to suggest to the listener one harmonic interpretation over another. The enormous distortion used in heavy metal compresses the guitar's dynamic range, producing a dynamically flat signal that is precisely parallel to the hypothetical monotone of the speaker in the 'Donna' example. No auditory cognition scholar could have designed a better experimental sample than the one Saladin composed for the solo section of FS.
 11. Here, the term political should be construed in the broad sense to include the politics of race, class, gender, sexual orientation, ethnicity and so forth.
 12. See, for example, Jeff Goldthorpe's excellent discussion of the influence of the rhetorical styles of early 1980s hardcore on the creative political protests of later progressive movements in San Francisco (1992). Similarly, E. Ellis Cashmore avoids simplistic pragmatism when he interprets Two Tone as a link in the ongoing chain of popular anti-racist sentiments in England (1987, pp. 260–1).
 13. See Ellen Koskoff's discussion of the relationship between women's limited musical roles and larger ideas about gender in the society of Hasidic Jews in New York (1987).

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