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Musical understanding: studies in philosophy and phenomenological psychology

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MUSICAL UNDERSTANDING: STUDIES IN PHILOSOPHY AND PHENOMENOLOGICAL PSYCHOLOGY

by

Shawn Raja Akbar

An Abstract

Of a thesis submitted in partial fulfillment of the
requirements for the Doctor of Philosophy degree
in Philosophy in the Graduate College of
The University of Iowa

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Thesis Supervisor: Professor Gregory Landini

ABSTRACT

The central undertaking of this project is to initiate a phenomenological theory of musical experience. The core views expressed are that musical rhythm is the most fundamental, and the only essential, component of the musical experience, and that the essence of musical experience lies in attending to rhythm as communicative of a sense of time.

In the introduction I set out the general phenomenon of musical understanding and argue for the relevance of phenomenological description of basic musical experience for the theory of musical understanding. I continue this work by considering Jerrold Levinson's concatenationist view, and indicate the need for a more adequate characterization of basic musical experience. I then discuss Roger Scruton's attempt to distinguish musical from nonmusical hearing in terms of metaphorical perception and acousmatic listening and conclude that neither provides an essential characteristic of musical hearing. I present the theory and method of phenomenology and trace out what I take to be phenomenologically adequate theories of sound and auditory experience. The heart of the work explores the notion of musical time along with the nature of the experience of rhythm and meter.

The first part of the final chapter contains an historical and critical overview of philosophical accounts of the connection between music and the emotions, and the related issue of whether music possesses any "content" beyond sounds and their melodic, rhythmic, and harmonic organization. The second part considers attempts to pursue a theoretical analogy between music and language.

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CERTIFICATE OF APPROVAL

PH.D. THESIS

This is to certify that the Ph.D. thesis of

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has been approved by the Examining Committee for the thesis requirement for the Doctor of Philosophy degree in Philosophy at the May 2013 graduation.

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CHAPTER 1

INTRODUCTION

The principle aim of this work is to develop a theory of musical experience and understanding.[1] This theory is based on consideration of the phenomenology of rhythm, and emphasizes the generality of the structures characterizing musical rhythm and the perceptual nature of the musical experience. While the central part is phenomenological, the work discusses philosophical issues such as the nature of auditory perception and musical expressiveness.

The core theses are that 1) rhythm is the most fundamental, and the only essential, component (among rhythm, melody, and harmony) of the musical experience; 2) perceptual experience contains within itself the enabling structure for musical rhythm; 3) the key to musical hearing is not essentially or particularly a kind of focus within auditory experience; and 4) the key to musical hearing (the enabling structure found within perception) and musical experience more generally is a particular kind of engagement of our consciousness of time.

Emphasizing the perceptual nature of the musical experience[2] goes against the view that musical experience is fundamentally imaginative.[3] On my view, attending

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[1] Influences for this view include Eric Clarke, *Ways of Listening: an Ecological Approach to the Perception of Musical Meaning* (New York, NY: Oxford U Press, 2005); Andy Hamilton, *Aesthetics and Music* (London, UK: Continuum International Publishing Group, 2007); Christopher Hasty, *Meter as Rhythm* (New York, NY: Oxford U Press, 1007); and Justin London, *Hearing in Time: Psychological Aspects of Musical Meter* (New York, NY: Oxford U Press, 2004).

[2] I acknowledge that certain claims of mine (particularly concerning continuity between musical and nonmusical perceptual experience) are easier to maintain when discussing rhythm than when discussing melody or harmony and that melody and harmony are both important aspects of paradigmatically musical experience. I do not offer a positive theory of the experience of melody in this work. Rather than assimilate every aspect of melody to rhythm, I set aside the work of an account of melody for a future time. Nonetheless, I do maintain that rhythm, which, unlike melody (as most of us understand it), is not only audible but visible and available to touch and kinesthesia, is what is essential to music and that rhythm is an essential aspect of melody.

musically to a given musical production (that is, hearing a musical performance or recording with understanding) simply is attending literally to the production and its audible features. The modification of normal perceptual experience that is at the root of musical experience is not a turning away from the worldly sources of the sounds but is rather a particular instance of what happens in the perception of human action—we try to *understand* the actions of performers and composers (hereafter producers), and this involves engaging those actions in a certain way.

On my view, the kind of understanding that is involved in the experience of music is not a matter of grasping representational content.[4] The view I develop presents the experience of music as a matter of perceiving musical events in themselves rather than as symbols (whether conventional or natural) or pictures of something else.[5] If music is not representational, it follows that it contains nothing that would be accurately described or explained by a musical *semantics*. Further, musical hearing is not usefully thought of as being organized by a set of grammatical principles (that is, as having a *syntactical* organization).

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[3] Such a view as this is developed in Roger Scruton, *The Aesthetics of Music* (New York, NY: Oxford U Press, 1997), chapters 2 and 3.

[4] The focus of much philosophy of music on *absolute music* (that is, music without text, title, or explicit program) is motivated by the idea that, if our study is to reveal anything about *music*, we should avoid discussing works which incorporate nonmusical (most often representational) elements. The motivation behind this choice is correct, but it need not take the form of restricting attention to certain classes of pieces in the Western tonal art tradition. Of course, any instrumental music can be heard and thought about simply as music, so it seems that all that is required is that, whatever music is under discussion, it is discussed independently of past associations, ritual, explicit or implicit program, and so on. In much of what I say here and in what follows, I am assuming that absolute music, or the abstract notion of music as such, is what is under discussion. (For a helpful discussion of *absolute music* as a description of certain kinds of music and as an ideal notion, see Roger Scruton, "Absolute Music," in *New Grove Dictionary of Music and Musicians*.)

[5] In discussing music as an art form, Eduard Hanslick (in *The Beautiful in Music* [1854], trans. Gustav Cohen [New York, NY: Liberal Arts Press, 1957], 118-9) states that music is closer to architecture and dancing than to poetry, non-abstract painting, and other representational arts.

Musical experience does, however, involve some sort of grasp, and it is for this reason that we speak of musical understanding and musical meaning. The project initiated in this work is to develop a phenomenology of musical experience as the basis for a theory of musical understanding and musical meaning.

1.1 Musical Experience

What musical experience is has obvious bearing on other philosophical issues pertaining to music. Appeals to phenomenology are indispensable in any discussion of musical expressiveness, the emotional power of music, and the appreciation of music. As well, the question of the value of music concerns what makes the *experience* of music worthwhile or valuable, and as such any account of musical value requires an understanding of musical experience. Thus, the interest of the project of a phenomenology of musical experience should be apparent to any philosopher interested in music.

1.2 Musical Understanding and Musical Experience

In contemporary discussions, musical understanding is commonly taken to involve grasp of some meaning or content. This seems to be the case whether one takes such content to be expressive[6] or representational,[7] or even if one denies that music expresses or represents anything and insists that it "means nothing but itself."[8] On this

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[6] Expressive content could be a matter of expressing the performer's or composer's feelings, the tendency of a piece to arouse feelings in the listener, affective qualities perceived in the sound itself, or the representation of feelings (see following note).

[7] Whether musical representation is developed in terms of pictorial, symbolic, or semantic content, representational theories typically claim that music represents the emotions or, alternatively, the forms of emotive life (thus, they claim that expressive content just is representational content), though it can go in very different directions.

[8] While it is unclear what it would be for something to "mean itself," this slogan (widely used in characterizing the formalist viewpoint that originated with Hanslick, though the saying itself is from Igor Stravinsky) concerns what is relevant to the understanding of music as music. Eduard Hanslick maintains that only sounds and their dynamic properties—the "contents" in the sense of being the stuff of music, what music (itself) presents—are relevant to musical understanding and appreciation.

last alternative, we might say, there is "purely musical content" to consider as well as representational and expressive content. It is very unclear whether there is a core sense of 'content' that is qualified differently in these approaches. In the interests of clarity and facility of discussion, I will set out to characterize musical understanding in a way that is noncommittal with regard to the notion of musical meaning or content.

To speak of grasping or missing things in a piece of music, or of being able or unable to follow its development, is to communicate something about our experience in hearing it. That we often (or sometimes) talk about music in such terms and not solely in terms of 'like/dislike' reflects that our experience of music involves some *cognitive* engagement—we can listen with or without understanding, and this understanding involves some level of attention and know-how.

Musical understanding, most fundamentally, consists in managing to hear unified objects such as melodies, melodic and rhythmic phrases, short progressions, and steps within larger progressive structures. If we do not grasp or hear much by way of such events or processes when hearing a musical production, we might be inclined to say that we don't hear music at all, even that the production itself doesn't count as musical. The experience is perhaps similar to that of a nonhuman creature who hears the sounds of a musical production (some of which may be pleasing or not pleasing) without hearing them as music.

I will refer to this type, or level, of musical understanding as *basic musical understanding*.[9] Ordinary language seems to acknowledge another notion of musical understanding. Consider English conductor Sir Thomas Beecham's remark that "the English people may not understand music, but they absolutely love the noise that it

[9] This is the same notion as that developed by Jerrold Levinson, though I seek to improve upon his analysis of it.

makes."[10] While it is true that being distracted by the beauty or ugliness of an instrument's sound can result in a failure to grasp the rhythms and melodies being played on it, I take 'understand' here to apply not to basic understanding—such would make Sir Beecham's assessment especially uncharitable—but rather to the grasp of structural features that require close attention as well as familiarity with a piece or its style or idiom. It seems that certain features relevant to the understanding of music, especially ones like unity or organizational form, which characterize movements and entire works, require more than basic understanding.

The main work of the first chapter is to explain why we should give priority to understanding in the first sense. I draw upon considerations from Edmund Gurney and Jerrold Levinson concerning the nature of musical experience and upon Levinson's discussion of how basic musical understanding relates to musical form, enjoyment, and value. Basic musical understanding is closely tied to how we assess music and to our sense of what music is (and, as Levinson points out, it is also the level at which we experience musical expressiveness).[11]

1.3 The Nature of Musical Understanding

So what is it to listen with understanding, and what accounts for it? Concerning the latter question, familiarity with an idiom clearly plays a role in determining *how* we will understand a piece. A few authors have suggested that we should further investigate the

[10] Quoted in Andy Hamilton, *Aesthetics and Music* (London, U.K.: Continuum International Publishing Group, 2007), 95.

[11] An important issue concerning basic musical understanding is whether we should consider basic musical understanding a unified phenomenon calling for a uniform account. Do the hearings of melodies, progressions, and rhythms reflect distinct types of awareness or are they instances of one type?

(largely unconscious) rules and principles implicit in musical hearing, and that doing so will point in the direction of innate musical structures.[12]

A distinct question from the question of how understanding is achieved is what *constitutes* listening to music with understanding. Familiarity with an idiom, extent of exposure to music, training, and unconscious principles (whether they are solely the product of exposure and training or also reflect deeper universal structures) may have causal relevance to the understanding of music, but these are not central topics of concern. I am interested in understanding as such—what it *is*, rather than what explains it.[13]

On the whole, my enterprise is not explanatory but descriptive. One of the central topics in what follows is what the most fundamental sorts of musical understanding *are*, independently of what explains them. Further, the target of my account is not musical understanding as general (third-person) phenomenon or capacity. I will develop a first-personal descriptive account of what musical understanding is, *for* the consciousness which understands. Any explanatory framework presupposes an understanding of what is to be explained, and if we do not have a clear view of what the explanandum *is*, in itself, we are without a clear direction for theorizing and at risk of mischaracterizing the very thing we are trying to explain. We want a clear (pre-theoretical) view of what is right

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[12] Fred Lerdahl and Ray Jackendoff, *A Generative Theory of Tonal Music* (Cambridge: Bradford/MIT Press, 1983) and John Sloboda, *The Musical Mind: the Cognitive Psychology of Music* (Oxford: Clarendon Press, 1985).

[13] Lerdahl and Jackendoff seem to treat understanding or "musical competence" as a black box—apart from the fact that it works according to certain principles and produces certain experiences, there isn't much else to say about musical understanding aside from specifying its neural substrate(s), its relation to other capacities, and its evolutionary significance (if any). While this is acceptable as a theory of musical competence, and may plausibly claim that this *does* tell us things about what constitutes musical understanding, natural questions seem to be blocked off. For examples: Among the things that are consciously accessible within the experiences themselves, what makes certain experiences musical and others not? What are the respective roles of bodily activity and conscious attention vis-à-vis the structures one hears in listening to a piece? What does consciousness *do*, what is *its* part, in the structuring and organization of the musical surface?

before us. The only way to make musical understanding more intelligible, *qua* structure of conscious experience, is to allow it to show itself and to describe it.[14]

Musical understanding, when it is achieved in attentive listening and is not merely the product or operation of habit (when we aren't engaged but still marginally aware, for instance), seems to be a *conscious* achievement. Even if unconscious processes explain and turn out to be partially constitutive of musical understanding, describing the conscious aspects of musical experience from the first person point of view seems to be an indispensable step in the study of music cognition. In addition to the factors discussed above, *attention* plays an indispensable role in musical understanding. Thus, a theory of musical understanding must specify the relevant kind of attention, an undertaking that is best pursued through phenomenological investigation. The third and fourth chapters, respectively, discuss the experience of sound and the experience of rhythmic attending.

1.4 A Word on the Title

Musical understanding, at first glance, is what that takes place when one hears a sequence of sounds as musically meaningful—that is, in melodic, rhythmic, and harmonic organization. A conviction that guides this work is that the most fundamental form of musical understanding is the understanding of rhythm, most pervasively metrical rhythm. The experience of rhythm is a necessary condition (though not a sufficient condition) for the experience of music—even a piece that consists of a single sounding note or chord is experienced as lasting through the entire duration—and, further, the experience of rhythm can found musical experience even if audible sounds are not available as musical material. Melody, on this orientation, is inseparable from rhythm in

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[14] In motivating the turn to transcendental phenomenology, Erazim Kohák (in *Idea and Experience: Edmund Husserl's Project of Phenomenology in* Ideas I [Chicago: University of Chicago Press, 1978]) speaks of lived experience as the ultimate context of intelligibility (167, 169). One does not, I think, need to adopt this attitude in order to accept the broadly phenomenological motivation just given.

that it requires rhythm and necessarily accompanies rhythm, which always has sensible material.

As should be clear from the discussion in this introductory chapter, 'musical understanding' will mostly be used in an occurrent rather than a dispositional sense. While we often speak of, for example, understanding a piece of music or of understanding a given genre or style, we primarily mean a kind of know-how that attends repeated listening to a piece or to pieces within an idiom, and this type of know-how is simply a disposition for actual, occurrent understanding.

'Phenomenological psychology' is intended in the sense of the *a priori* first-person study of psychological essences that does not bracket the natural attitude or "world-belief" (as does "pure phenomenology") but is nonetheless distinct from (and foundational for) empirical psychology; it is also intended in the somewhat extended sense that we find in Jean-Paul Sartre's *The Imaginary: a Phenomenological Psychology of the Imagination*.[15] After setting out essential characteristics of the image ("the certain") and introducing a unified framework for discussing the constitution of images on the basis of various sorts of perceptual *analogon*, Sartre makes a move to "the probable" when he conjectures that eye-movement is always part of the constitution of the image, including the mental image, and tries to show how this conjecture is empirically corroborated.[16]

A similar move is suggested by what I say concerning the synchronization of perceptual attending (including body movement) with perceived movement. If my view is correct, the perception of metrical rhythm always involves synchronization of body movement with the perceived at some physiological level. The phenomenological

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[15] Jean-Paul Sartre, *The Imaginary: a Phenomenological Psychology of the Imagination* (Paris: Gallimard, 1940), Jonathan Webber, trans. (New York, NY: Routledge, 2007).

[16] Ibid, parts I and II.

discussion in Chapter 5 makes reference to empirical results established in objective time (in the course of delineating the experiences to be considered) and adopts some terms of current psychological and music-theoretic studies of rhythm and meter (specifically the tactus). In both of these respects, the central work here can be seen as carrying out the plan of *The Imaginary* for musical experience (although I take it to be, at its most basic level, distinct from imagination).

The subtitle ("philosophy *and* phenomenological psychology") should not be taken as suggesting that phenomenological psychology is something outside of philosophy. Phenomenological psychology *is* philosophical in being a foundational and *a priori* study of essences (for psychology and related empirical disciplines). This part of the title indicates only that certain issues in philosophy of music are taken up throughout this work, though mostly in the process of setting up for the main work of Chapter 5.

A word on my choice of the term 'studies' is necessary here. What bound the different parts of this project together at the outset was my conviction that phenomenology can clarify issues in the philosophy of music. The conviction stands, but I found it necessary to focus first on the nature of the experience of rhythm. What I found was that certain of the issues I raised at the outset of this project are orthogonal to the specific claims I make about the role and nature of musical rhythm, while others (such as the issue of musical expressiveness) are informed by these claims but better pursued independently. My current thinking on these topics is presented here in the form of studies each of which relates to the central topic of musical understanding.

1.5 Overview

Chapter 2 considers Jerrold Levinson's concatenationist view of musical understanding, derived from his reading of Edmund Gurney. Levinson extracts from Gurney's discussion a set of theses comprising *concatenationism*: that *musical understanding* is centrally a matter of apprehending individual bits of music and immediate progressions from bit to bit; that *musical enjoyment* is had only in the

successive parts of a piece, not in the whole as such or relations of parts separated widely in time; that *musical form* is centrally a matter of cogency of succession, moment to moment and part to part; and that *musical value* rests wholly on the impressiveness of individual parts and the cogency of succession between them.[17]

Levinson bases these theses in 1.) a consideration of the nature and scope of momentary hearing and 2.) a treatment of musically relevant features that extend beyond this scope. While the second of these is the more central task of Levinson's discussion in *Music in the Moment*, the first step is of greater relevance to my project.

In Levinson's treatment, quasi-hearing (which enables aural grasp extending beyond the present instant) is composed of the actually or literally heard instant, vivid remembering of what just passed, and vivid anticipation of what is to follow. Quasi-hearing is what is required for hearing musical movement (a phenomenon Gurney seems to limit to melodies as opposed to rhythms, though Levinson does not seem committed to this).

Levinson's analysis of quasi-hearing is considered in relation to the phenomenological theory of time-consciousness. While Levinson is silent concerning whether what is literally or actually heard at an instant is temporally extended, it is clear that the broad shape of his account is the same as that of Edmund Husserl's account of our experience of temporal objects. On Husserl's account, awareness at any given point has the three *moments* or abstract parts of primal impression (of the object's now-phase), retention (of just-past awarenesses), and protention (of awarenesses yet to come), corresponding to three moments of the perceived temporal object (the now-phase of the object, just-passed phases, and not-yet phases).[18]

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[17] Levinson, *Music in the Moment* (1997), 13-4.

[18] Robert Sokolowski, *Introduction to Phenomenology* (New York, NY: Cambridge University Press, 2000), 136.

Levinson states that "understanding music … is fundamentally a matter of hearing it a certain way" and specifies that this involves quasi-hearing, or "aurally connecting together tones currently sounding, ones just sounded, and ones about to come, synthesizing them into a flow as far as possible at every point."[19] Levinson is not clear about the relationship between his analysis of quasi-hearing, which he seems to present as a unique characterization of musical hearing, and what characterizes auditory experience and temporal consciousness more generally. The chapter concludes that Levinson leaves basic musical understanding under-characterized.

Chapter 3 opens with three definitions of music, each of which implicates musical listening. Levinson's definition, for example, speaks of "engaging with sounds regarded primarily (or in significant measure) as sounds."[20] Levinson also thinks of hearing musical motion in a sequence of sounds as centrally involved in basic musical understanding. Roger Scruton's theory of musical hearing presents both of these features as constitutive; it couples the *acousmatic thesis*—that hearing musically involves detaching the sounds from the circumstances of their production—with an understanding of music as essentially involving metaphorical perception. The latter is involved in the transformation of sounds into *tones*—pitched sounds in melodic, rhythmic, and harmonic organization. For Scruton, detachment of sound from source involves attending to the virtual causality, space, and movement heard *in* the sounds rather than to their actual causal and spatial conditions.

Scruton's account of musical hearing can be challenged on two fronts. For one, Andy Hamilton presents a set of nonacousmatic yet genuinely musical components of certain musical experiences. These components include timbre, virtuosity, the use of

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[19] Levinson, *Music in the Moment*, 29.

[20] Jerrold Levinson, *Music, Art, and Metaphysics* (Ithaca, NY: Cornell U Press, 1990) 273.

spatial elements, and nonauditory aspects of musical experiences (particularly in live performance settings). The second front—the intrinsically metaphorical nature of musical experience—can be challenged easily in the case of rhythm, since the perception of movement that occurs in the experience of rhythm need not be seen as a perception of virtual movement. Further, Scruton's understanding of acousmatic hearing rests on a view of sound and its role in experience that is odds with our experience of sound.

Chapter 4 introduces the theory and method of phenomenology and presents features of the phenomenology of sound and auditory experience. The following discussion is intended to illustrate the global nature of lived auditory experience and how it seems to relate us primarily to *things* and their properties rather than to sounds as distinct and mediating objects. In light of this observation, the sounds available for us to attend to in musical experience are best understood either as qualities of events or sounding objects or (as I hold) as mereological parts of events or sounding objects. Attending to them in either case is a type of "literal," perceptual attending. (The experience of "disembodied sound" is a rare occurrence and certainly not one that characterizes normal auditory experience.)

These features of the experience of sound are in tension with Scruton's understanding of the conditions for acousmatic hearing. Hearing music, on my view, is primarily a matter of attending to rhythmic forms, which are perceptual features of the musical production. To perceive rhythm *is* to perceive a certain kind of movement, and the perception of rhythmic motion involves no indispensable metaphor of spatial movement.

Chapter 5, the most constructive part of the project, explores the basic structures of the experience of rhythm by discussing an incremental set of examples and variations. Since musical experience is most fundamentally a certain kind of rhythmic experience, such an investigation yields the basis for a theory of musical experience and understanding.

I take rhythm to be an objective characteristic of the unfolding of events and actions, one that does not necessarily involve repetition or a regular beat or pulse. The synchronization with objectual time (the correlate to nonrelational temporal perception of change in an object) that is involved in event and (more importantly) *action* perception carries over to the perception of metrical rhythm in the latter's involvement of beginning, continuation, and lead-in. The following discussion concerning "musical time" criticizes the view that music presents us with a kind of virtual time, suggesting instead that musical time is a specialized form of objectual time.

My discussion of metrical rhythm goes through an incremental set of examples, identifying general structures with the use of variations. The variations I discuss are intended to illustrate the role of rhythm in normal perception. One feature that is constant across these variations is that the auditory sequence is perceived as part of some event with which I attend synchronically, and in the course of so attending I project a series of determinate durations. The way in which I project has essential psychological determinants, such as what I take myself to be perceiving and how closely it relates to a tactus level. These both signal essential structures of the experience of rhythm.

In some experiences, we are led to attend to rhythm by an interest in it: we may have an interest in hearing repetitions aligned with projected durations or across projected durations and in hearing rhythmic events that are unified over longer stretches of time; it may be motivated an interest in unity, as when we hear a multiple sequences as participating in a unified movement or action, or when we hear an element as unified movement across projected durations; or we hear it as a performative action that communicates a certain hearing of the rhythm. The last of these, I submit, is essential to the experience of musical rhythm.

The discussion of counting in this chapter aligns my view of rhythm and meter with that of Christopher Hasty, who speaks of a "vivid sense of felt duration" that

characterizes our experience of rhythm.[21] Attending to meter is not an essentially internal matter, nor is it a matter of counting points. Our sense of meter arises from the fact that attending to ongoing processes involves synchronizing along with thematic or nonthematic awareness of synchronization.

Since musical understanding is commonly taken to involve grasp of expressive features, the first part of Chapter 6 contains an historical and critical overview of philosophical accounts of the connection between music and the emotions and the related issue of musical representation. This chapter discusses the arousal or dispositional theory, the self-expression theory, and the representational theory of musical expressiveness and closes with a presentation of formalism. While the discussion is sympathetic to the contour theory, it is ultimately inconclusive concerning which theory of expressiveness is the right one. The considerations of the second part concern similarities between music and language and attempts to derive theoretical insights into musical understanding based on an analogy with linguistic understanding.

This work initiates the project of a phenomenological theory of musical understanding and indicates areas of relevance in the philosophy and psychology of music. The most important achievement of it is clarification concerning the kind of experience that is most basic to music. Completing the theory by considering the experiences of melody and harmony, and working out the consequences of the view I present here for the issues of musical expressiveness and value are part of the larger project, though here I could do no more than suggest how the accounts might go.

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[21] Christopher Hasty, *Meter as Rhythm* (New York, NY: Oxford University Press, 1997), viii.

CHAPTER 2

BASIC MUSICAL UNDERSTANDING

The first section of this chapter presents an approach to musical understanding and appreciation, evident in Edmund Gurney's *The Power of Sound,*[22] that takes the necessarily sequential nature of musical experience as its starting point. The second section considers concatenationism, a view that Jerrold Levinson[23] develops from his reading of Gurney. The third section discusses Levinson's notion of quasi-hearing in connection with Edmund Husserl's theory of time-consciousness and concludes that Levinson's analysis of quasi-hearing does not provide an adequate basis for distinguishing basic musical understanding.

2.1 Levinson and Gurney on Musical Experience

Edmund Gurney's *The Power of Sound* is the second major work, after Eduard Hanslick's *The Beautiful in Music,*[24] to advocate a formalist position in musical aesthetics. Like Hanslick, Gurney insisted that the rewards of music are specifically musical and rest on no extra-musical interests or values.[25] Gurney was not at all a disciple of Hanslick—the two never met, and Hanslick is not mentioned anywhere in Gurney's book. In its thoroughness and the range of topics it covers, *The Power of Sound*

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[22] Edmund Gurney, *The Power of Sound* (London, U.K.: Smith, Elder, and Co., 1880).

[23] Jerrold Levinson, *Music in the Moment* (Ithaca, N.Y.: Cornell U Press, 1997).

[24] Eduard Hanslick, *The Beautiful in Music,* trans. Gustav Cohen (London and New York, 1891), ed. Morris Weitz (New York: The Liberal Arts Press, Inc., 1957). *Vom Musikalisch-Schönen* was first published in 1854.

[25] Budd, *Music and the Emotions: the Philosophical Theories* (London, U.K.: Routledge and Kegan Paul, 1985), 53.

is a highly impressive work in its own right. Here, we limit ourselves to what is relevant to the notion of basic musical understanding.[26]

Gurney's notion of the uniquely musical differs significantly from Hanslick's in character and in extent of development and application.[27] Like Hanslick, he compares the apprehension of music with the visual apprehension of static aesthetic objects, such as paintings, arabesques, and architectural facades. A sweeping, simultaneous grasp is possible in the latter sort of apprehension, while in the case of music, apprehension is necessarily sequential, involving momentary perceptions of parts of the work that are in process.[28]

While Hanslick was more comfortable with analogizing music and architecture (mainly to show how music is non-representational), Gurney is at pains to show how music is *unlike* visual forms of any sort and thus sees such an analogy as more misleading than helpful.[29] For Gurney, a theory of music is essentially a theory of melody. He emphasizes "that it is not Harmony or notes in combination, but Melody or notes in succession, which is the prime and essential element in Music …"[30] In melody, he says,

> … there is no multiplicity or thronging of elements, no impression of conspiring parts all there at once … The elements are units succeeding one another in time; and though each in turn, by being definitely related to its neighbours, is felt as belonging to a larger whole, there is no simultaneity of impression. Thus the effect of a melody pure and simple is not in the slightest degree one of richness and number; nor … do they exhibit anything analogous to the labyrinthine order presentable by a similar number of visual elements …[31]

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[26] Gurney's treatment of emotional expression in music, though relevant to the fifth chapter, is not relevant here. Also left out is Gurney's Darwinian account of the deep, indescribable emotions we experience when exercising the musical faculty (Gurney, *The Power of Sound*, 116-26).

[27] Hanslick's views are discussed further in Chapter Five of this work.

[28] Levinson, *Music in the Moment*, 3.

[29] Guney, *The Power of Sound*, 91.

[30] Ibid.

[31] Ibid, 92.

Hearing music, however, is not *simply* a matter of successively apprehending isolated moments. When sequences of impressions cohere strongly enough, we are able to join them into a single auditory perception as of a unified movement. Pitch and rhythm each contribute to this phenomenon of *melody* or *melodic form*, the fundamental unit of music apprehension.[32] In turn, larger stretches of music (what Gurney calls "paragraphs"), though never apprehended as wholes, can be experienced as unities thanks to an impression of the relatedness and connectedness of sequential melodic phrases. Gurney refers to coherence and connectedness among musical elements as *cogency of sequence*.[33]

Cogency of sequence, for Gurney, is *the* mark of effective musical form, characterizing melodies as well as musical paragraphs. Gurney characterizes cogency in counterfactual and phenomenological terms. For one, a cogent passage is one for which changes or substitutions *would* be met with resistance or resentment from a listener familiar with it (and this is because each part seems to follow necessarily from the preceding and to necessitate the part immediately following). Further, when listening to a familiar melody, the beginning seems to contain or present the remaining parts "in prospect."[34]

Gurney states that cogency and organic union cannot be demonstrated, ensured, or predicted by rules of composition or psychological laws[35]—neither aesthetic nor

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[32] Levinson, 4-5.

[33] Ibid, 6.

[34] Ibid, 5-7. Partly to refer to the teleological character of melody (or of the process whereby we perceive melodic form), Gurney spoke of "ideal motion" (Budd, *Music and the Emotions*, 55). This notion corresponds to Hanslick's talk of musical "logic" and "sense" in *The Beautiful in Music* (Kivy, *Introduction to a Philosophy of Music* [Oxford: Clarendon Press, 2002], 63-4). Levinson finds the notion hopelessly unclear and does not discuss it in his presentation of Gurney (Levinson, 5 n. 4.)

[35] Levinson, 8.

psychological laws can provide a basis for generating beautiful melodies or deducing which works an individual will hear with distinctively musical pleasure. Musical beauty is judged by a musical faculty that is autonomous, anomalous, and radically unique, and the rewards and meanings of music are entirely self-contained.[36]

2.2 Concatenationism

Levinson opens *Music in the Moment* stating that his aim is

> … to combat the notion, often only implicit in the writing of many music commentators and theoreticians, that keeping music's form—in the particular, large-scale structural relationships, or spatialized representations of a musical composition's shape—before the mind is somehow central to, even essential for, basic musical understanding. What I maintain instead is that much in the aural comprehension of extended pieces of music that seems to implicate explicit architectonic awareness can be explained by appeal to tacit, unconscious correlation of present passages or bits with earlier ones, rather than explicit, conscious grasp of relationships of a broad-span sort.[37]

The view Levinson describes in the first half of this passage is *architectonicism*. The view he develops in opposition to it is concatenationism, the main elements of which he locates in Gurney.

Levinson follows Gurney in taking the sequential nature of musical experience, together with the observations concerning organic union and cogency (coherence and connectedness, in Levinson's terms), to imply important points about musical understanding, form, enjoyment, and worth. Levinson presents the following four theses as exhaustively specifying the concatenationist perspective:

1. *Musical understanding* centrally involves neither aural grasp of a large span of music as a whole, nor intellectual grasp of large-scale connections between

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[36] Budd, 53-5. In addition to claiming that the possession and operation of the musical faculty requires no specific character or intellectual traits and that its objects are isolated from extra-musical interests and concerns, Gurney bases his designation of an autonomous musical faculty on a further contrast between music and the visual arts. While our reaction to visual forms, even in abstract painting, is informed by patterns we find in visual perception of the world, our reaction to melodic forms is completely abstract and unconditioned by resemblance to normal sounds (Budd, 53-5).

[37] Levinson, ix.

parts; understanding music is centrally a matter of apprehending individual bits of music and immediate progressions from bit to bit.
2. *Musical enjoyment* is had only in the successive parts of a piece of music, and not in the whole as such, or in relationships of parts widely separated in time.
3. *Musical form* is centrally a matter of cogency of succession, moment to moment and part to part.[38]
4. *Musical value* rests wholly on the impressiveness of individual parts and the cogency of the successions between them, and not on features of large-scale form per se; the worthwhileness of experience of music relates directly only to the former.[39]

Part of what is driving Levinson is an egalitarian impulse. Concerning classical music lovers who are not musically trained, educated extensively in music, or equipped with the languages of musical analysis and theory, Levinson wants to say that such listeners—"untutored" yet "experienced, attentive, and passionate"[40]—can claim to understand and appreciate whatever in classical music is of properly musical value. While there are other valuable experiences available to those with extensive training in music and music theory—for example, the pleasure of comprehending the overall organization of a piece, or delighting in the composer's skill—such experiences are not pleasures of a distinctively musical sort, and even for the initiated they provide a lesser contribution of value to the musical experience.

Central to the elaboration of Levinson's concatenationism is the notion of *quasi-hearing*. First, since musical hearing involves sequential awareness, any theory of musical experience and understanding should start by considering what can be heard at any given moment. Levinson states that while one "literally" hears only an instant,[41] one

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[38] One of Levinson's aims is to show that hearing sonata and other musical forms does not require reflection on concepts during one's listening or even possession of those relevant concepts; all that is required is that listener has internalized certain norms and that these implicitly or unconsciously guide the listener's anticipation (Ibid, 71-2, 84).

[39] Ibid, 13-4. Another of Levinson's aims is to show that *unity* as a musical value either reduces to coherence, or it contributes (causally) to the experience of coherence, or it yields marginal (if any) musical pleasure (Ibid, 60-2).

[40] Ibid, ix.

[41] Levinson refers in passing to empirically based estimates of the extent of the "musical present," and elsewhere his language suggests that the instant that is a constitutive part of quasi-

vividly apprehends or *quasi-hears* "a somewhat greater extent of musical material." Levinson characterizes this experience as being composed of the actual hearing of a moment, vivid remembering of what has just passed, and vivid anticipation of what is to follow.[42] It is quasi-hearing that apprehends cogent sequences of tones as unified movements; thus, it constitutes the most basic form of musical understanding. However, even quasi-hearing does not extend very far: "It is to be measured in seconds or possibly minutes, not in hours or quarter-hours."[43]

Not only is musical listening thus limited, Levinson says: it is not even a "self-conscious" activity, meaning that quasi-hearing does not involve explicit or thematic awareness of quasi-hearing, nor any explicit awareness *that* its scope is thus limited. Levinson further thinks that quasi-hearing is incompatible with explicit or thematic awareness of past or present hearing. Victor Zuckerkandl presents this view in dramatic fashion:

> … let anyone who is capable of it call to mind the immediately preceding tone of a melody that he is hearing. *The instant he does so, he will have lost the thread of the melody*. The hearing of a melody is a hearing *with* the melody, that is, in closest connection with the tone sounding at the moment. It is even a condition of hearing melody that the tone present at the moment should fill consciousness *entirely*, that *nothing* should be remembered … any turning back of consciousness for the purpose of making past tones present immediately annuls the possibility of musical hearing.[44]

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hearing is already a moment extending at least as wide as either the "musical" or the "auditory present" (Levinson, 15 n. 4, 15-6).

[42] These notions are similar to the notions of primal impression, retention, and protention developed in Husserl's lectures and writings on time-consciousness. Husserl (in *The Phenomenology of Internal Time-Consciousness* [1905-10/1928], ed. Martin Heidegger, trans. James Chuchill [Bloominton: Indiana University Press, 1964]) actually develops these ideas with reference the hearing of a melody and of a single tone. The question of how to see the relationship between Levinson's analysis of the musical present and phenomenological accounts of the living present is taken up later in this chapter.

[43] Levinson, 17.

[44] Victor Zukerkandl, *Sound and Symbol: Music and the External World*, trans. Willard Tarsk (Toronto, Canada: McClelland and Stewart, Ltd., 1956), 231.

In addition to saying that when we quasi-hear we are not *conscious* (i.e., explicitly or thematically aware[45]) of quasi-hearing, Levinson states that quasi-hearing is incompatible with explicit recollection of the preceding note, but not with *any* awareness of it. Musical grasp, Levinson says is "fundamentally a matter of attentive absorption in the musical present."[46] Like Zuckerkandl, Levinson sees quasi-hearing as essentially nonreflective—it is necessarily given over to, absorbed in, the musical present.[47]

According to Levinson, basic musical understanding, and thus anything that can be called uniquely musical understanding, is a "locally synthetic", not a "globally synoptic" hearing. Thus, architectonicism is false:

> If basic musical understanding can be identified with a locally synthetic rather than globally synoptic manner of hearing, then it is conceivable that with musical compositions, even complicated and lengthy ones, we miss nothing crucial by staying, as it were, in the moment, following the development of events in real time, engaging in no conscious mental activity … that has the whole or some extended portion of it as object. Of course it is rare that activity of that sort is entirely absent, but the point is that its contribution to basic understanding may be nil.[48]

Aside from the above considerations of the nature of music as a temporal art, Levinson offers what he takes to be common sense points that favor concatenationism. One is that a common criterion for identifying whether someone has understood a piece is whether that

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[45] The language of thematic/nonthematic, explicit/implicit, and reflective/nonreflective (or prereflective) consciousness (rather than conscious/unconscious) reflects more than a terminological preference. We are certainly aware of musical listening and what it is like. Though it is not obvious to reflection, quasi-hearing, along with vivid memory and anticipation, is a structure of the act of musical listening; we cannot be "unconscious" of it in the same sense that we might be unconscious of the effects of events far in the past on present listening.

[46] Levinson, 23.

[47] Another way of making the point is to say that the immediately preceding note(s) is (are) conscious, though to "call it to mind" (that is, *re*collect it) is to *dis*connect it from the present and regard it as past. This is one reason "vivid recollection" is an unfortunate labeling. ('Vivid,' further, suggests some strong or pronounced reproduction or a "trace" that is phenomenally present; in either case, it would be something present with the currently sounding note.)

[48] Ibid, 29.

person is able to reproduce (by singing, humming, or tapping) some part of the piece in question. Another is that when we speak of understanding music, about "getting it" (or not) we simply mean grasping (or not grasping) local connections. Finally, Levinson states, expressive content is experienced or grasped as a feature of melodic figures, phrases, and passages, and only rarely (and *derivatively* if so) is expressiveness a global musical phenomenon.[49]

The principle task in Levinson's project is accounting for the influence and/or relevance of musical events outside the scope of quasi-hearing. For example, my experience of a repeated theme is different from my experience of its first sounding and would not be the same (it seems) if I did not hear it as a reiteration. A similar point seems to apply to recognizing a musical line as a variation. Such influence or awareness seems relevant to our understanding and enjoyment of a given work. Levinson responds by first drawing a distinction between causal and appreciative relevance.[50] Previous parts (such a theme's first iteration) may be causally relevant to the enjoyment of later parts (reiteration) by persisting in unconscious memory. Explicit awareness of such connections, however, does not contribute to properly musical enjoyment, though it might occasion (nonmusical) pleasure in craftsmanship or design.[51]

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[49] Ibid, 23-7.

[50] Ibid, 44-5. Levinson illustrates the notion of causal bearing of structural relationships through a discussion of the Polonaise from Bach's Orchestral Suite No. 2 in b minor for Flute and Strings, with reference to a listener hearing it for the third or fourth time (ibid, 45-9).

[51] Concerning the examples he discusses, Levinson seems to say that not much of appreciative relevance hangs on whether a passage is heard as a reiteration of a theme or a variation; as far as concatenationist listening is concerned, all that is important is that the experience of having heard the original theme "colors" the present experience without being explicitly recalled or related to it (89-93). Of course, one's awareness of these things can develop upon repeated hearing and enhance one's experience (see next paragraph), but Levinson thinks that this fact does not challenge concatenationism.

While *Music in the Moment* primarily concerns the appreciation of "classical" (High-Baroque, Classical, and Romantic period) music, it is interesting to consider this view in connection with jazz improvisation. One might think that in this case appreciating the craftsmanship of the artist-producer (the performer in this case rather than a composer) is a

However, it seems that repeated listening often *enhances* appreciation, enjoyment, and value of a work. Such enhancement seems to be precisely a matter of coming to know the piece as a whole, of identifying themes and grasping patterns and connections between parts. Levinson thinks that this is correct but that it would be misguided to conclude on the basis of it that global features of a piece are appreciatively relevant to the enjoyment of it as music. Levinson thinks that there is such a thing as perceptual (versus the intellectual) hearing of musical forms but denies that conceptualization of forms and conscious categorization and comparison in listening is required for such hearing; he insists, rather, that it is achieved by extensive and repeated listening.[52]

Whether or not Levinson's framework is adequate for showing that quasi-hearing is necessary and (more or less) sufficient for the appreciation of works of Western tonal art music, the foundational and central role given to the experience of basic musical forms (melodies and rhythms) seems to be well-motivated by the nature of the artistic medium itself. Further, understanding and evaluation seem to be more intimately linked in the experience of basic musical forms than in larger stretches or entire works.[53]

The two central claims in Levinson's statement of concatenationism are 1) that quasi-hearing is constitutive of basic musical understanding and 2) that basic musical understanding is necessary, fundamental, and central to any musical experience,

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crucial part of appreciating the music, and perhaps further that there is no real distinction between delighting in the mind of the soloist and delighting in the music being played. While it is true that the contrast between enjoyment of the music itself and appreciation of the artist is not as clear in the case of improvised solo performance, I would argue that there is still such a distinction. Certain soloists do tend more than others toward the use of motifs that are revisited and elaborated throughout the solo, but when they do this it is most often within the scope of quasi-hearing and heard as a unified motion or *thought* (for a discussion from Levinson concerning both classical and improvisational jazz examples, see "Musical Thinking," http://www.musicandmeaning.net/issues/showArticle.php?artID=1.2, 2003).

[52] Levinson's example here is Mozart's Piano Sonata in D Major K. 311, 1st movement (Ibid, 73, 80-5).

[53] Kivy (*Introduction to a Philosophy of Music*, 64) notes that, for Gurney, "ideal motion" is what distinguishes melodies from non-melodies as well as good melodies from bad.

understanding, or enjoyment, and it is "substantially adequate to most instrumental music in the Western tradition."[54] Clarifying the connection of basic musical understanding to musical understanding and appreciation is the project of *Music in the Moment*. While I join Levinson (and Gurney) in insisting on the central relevance of basic musical understanding for the theory of musical understanding and appreciation, the first claim is of greater interest for the following chapters.

2.3 Quasi-Hearing and Basic Musical Understanding

In Levinson's view, then, basic musical understanding is the grasp of basic musical forms and of their coherence and connectedness. It is an aural synthesis that crucially involves attentive absorption in the musical moment. It is constituted by quasi-hearing, which Levinson analyses in terms of present (instantaneous) hearing, vivid memory, and vivid recollection. Quasi-hearing, though ultimately of limited scope, enables listening to extend beyond the "literally" heard instant and to apprehend cogent sequences of sounds as unified motions.

Levinson notes the similarity between his analysis of quasi-hearing and the phenomenological account of time-consciousness and the living present.[55] We turn now to a presentation of Husserl's theory.[56]

The question that prompts Husserl's discussion concerns our experience of temporally extended objects (melodies, tones, dances, speech acts, etc.).[57] What is the structure of our experience of such objects? How do they appear?

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[54] Levinson, 33.

[55] Levinson, 17 n. 7.

[56] Time-consciousness was of central importance in Edmund Husserl's phenomenology. Since he was never at rest with his conception of phenomenology, his thinking on time-consciousness (the topic he saw as most difficult and important) naturally underwent significant changes. The account presented in this chapter is the most common one; it is based on the presentation in *The Phenomenology of Internal Time-Consciousness* (1905-10/1928).

[57] Husserl, *The Phenomenology of Internal Time-Consciousness*, 40.

Consider this fragment from the beginning of the "Ode to Joy" theme from Beethoven's Ninth Symphony:

E E F G G F E D …

First, though I experience this melodic line (or any given segment of it) as a unity, its parts are not presented simultaneously but in a succession. Nor is my experience a serial presentation of now-sounding notes, since I am aware of the melody as an ongoing succession. Husserl emphasizes (along with a parallel point about duration) that "the succession of sensations and the sensation of succession are not the same."[58] The general point is that succession (or continuance or endurance) of awarenesses, no matter how close they are in time, does not, by itself, account for awareness of succession (or continuance or endurance).[59]

Consider the experience of hearing the melody up to the sixth note. The first thing to be noticed is that a familiar melody has been cut short, and this occasions a sense of frustration. While this is a prominent aspect of the experience, let us for now think of our awareness of the previous notes. (It is useful to vary the experience of the sixth note in the imagination such that the melody continues.) I seem to be aware of the earlier phases of the melody, though as past. Husserl states that this awareness of past phases cannot be a matter of having echoes or memory traces of the earlier notes in consciousness—these would yield simultaneity, not succession, and would further leave out our sense of pastness and continuation. A similar point applies to the anticipation of future notes. Husserl's view is that a sense of past and future are directly given in immediate

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[58] Ibid, 31.

[59] Izchak Miller, *Husserl, Perception, and Temporal Awareness* (Cambridge, Mass.: MIT Press, 1984), 109. The thesis implies what Miller calls The Principle of Simultaneous Awareness—awareness of succession (or duration) must at some level involve a unified awareness that simultaneously grasps temporal phases (or parts thereof) *as* successive (enduring).

experience. In hearing the melody, what is given to consciousness is given as trailing off and as coming into being.[60]

The *living present*, in Husserl's account, has three *moments* or abstract parts: *primal impression*, the "peak of actualization" within the living present that is, as Klaus Held states, "surrounded by a 'halo' of just-having-been and just-becoming;" and *retention* and *protention*, the unthematic modes of givenness of the just-past and the not-yet.[61] In the example of the above melody, the living present corresponds to the "now-phase;" it retains the elapsed living present (itself made up of primal impression, retention, and protention, so that retention trails back to the beginning) and protends a further living present.[62]

It is unclear whether we should read Levinson's analysis of quasi-hearing as being intended to characterize a more general set of auditory experiences (it is difficult to see how it does not in fact do this) or only the auditory experience of music. In either case, it is inadequate as a constitutive account of basic musical understanding. Since it is what founds our apprehension of a certain kind of temporally extended phenomenon (melody), quasi-hearing has something in common with many other auditory experiences (the experience of hearing a sentence most obviously, but more generally the structure characterizes any synthetic auditory experience). Since it is not the case that every aural grasp structured like quasi-hearing is a musical experience, some further specification is required.

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[60] Robert Sokolowski, *Introduction to Phenomenology* (Cambridge, U.K.: Cambridge U Press, 2000), 136-8. Husserl actually turns to consider the experience of the individual tone and its phases (Husserl, 43) at some length, and it is from this consideration that he develops the notions of retention (primary memory) and primal impression (44-52).

[61] Klaus Held, "Husserl's Phenomenology of the Life-World" (trans. Lanei Rodemeyer), in Donn Welton, ed., *The New Husserl: a Critical Reader* (Bloomington, Indiana: Indiana U Press, 2003), 32-62; 45.

[62] Sokolowski, *Introduction to Phenomenology*, 136-7.

It could be answered that, though the analysis of quasi-hearing characterizes other auditory perception aside from basic musical understanding, the focus on synthetic auditory grasp of basic musical forms—on *musical* quasi-hearing—is acceptable. On this response, the full characterization of musical quasi-hearing and its distinctness from nonmusical quasi-hearing would require a definition of music,[63] and such an endeavor is unnecessary for making points about the relative importance of local and global hearing.

Another answer is that musical quasi-hearing *is* distinct from other types of auditory perception. Gurney, for one, emphasizes that our understanding and appreciation of melodic forms is without parallel in normal auditory experience. Unlike the visual forms we encounter in art, even in abstract art, our understanding of melodic forms does not rest on any resemblance with normal sounds. Natural sounds are mostly formless and indefinite, and sequences thereof contain nothing like the definite proportion of melodic forms.[64] This is an interesting argument for the distinctness and autonomy of the musical faculty. If good, it would also present a clear difference between the perception of melody and other perceptions of motion and change.

Quasi-hearing, then, would be sufficient to characterize basic musical understanding if either (1) music is defined or characterized in such a way that distinguishes it from other types of sound, or (2) quasi-hearing itself has characteristics that distinguish it from other types of auditory experience.

Gurney emphasizes the sense of movement, progression, passage, advance, etc. (more generally, the sense of *teleology*) that attends the experience of musical forms.[65] If

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[63] In the next chapter I consider three definitions of music, including one from Levinson. There I argue the task of defining music is orthogonal to the account of musical experience and understanding.

[64] Budd, 54-5.

[65] Gurney writes that change of pitch presents passage and advance, unlike rhythm, "however much it may suggest movement." This "fundamental attribute" he designates as "the Ideal Motion" (Gurney, 141).

there is something that distinguishes the experience of a melodic line from the auditory experience of other temporal objects, perhaps it is a specifically *musical* kind of movement. In a sense, the following chapters pursue this suggestion, though my own approach to distinguishing musical from nonmusical hearing is more roundabout. It involves first identifying rhythm and meter as features within musical experience that characterize perceptual experience more generally and then identifying features that distinguish the experience of *musical* rhythm. This task falls mainly to Chapter 5.

The intervening chapters consider the experience of sound in musical and nonmusical contexts. The next chapter presents three definitions of music that each make use of the notion of organized sound and offer some specification of the kind of listening involved, along with an account of musical experience and understanding that develops notions of virtual musical movement and space.

CHAPTER THREE

SOUND AND MUSICAL EXPERIENCE

The opening section of this chapter is a consideration of Levinson's definition of music, along with definitions from Andy Hamilton and Thomas Clifton. The following sections consider Roger Scruton's account of musical understanding, which combines the acousmatic thesis with a thesis about the essential role of metaphor and imagination in music.

3.1 Music as Organized Sound

In *Music, Art, and Metaphysics*, Levinson defines music as "sound organized for the purpose of enriching or intensifying experience through active engagement (e.g., listening, dancing or performing) with the sounds regarded primarily, or in significant measure, as sounds."[66] This definition reflects one way to go about defining music: start with the notion of organized, ordered, or meaningful sound, and then specify the relevant type of organization, order, or meaning. In this definition, sound is organized for a purpose, which implies an intentional agent or group of intentional agents organizing the sounds.

Concerning the purpose of musical organization, this definition states that music is sound that is organized "for the purpose of enriching or intensifying experience" through the listener's or performer's attentive engagement with sound. Levinson insists that the aims of enrichment and intensification do not imply or require that the listener adopt a purely aesthetic attitude (which Levinson describes as a "contemplative and distanced apprehension of pure patterns of sound"[67]). Enrichment and intensification are

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[66] Jerrold Levinson, *Music, Art, and Metaphysics: Essays in Philosophical Aesthetics* (Ithaca, NY: Cornell U Press, 1991), 272.

[67] Quoted in Hamilton, *Aesthetics and Music*, 54.

achieved in ritual, martial, and ceremonial music, contexts in which music and the enjoyment of it are clearly subordinated to social function.[68]

While Levinson tries to avoid giving an aesthetic definition, Hamilton (who sees aesthetic experience as ubiquitous and commonplace) gives an avowedly aesthetic aim to music.[69] He defines music as "an art with a lower-case 'a'—a practice involving skill or craft whose ends are essentially aesthetic, that especially rewards aesthetic attention—whose material is sounds regarded predominantly as tones."[70] Both offer *functional* definitions of music that make essential reference to intentional or purposeful production. For now, I want to set aside the question of what sort(s) of valuable experience music aims at. At present, the only essential aim that I attribute to the activity of musical production is that the sounds are heard as organized in a certain way.[71]

Levinson and Hamilton both define music in a way that makes reference to intentional production. By contrast, Thomas Clifton characterizes music without reference to a producing agent. Music, he says, is "an ordered arrangement of sounds and silences whose meaning is presentative rather than denotative," specifying further on that it is "the actualization of the possibility of *any sound whatever* to present to some human being a meaning which he experiences with his body …"[72] Clifton, pursuing a

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[68] The purified aesthetic response, according to Levinson (and others), is an artifact of the Enlightenment. He thus maintains a general opposition to aesthetic definitions of the arts. Ibid, 55-6.

[69] Ibid, 52-56.

[70] Ibid, 58.

[71] Note that this is a (minimal) ascription of an essential aim attributed to *music production* and not to music itself. (Note also that performers and composers are listeners as well.) As Davies notes, an insurmountable obstacle to functional definitions of music is that music is put to far too many (and a few opposing) uses, and it is unclear what basis there is for ranking them (Stephen Davies, "On Defining Music," *The Monist* 95:4 (2012).

[72] Thomas Clifton, *Music as Heard: a Study in Applied Phenomenology* (New Haven, CT: Yale U Press, 1983), 2 (emphasis added).

phenomenology of musical experience, wants to consider music solely in connection with an experiencing (listening) subject. Thus, he tells us that "there is no music without the presence of a human being assuming whatever stance of receptivity is needed to make sounds musical for him."[73]

I would agree that music cannot be characterized without reference to some possible listener. However, that a series of sounds can be heard in a musical way by some subject is not sufficient for it to be music, given that the range of audible sequences that could be heard as musical is conceivably as wide as the range of audible sequences (as Clifton seems to acknowledge in his talk of "actualization").

I also agree with Levinson that some type of intentional production is central to the concept of music. (To say that nature has its own *music* is fine so long as it is understood to mean that nature *can be heard as* music,[74] and part of what it is to hear something as music is hear it as if it were a meaningful action.) Note that the definition he provides involves the listener's "attentive engagement with the sounds," which seems to involve apprehension of how the music is structured, at least at the basic level of musical experience. Whatever one may think about the aims of music production, part of the intention in arranging sounds is precisely that the listener hears them as structured or organized in a certain way.

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[73] Ibid.

[74] Andy Hamilton (in *Aesthetics and Music* [London, U.K.: Continuum International Publishing Group, 2007]) distinguishes between something's being music and something's being music*al* (53), which is to say that, while sounds that were not intentionally produced can nonetheless be structured in a way that affords hearing it as music, music is essentially a "performance art." I agree with this point, though I would prefer to say that music is essentially a *communicative practice*.

In *some* sense, someone alone in nature (supposing this person is from a music community) who hears sounds as musically organized *is* a producer (in *any* case of musical hearing, the listener is a producer in the sense of *enacting* a certain hearing), or even *the* producer—though the person in this case is not producing the sounds, she is discerning a certain order in them and communicating it to herself as she attentively engages the sounds.

A further respect in which Hamilton's definition differs from Levinson's is in its reference to *tones* rather than sounds regarded (primarily) as sounds. Hamilton regards tones as "determinate pitched sounds of a certain stability and duration … structured through melody, rhythm, and harmony."[75] The first half of this characterizes tones considered as "natural phenomena" (which, Hamilton says, are not really tones) while the second characterizes tones as "intentional phenomena." Hamilton's point is that one cannot hear sounds as tones prior to hearing musical organization—thus, while they are the materials of music, they are not its *raw* materials.[76] For Hamilton, the circularity in his definition is benign because it reflects an "explanatory conceptual holism" between 'music' and 'tone.'[77] The point seems correct—it is that musical hearing cannot be specified independently of the specific way in which it organizes sounds.

I now want to consider a multiple ambiguity in the term 'music.' Levinson and Clifton describe the *material* for musical experience (in paradigmatically musical cases, the *products* of music-making)—the sounds that make up what we are hearing when we listen to recordings and performances. Hamilton, on the other hand, describes music as a artistic *practice* or *craft*. All three definitions have something to say about *musical hearing*—that it involves engaging with sound in some special way (for Hamilton, hearing musical organization *in* the sound). Finally, all have something to say about what (if anything) constrains the *production* of musical material.

I find it useful to distinguish between musical practice, musical production (in the sense of music-making), musical material or product, and musical hearing. The definitions above were provided in order to set out some of the issues involved in trying

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[75] Ibid, 49.

[76] Ibid, 49-50. As we will see, Hamilton derives this account of the difference between sounds and tones from Roger Scruton.

[77] Ibid, 58-9.

to define music, not as a preamble to my own definition. Questions about the necessary conditions for musical experience, meaning, and understanding can be pursued without either resting upon or aiming at a definition of music. In a similar way, questions can be posed about linguistic awareness, meaning, understanding, expression, and communication, about the relevant sorts of psychological states such as cognition or communicative intent, and even about the connection between language, thought, and the world, without providing or aiming at a definition of language.

Like linguistic practice, musical practice is fundamentally *communicative*; at its core is the communication that takes place between performers, between performers and listeners, and between listeners.[78] Communication, in all of these cases, has the same structure—its function is to enjoin a certain attunement or coordination of attention with sounds. To say this is not to abandon the project of developing a phenomenological theory; rather, it is to point to a phenomenological feature of the experience of listening to music. This sense of communication is a part of musical listening considered under the *epoché*—musical experience has a sense of other subjects in its very ("internal," "phenomenological") structure.[79]

The question before us now is that of what kind of hearing is distinctively musical hearing. Scruton's account of musical meaning, understanding, and expression start with precisely this question. I turn now to Scruton's account of musical listening.

3.2 Scruton on the Acousmatic Experience of Music

Scruton's first step in *The Aesthetics of Music*[80] is a consideration of the nature of sound and the difference between nonmusical and musical experience of sound.

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[78] Thus, my account should not be seen as adverting to composers' intentions.

[79] A useful comparison can be made with the phenomenology of speech—that it is as if there is another subject speaking is an essential phenomenal feature of that experience.

[80] Roger Scruton, *The Aesthetics of Music* (Oxford, U.K.: Clarendon Press, 1997).

Scruton states that sound, like color, is uniquely accessible to one sense modality. (It seems clear from his opening remarks that he takes the deaf person's awareness of sound to be a matter of inference from a mediating experience of something that is *not* sound.) He further claims that sounds differ from colors in that sounds are not qualities. Though we often speak of the sounds *of* objects, objects do not really *have* sounds; they *emit* them.[81] Unlike colors and their bearers, a sound can be experienced and identified independently of its source, and independently of any consideration or awareness of causes:

> You could identify a sound while failing to identify its source, and there seems to be nothing absurd in the idea of a sound occurring somewhere without an identifiable cause. If we say that the sound must nevertheless *have* a cause, this would reflect a metaphysical view about causation … rather than the belief that sounds are qualities. Besides, even if every sound must have a cause, it does not following that it must also be *emitted* by its cause, or that it must be understood as the sound *of* that cause.[82]

Scruton thus thinks of sounds not as qualities, but as (secondary) objects.[83] Borrowing from Leibniz, he sees them as well-founded phenomena, "material" objects that are not strictly part of the physical order. (He argues that the "phenomenal reality of sound" cannot be eliminated in favor of the primary qualities of sounds waves.) Scruton thus holds that facts about sounds are *ultimately* facts about the dispositions of normal perceivers under certain conditions.[84]

The distinctness of sounds and causes (and the availability of sounds to be heard as pure events) is important for Scruton. It enables us to listen to sounds *acousmatically*,

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[81] Ibid, 1-2.

[82] Ibid, 2.

[83] Scruton does not sufficiently motivate this point (at least not in *The Aesthetics of Music*). Objects do not have sounds the way they have colors, but it does not follow that sounds are not qualities at all. We can take them to be *event* qualities, or perhaps object qualities of a different kind.

[84] Ibid, 5-6.

i.e., as they are in themselves, and this, Scruton claims, is what defines musical listening.[85] For Scruton, acousmatic listening requires that the sound is considered as it is, in itself, rather than as a marker of location, size, or action.[86]

Scruton describes a music room in which a normal observer hears sounds that can only be heard in the room and that cannot be traced to any specific source.[87] Such an observer can identify and describe sounds in terms of purely acoustical properties, without specifying a source and *in principle* without any reference to actual or characteristic causes. Scruton states that such a situation is conceivable, whether or not it is physically possible. Supposing that the sound of an orchestra is present in the room, any normal observer entering the room is granted a musical experience; in hearing the sounds, such an observer has all she needs for understanding the sounds as music.

Hamilton describes the *acousmatic thesis* as stating that "to hear sounds as music involves divorcing them from the worldly source or cause of their production."[88] This statement seems to state only a necessary condition on hearing musically. In presenting the music room scenario, Scruton claims that acousmatic listening can occur in the absence any awareness of causes (although, crucially, it need not) and further that acousmatic listening is *sufficient* for understanding the sounds one hears as music. What is it about the observer or the sounds in the room that makes available for her a musical experience?

Scruton denies that anything intrinsically characterizing the sounds themselves distinguishes them as musical. Musical understanding is not a matter of knowing

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[85] Ibid, 2-3, 11-12. The term 'acousmatic' was first adopted by Pierre Schaeffer (founder of the school of *musique concrète*) in the 1940s.

[86] Justin London, *Hearing in Time* (New York, N.Y.: Oxford U Press, 2004), 5.

[87] Scruton, 3.

[88] Hamilton, 95.

anything (consciously or unconsciously) about the structure of the sound as a material or physical phenomenon. Rather, hearing musically involves a transformation of sounds into *tones*—sounds heard as "having melodic, rhythmic, or harmonic implications"[89]—and to hear sounds this way is to hear them under the metaphors of space, movement, and causality.[90]

> Hearing sound involves the exercise of the ear: it displays an *acoustic* capacity, and all that we hear when we hear sounds are the secondary properties of sound events. Animals also hear these properties, and respond to sounds and to the information contained in sounds. But to hear music we need capacities that only rational beings have. We must be able to hear an order that contains no information about the physical world, which stands apart from the ordinary workings of cause and effect, and which is irreducible to any physical organization. At the same time, it contains a virtual causality of its own, which animates the elements that are joined by it.[91]

When we hear musically, we spontaneously detach sounds from their spatial and causal conditions *and* hear them as tones, attending to the space, movement, and causality that we hear *in* the sounds. Scruton, then, presents a two-part characterization of musical listening, one involving the detachment of sound from source and the other involving the necessarily metaphorical or imaginative perception of sounds as tones.[92] We will consider these components in reverse order.

3.2.1 Metaphor and Musical Experience

Scruton discusses the relationship between sounds and tones by discussing the experience of pitch, rhythm, melody, and harmony, showing how the description of each

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[89] Malcolm Budd, in Michael Tanner and Malcolm Budd, "Understanding Music," *Proceedings of the Aristotelian Society, Supplementary Volumes*, Vol. 59 (1983), 215-248, 240.

[90] Scruton says that a melodic line illustrates the following distinctions: between "the acoustical experience of sounds and the musical experience of tones"; "the real causality of sounds and the virtual causality that generates tone from tone in the musical order"; and "sequences of sounds and the movement of the tones that we hear in them" (Scruton, 19).

[91] Ibid, 39.

[92] Hamilton, 97. In the passage just quoted, Scruton seems to be assuming that such imaginative hearing simply goes along with acousmatic listening.

unavoidably involves the transfer of (mainly spatial) extramusical ideas to the experience of sound.[93] Scruton argues from there that metaphor defines the musical experience.[94] In motivating the initial claim and presenting the argument I will focus on melody, which is perhaps the case for which Scruton's claim is most plausible.

Scruton notes the experience of movement in hearing melodic unities, a feature of the experience noted by many authors (including Gurney, as we saw in the previous chapter). The melodic unity is "special kind of *Gestalt*" because, unlike a chord, it is a unity across time. A melody seems to start at a place, to pass through a succession of notes, and perhaps to conclude or arrive at a place.[95] Scruton emphasizes that melodies present not only change but movement, which unlike change implies "a spatial frame, an occupant of that frame, and a change of position within it."[96] Further, in melodic movement there is no reidentifiable individual that moves—no subject of movement that moves from place to place.[97]

Scruton argues that the metaphor of spatial movement is *ineliminable*. If we remove spatial terminology from our description of melody, we will have ceased to talk about melody as an object of musical experience (that is, we will have ceased to talk about melody):

> For suppose someone said that, for him, there *is* no up and down in music, no movement, no soaring, rising, falling, no running or walking from place to place. Could we really think that he experienced music as we do, that it was, indeed, *music* for him …? Surely, the temptation is to say that we *must* hear the

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[93] Budd, "Understanding Music," 240 and Scruton, 20.

[94] Scruton, 92. Here Scruton states that "there lies, in our most basic apprehension of music, a complex system of metaphor, which is the true description of no material fact …" and that "the metaphor [of space, movement, and animation] cannot be eliminated from the description of music, because it defines the intentional object of the musical experience."

[95] Ibid, 40.

[96] Ibid, 49.

[97] Ibid, 50-1.

> movement in music, if we are to hear it as music. If we have a metaphor here, it is, to adapt the happy phrase of Johnson and Lakoff, a 'metaphor we hear by'.

That the metaphor of movement is ineliminable from talk about melody is important for Scruton; it means that the experience of melody itself involves metaphor.

Scruton sees metaphor as the transfer of a given predicate from things to which it ordinarily applies to things to which the predicate does not or cannot apply. It follows from this understanding of metaphor that terms used metaphorically are used with their ordinary sense (since it is the ordinary use that gives it its meaning), and thus that metaphors are all or mostly false.[98] The point of metaphor (and of simile, which is to be explained in terms of metaphor) is "not to describe an object, but to change its aspect so that we respond to it in another way"; it is to get the listener to share in the experience of that prompts the description, to see and respond "to one thing in terms suggested by another."[99] What metaphor tries to communicate is what Scruton describes as a "fusion of experiences," a "coalescence" of simultaneous thoughts into a single image (an image that can only be described by the metaphor). The imagination is what enables this kind of experience; specifically, in imaginative perception there is a coming together in experience of asserted and unasserted thought.[100]

In hearing a melody, we hear spatial movement in the sound—we hear the sounds *as moving*—though we are aware that nothing is literally moving in the sense of rising, departing, arriving, climbing, falling, and so on (thus movement is only entertained rather than asserted). To describe the melody in these terms is to describe the way sounds seem,

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[98] Ibid, 80-85. In this, Scruton (who first introduced these ideas in *Art and Imagination* [1974]) actually anticipated Donald Davidson's often cited discussion of metaphor ("What Metaphors Mean," in A.P. Martinich, ed., *The Philosophy of Language, 4th edition* [New York, NY: Oxford U Press, 2001] 435-46).

[99] Ibid, 83-5.

[100] Ibid, 86-90. Instances of imaginative perception include the experiences that ground metaphorical descriptions (and that are the aim of such descriptions), such as that the sky is velvet, that a melody is joyful, or that a willow tree is sad.

where the way they seem depends on "our imaginative engagement" with them "rather than our ordinary cognitive goals" (rather than, for example, using them to gather information about the environment). This makes the metaphor of spatial movement an indispensable one.[101]

Scruton makes corresponding claims about the metaphors involved in rhythm and harmony. In melody, then, sounds are heard as moving through space. In rhythm, they are heard as moving in a sense that is distinct from succeeding one another—they are heard as animated (as "dancing"). In harmony, combinations of sounds are heard as open, filled, in tension, etc.[102] Thus, for Scruton, "our experience of music involves an elaborate system of metaphors—metaphors of space, movement, and animation."[103] The transference of these metaphors to sound is an ineliminable feature of the experience of music.[104]

Malcolm Budd responds to this claim with an "objection of principle" and a discussion of the particular case of rhythm. The objection of principle is as follows: if there is essential relation between concepts of space, movement, and animation and the experience of music, that relation "is not illuminated by the notion of the metaphorical transference of the concepts or properties to the experience." This is because any metaphor requires interpretation, and such interpretation is "the injection of significance into it, not the extraction of significance from it."[105] If such metaphors as we use to describe musical experience are ineliminable, then musical experience has properties that can only be described metaphorically. The suggestion, however, is incoherent. On the

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[101] Ibid, 92.

[102] Budd, 240.

[103] Scruton, 80.

[104] Budd, 241.

[105] Ibid.

other hand, if what is meant is that a metaphorical thought is somehow embedded in the experience of music, then it would be the case that that experience can only be described using the metaphor. However, Budd says, "it is unclear how a metaphor could be part of the content of a perceptual experience." It is further unnecessary to have metaphorical thoughts (such as "These sounds are moving") in order to experience sounds as music.[106]

Budd argues that Scruton's motivation for his view (that musical experience is essentially informed by spatial concepts) is unconvincing, particularly in the case of rhythm. This is because the kinds of vital movement Scruton has in mind—he invokes the metaphor of dancing at a few points—already presuppose rhythm. In fact, Budd says, rhythm can be distinguished from mere succession or temporal pattern quite straightforwardly, without reference to concepts involving animate movement. He characterizes rhythm in terms of not requiring variation in pitch, timbre, duration or loudness and as involving the grouping of unaccented elements relative to accented ones.[107]

Budd diagnoses the situation by citing Christopher Peacocke's distinction between sensational and representational properties of perceptual experience. Scruton's arguments, Budd claims, only show that rhythm is a sensational rather than a representational property; similarly for melody and harmony. Distinguishing between sensational and representational properties blocks the inference from the claims that we do not think of musical sounds as literally moving or being animate and that we often speak metaphorically of movement in music to the claim that musical sounds are distinguished in that they appear to move metaphorically. He concludes that the experience of music possesses certain sensational properties—experiential properties that

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[106] Ibid, 242.

[107] Ibid, 243.

can vary while the way the world is represented can remain constant—and sometimes we use metaphors to talk about these properties.[108]

Hamilton agrees with Scruton that music is "conceptualized in terms of movement" but denies that the experience of musical rhythm should be understood in terms of metaphorical perception.[109] Rhythm (which he holds to be the only indispensable element in all music) is ubiquitous in human life, characterizing not only music but also the other arts (poetry, and to a lesser extent prose), speech, and physical labor.[110] For Hamilton, this means that conceptualization goes both ways: we conceptualize music in terms of human movement, but we also conceptualize human movement in terms of music. The experience of musical rhythm is an experience of the human body as behaving musically just as much as it is an experience of music as behaving like a human body.[111]

While the experience of musical rhythm is thus a kind of aspect perception, it is incorrect to claim that it is metaphorical perception because the description of music in terms of movement is not metaphorical. Hamilton writes:

> … human bodily movement is as much the target of metaphorical projection as music itself … we do not project from a primary sense of rhythmic bodily movement because we have already reached the musical level of description in describing human bodily movement as rhythmic … the description of human behavior is not the primary description of which the musical description is secondary.[112]

Both sorts of description are of *action* rather than of mere succession of movements, and neither can be expressed in a purely physical description. The paradigm for the sort of

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[108] Ibid, 244-5.

[109] Hamilton, 144-8.

[110] Ibid, 121-2, 126.

[111] Ibid, 144.

[112] Ibid, 145.

action being described (rhythmic action) is "human action with a feeling or sense of involvement—originally, a communal activity of making music."[113]

Hamilton further argues against the claims that there is no literal movement in music and thus that any description of music in terms of motion has to be metaphorical. Some uses are clearly metaphorical, such as the ascription of momentum to a rhythmic line.[114] On other hand, descriptions related to the tempo and length of pieces or passages of music, which are both related to the rate of the occurrence of musical events, are literal, not metaphorical. Hamilton thus tries to preserve the claim that we conceptualize music in terms of movement while challenging the claim that such movement must be spatial.[115]

While Budd is concerned to deny that ideas of animated movement necessarily inform the experience of musical rhythm, Hamilton agrees that they inform the experience but denies that they are metaphors. Budd asserts that what distinguishes the experience of rhythm from the experience of a mere succession of sounds is a sensational rather than a representational property of the experience—the world can be represented as being the same way whether or not rhythm is heard in a series of sounds and, importantly, different rhythms can represent the world as being the same way, but this does not show that the varying experiences (metaphorically) represent things differently.[116] Hamilton holds that to perceive rhythm is in part to perceive rhythmic action, and this seems to imply a difference in representational properties between hearing sound and hearing musical rhythm. These issues point to topics taken up in Chapter 5, which considers the

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[113] Ibid, 146.

[114] Ibid, 145.

[115] Ibid, 146-7. Likewise Davies (Stephen Davies, *Musical Meaning and Expression* [Ithaca: Cornell University Press, 1994], 235-6).

[116] Budd, 244. Examples of the latter sort of case are discussed in Chapter Four. There I try to show that rhythm is an essential structure of all perception of change and movement.

experience of rhythm more closely. Here, I conclude that Scruton's account of rhythm in terms of metaphorical transference and imaginative perception does not give a necessary feature of the experience, nor does it clarify the nature of the experience.

Though I do not provide them here, I think that corresponding discussions of melody and harmony are needed in order to address Scruton's view adequately. Budd's objection of principle, or at least one part of his elaboration of it, seems to miss the point.[117] When he says that it is unnecessary to think a metaphorical thought such as "These sounds are moving" in order to hear a melody, he is glossing over what seems to be a robust experience. His suggestion concerning the distinction between sensational and representational properties does, I think, clarify the issue in the case of rhythm, but that is because I think there is a *description* of the relevant sensational and representational properties that shows why imaginative perception (or something like it) is not necessary for the experience of musical rhythm. The case seems less obvious with melody (and it seems nearly impossible to identify the movement heard in a melody, if such hearing is indeed necessary for understanding melody, with any experience of actual movement or change).

It seems clear that tonality[118] generally is an important part of the musical experience (and it is difficult to imagine how sensible qualities other than sounds might

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[117] Budd, 242.

[118] By 'tonality' I mean to refer not only to melodies, which exhibit tonal movement, but to what corresponds to the experience of tonal space in general. Concerning movement, Scruton writes:

> Nor should we confound the movement that we hear in melody with the rhythmic organization … We speak of rhythmic movement, as opposed to 'sequel' or 'pattern', and this is … an expression of our experience of rhythm, as a form of life. But rhythmic organization can occur without pitched sound, and therefore without the experience of melody. The distribution of pitches in melody is also a conquest of tonal space, a movement from and towards (Scruton, 49-51).

If Scruton is correct, then, there is a distinct experience of melodic movement that is not to be likened to rhythmic movement; nor would it be addressed by a more thorough account of the experience of rhythm.

come to exhibit tonal relationships.) An account of the contribution of tonality consonant with my insistence on the (literal) perceptual nature of musical experience requires further work. Concerning melodic movement, I might agree that the kind of aspect perception Scruton is talking about (perception as of movement through space) does often occur but deny that it is part of the *essential* characterization of the experience of melody or that even it features in all experience of melody.

When it does occur, there are a few things we might say. One thing that takes place in more robust experiences of melodic space and movement is the listener's sympathetic participation with the melodic line in actual or imagined singing and the attendant experience (or imagined experience) of the body singing. However, we do not always experience the body this way in hearing melody, and in most cases the movement we hear seems to be a feature of the very thing we are hearing rather than a real or imagined process in the body.

Another suggestion concerning the use of spatial terminology and concepts is that we experience melody as a series of modifications in the instrument that is sounding the melody. (It is further significant that we experience the process as goal-directed, as having a point.) With most tonal instruments, the movement that corresponds to the movement from low notes to high notes is a literal movement across a spatial plane. However, as Davies points out, our description of the relevant actions can depend conversely on the motion we hear in the music; for example, the hand does not literally move *up* the keyboard.[119] Nonetheless, this suggestion goes some way in capturing our sense of spatial movement as we listen to melodies.

The experience of spatial movement in hearing a melody can thus take different forms. When we (we who are familiar with musical instruments and how they are used to make sounds) hear melody, we sometimes perceive spatial movement crossmodally and

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[119] Davies, *Musical Meaning and Expression* (1994), 233.

directly (as when we are watching and hearing someone play) or indirectly (as when we are listening without perceiving the corresponding movements), and sometimes abstractly or acousmatically (as when we are attending to the notes abstracted from the particular instrument sounding them—though not from any cause whatsoever—and as occupying or moving through an ideal space). Each of these possibilities (not only the last) provides a partial description of our overall experience of melodic movement.

While I do not deny tonal (or "ideal") movement, then, I deny Scruton's account of it in terms of metaphor and imaginative perception. One reason for this is Budd's main objection—if spatial concepts are essential to musical experience (and I am agreeing that they are), the notion of metaphorical transference does not shed light on that relation. It is further unclear how Scruton's account of imaginative perception is supposed to apply to the experience of melodic movement. In speaking of the importance of the falsehood of metaphor, Scruton writes: "It is the impossibility of believing that the evening really *is* porcelain that enables me to think of it *as* porcelain: to hold this thought in suspension before my mind," and further on that "the metaphor is the verbal expression of an experience made available precisely be *that form of words.*"[120] Our experience of melodic movement does not seem to conform to this model. There is immediacy and ease in our hearing of the melody, not any identifiable tension and coalescence of ideas.

We do, at times, experience motion rather than change in hearing music,[121] but the account in terms of metaphorical aspect perception does not seem to capture the immediacy of this sense of movement. An attempt to illuminate the experience of spatial motion without appeal to metaphor might say that the apprehended motion is abstract or

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[120] Scruton, 90.

[121] Again, an available position for responding to Scruton is to challenge the paradigm according to which motion must involve space as well as time. As indicated, Hamilton pursues this line in connection with rhythm (Hamilton, 145-8), while Davies argues that music does move in the sense of being a process that involves change, and further that uses of spatial terms in describing musical motion are secondary rather than metaphorical (Davies, 234-6).

ideal, or it might acknowledge it as a distinct kind of motion—a motion in which nothing moves—that is nonetheless real and concrete.[122]

Before closing this discussion and turning to consider the other condition Scruton states for musical experience, note again what a treatment of melody and harmony corresponding to the above discussions of rhythm needs to show—that metaphorical or imaginative perception is not necessary for having the relevant experiences, not that it never characterizes them.

3.2.2 Hamilton on the Acousmatic Thesis

In assessing whether acousmatic listening is sufficient for musical understanding (for Scruton, hearing sound in rhythmic, melodic, and harmonic organization), it should be noted that Scruton's account glosses over a type of acousmatic listening sought by one of the oldest traditions of nonmusical sound-art.[123]

The term 'acousmatic' was adapted from 'akousmatikoi' (or "those willing to hear") as Pythagoras' disciples were known. Pythagoras is reputed to have lectured from behind a wall so that his students would attend to the words being spoken rather than to the person uttering them. By manipulating sound material (playing sounds backwards, cutting or extending them, using echo-chambers, filtering, etc.) the proponents of *musique concrete* similarly sought to place a wall between the sounds the listener would hear and their worldly sources. The attitude of "reduced listening" that they sought was a type of listening without seeing (one, further, that is enhanced by not seeing). The object

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[122] Zuckerkandl advocates this latter approach in the following:

> Philosophers and aestheticians are wrong when they talk of "ideal" motion, of "abstract" motion, in music. There is nothing ideal or abstract in it. The elimination of thing and place takes away nothing of the reality of motion, of the concreteness of its experience; on the contrary, it reveals its inmost core. *Tonal motion is the most real motion* (*Sound and Symbol*, 138-9).

[123] I do not use this term with a specific commitment in mind concerning what distinguishes musical and nonmusical sound-art (though a means of distinction emerges in Chapter Four).

of this type of listening is the "pure sound object" (*objet sonore*). The focus was on non-tonal sound and traditional instrumentation was avoided.[124] Hamilton notes that this reflects a different conception and application of the concept of the *acousmatic* from Scruton's. It is still the case, however, that on Scruton's conception sounds can be heard as *sounds* (not tones) and still be heard acousmatically.[125]

Concerning the claim that acousmatic listening is necessary for musical experience, Hamilton draws attention to the following non-acousmatic components of certain musical experiences and claims that they have genuinely musical status:[126]

1. *Space*—Acousmatic experience does not involve awareness of the locations of sounding things or of the directions of sounds. Thus, it seems that acousmatic experience cannot appreciate music arranged and performed to achieve spatial effect. (An example is Berlioz's use of off-stage instrumentation in the third movement of *Symphonie Fantastique*).
2. *Virtuosity*—In much of the recorded and live music we listen to, our awareness of virtuosity is an important component of our experience. Whatever we might say about the value of such awareness, it concerns the cause of the sound and thus seems beyond the scope of acousmatic experience.
3. *Timbre*—Concerning the acousmatic thesis itself, timbre seems to relate the listener to both the general cause (an instrument, such as the human voice) and the particular cause (Billie Holiday or Bob Dylan). Thus, if appreciation of timbre is relevant to musical experience, the acousmatic thesis is undermined.[127]
4. *Non-auditory aspects*—For one, non-auditory experience of sound, as when one literally feels as well as hears the bass section, can be relevant to musical enjoyment. The presence (and relevance) of non-auditory features in musical experience is most pronounced in live performance: we see performers move as they play, and how they move (*visibly*) affects the intensity of what we hear and can even affect what we hear.[128]

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[124] Ibid, 99-101.

[125] Ibid, 102-3.

[126] Ibid, 103-6

[127] Scruton considers timbre a secondary musical feature. In describing it, he says, "we are not situating it in musical space; nor are we identifying anything that is essential to it as a musical individual" (Scruton, 77-8).

[128] For most listeners, this latter effect is especially striking in the case of live jazz performance (versus recorded jazz).

That the above are challenges to the acousmatic thesis is a significant point against it, given that common sense about music and musical performance will readily regard these components as relevant to musical enjoyment and value.

Two of the above points and observations can be taken as answers to the question of why we attend live performances. If the acousmatic thesis is true, it should make no difference whether one sees the production of the sounds one is hearing. Nor should it make a difference whether the sounds one is hearing are improvised or rehearsed. All of these objections, Hamilton notes, relate to the fact that music is a performance art.[129] As I would state it, music is fundamentally a communicative practice, and both the means and the object of musical communication extend beyond the use and experience of audible sounds considered in themselves.

Hamilton holds that, while acousmatic listening is neither necessary nor sufficient for musical experience, it nonetheless captures an important aspect or component of musical listening. He supplies a "twofold thesis" concerning musical experience—"that listening to music involves both non-acousmatic and acousmatic experience and that both are genuinely musical aspects."[130]

In the following chapter I will present an account of sound in both musical and nonmusical contexts that is at odds with Scruton's account of sound and musical experience. Certain sounds (or features of sounds) seem to present objects and events directly. In the experience of timbre, some source seems to be present and given in the very experience of the sound (much the way the thing bearing a color is present in the very experience of color). This last observation connects with an important theme of the next chapter: the spatiality of hearing.

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[129] Ibid, 106.

[130] Ibid, 109.

Concerning acousmatic listening, I describe it not as a detachment of sound from source but rather as attending to an aspect or part of a broader event.[131] This is unlike Scruton's characterization in that the listener remains in perceptual contact with the "sources" of sound, even in highly absorbed musical listening. I further hold that what makes such listening musical is a certain kind of attention to rhythm, which is *not* (contra Scruton) helpfully seen as an object of metaphorical perception.

Further, the sensible qualities that can enter into (or even constitute) a musical experience in this sense are not restricted to auditory qualities: there are non-auditory aspects of normal musical experience that are relevant to musical appreciation and enjoyment; and musical experience consists in a kind of rhythmic perception that is not essentially an auditory one. Before elaborating on the experience of rhythm, I will introduce phenomenology and phenomenological method and develop what I take to be phenomenologically adequate accounts of sound and auditory perception.

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[131] Casey O'Callaghan considers this view in connection with the account of auditory perception presented in the following chapter (in "Auditory Perception," *Stanford Encyclopedia of Philosophy* [http://plato.stanford.edu/entries/perception-auditory/#Acousmatic, 2009]).

CHAPTER 4

THE PHENOMENOLOGY AND ONTOLOGY OF SOUND

The previous chapter aired criticisms of Scruton's view, which couples the acousmatic thesis with what we might call the metaphorical "hearing-in" thesis. Concerning the acousmatic thesis, Hamilton points to musical contexts in which nonacousmatic elements are both prominent and musically relevant. If this claim is correct, the acousmatic thesis does not offer a necessary condition for musical hearing.

Additionally, the thesis clearly fails to provide a sufficient condition for musical hearing *if* it does not provide some specification of *how* sounds are to be heard as ends in themselves—as noted in the previous chapter, the first proponents of electronically produced sound-art (which most would consider *nonmusical* sound-art) insisted on just this kind of listening and, toward that end, excluded traditional instrumental sounds. Scruton does state that a specific type of organization must be heard in the sound and that the imagination must be engaged in the right sort of way. Thus, whether the acousmatic thesis provides a sufficient condition for musical hearing rests on Scruton's account of imaginative or metaphorical hearing-in, informed by his account of sounds as intentional objects.

I endorse theories of sound and auditory perception that differ from Scruton's in respects relevant to understanding the role of the acousmatic within musical experience.[132] My views on these matters are informed by the practice of

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[132] Influences are Casey O'Callaghan's discussions in O'Callaghan, "Sounds and Events," in Matthew Nudds and O'Callaghan, eds., *Sounds and Perception: New Philosophical Essays* (Oxford, U.K.: Oxford University Press, 2009), 26-49 and "Hearing Properties, Effects, or Parts?" (http://ocallaghan.rice.edu//research/papers/ocallaghan-2011-Hearing.pdf), *Proceedings of the Aristotelian Society*, Volume CXI, Part III, 2011. Other influences are Don Ihde, *Listening and Voice: Phenomenologies of Sound, 2nd ed.* (Albany, N.Y.: State University of New York Press, 2007) and Robert Pasnau, "What is Sound?" *Philosophical Quarterly* (49: 169, 1999), 309-24. Though sound and auditory perception are not key topics in either of these, José Luis Bermúdez, "Naturalized Sense Data," *Philosophy and Phenomenological Research* (61: 2, 2000),

phenomenological method, so in what follows I will first present the theory and method of phenomenology as I understand it. I will then present points concerning the phenomenology of sound-experience and, finally, present my account of sound and auditory experience. I take phenomenology to be a guide in assessing philosophical accounts of perception at least in the minimal sense that, all else being equal, a theory of auditory experience should not assign objects or contents to auditory experiences that are at odds with careful first-person reflection on experience—that is, they should not deny that auditory experiences have the sorts of objects or contents they seem to have. A theory that, for examples, denies to auditory experience such features as directionality and locatedness or makes sensations the objects of auditory experience would have to attribute massive error concerning what we take ourselves to hear. All else equal, it is better to avoid making such attributions.

4.1 Phenomenology

The defining aim of phenomenology is to describe conscious experience from an ontologically neutral standpoint. Thus, in describing the experience of looking at this mug, I simply concern myself with the experience as it is lived. I attend only to features of the experience accessible to first-person conscious reflection. I do not concern myself with whether the mug "really exists" in a nearby region of space, nor with whether any external world exists, nor with how this or any experience is caused, nor with whether experiences are spatiotemporal events. When doing phenomenology, these matters are set aside, though they are not simply set aside: description must repeatedly be searched for presuppositions about conscious experience that go beyond what is directly given. Ontological neutrality is an ideal limit of the practice of phenomenology and is attendant to the ongoing pursuit of descriptive adequacy.

353-74 and Alva Noë, *Action in Perception* (Cambridge, Mass.: MIT Press, 2004) have also been influential.

Phenomenology seeks to uncover the essential *laws*, or *structures*, of conscious experience. Part of the enterprise of describing appearances is attending to their necessary, structural features (the essences within the appearances). In addition to *adequacy*, phenomenology seeks *apodicticity*—it seeks to establish truths about experience that are necessary and can be brought to evidence. These goals of phenomenological description correspond to two aspects of phenomenology—the *transcendental reduction* and the *eidetic reduction*.

Husserl's principle aim in developing phenomenology was to clarify the notions of objectivity and subjectivity and thus to provide conceptual and epistemological foundations for the empirical and the "exact" sciences (the latter including logic and mathematics). For Husserl and his followers, phenomenology does not consist solely in describing structures of experience; it marks a distinctive philosophical outlook on the relationship between consciousness and reality, between subject and object.[133]

We start with the common sense view of the world and our relation to it, which Husserl calls the *natural attitude*. The natural attitude is essentially characterized by the view that consciousness is an item within a *world*, a world that exceeds consciousness and conditions it in various ways. This is the thesis of the natural standpoint, and the first step toward (pure) phenomenology is the *epoché*—the "suspension," in Husserl's terms the "bracketing," "altering," or "putting out of play," of all world-belief. It consists in the adoption of a critical stance toward the natural attitude, including the habitual modes of explanation and description that go along with it. This stance, though critical, is distinct from disbelief or doubt.[134] While phenomenology refrains from asserting any claims

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[133] While my goal in what follows is to present the *epoché* and the reductions as stages in a method that can be used by anyone with an interest in describing experience, the discussion will also reflect this outlook.

[134] Edmund Husserl, *Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy*, Book I: *General Introduction to a Pure Phenomenology* (1913), Kersten, Fred, trans. (The Hague: Martinus Nijhoff, 1982), 51-2, 56-61. (Hereafter I refer to this text as *Ideas* I.)

about actual existence and causation, it does not dispute the truth of such claims; rather, it places them in quotes. *As quoted*, judgments concerning existence and causation are among the very things phenomenology seeks to understand.[135]

4.1.1 The Reductions

The *epoché* can be carried out locally or globally.[136] Performing the *epoché* at the global level reveals to us that consciousness is transcendental in the sense of *cutting through* all types of appearance. In performing the global *epoché*, we realize that all objects that appear must appear to and through consciousness, and also that consciousness is self-given; it is the uniquely enabling condition for the appearance of anything, including consciousness itself. While Husserl speaks of consciousness as having "absolute" being, he is pointing to this *transcendental function* of consciousness. The global *epoché* is incompatible with any "ontologizing" of consciousness, that is, of any theorizing about consciousness as a mundane entity, as a thing inhabiting a world (even if that world is a solipsistic one).

Since consciousness, the condition for the appearance of anything, is also self-given, we have hope of getting an adequate view of conscious experience and of

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[135] Husserl expositors emphasize that the world remains the same as it was before being placed in brackets. Erazim Kohák states that the "basic move" in the phenomenological reduction is one of *Ausschaltung*,

> "switching off," as when we switch off an electric lamp. The lamp is still there, but now as one of the objects in the room, not as that which illuminates everything else. This is what the phenomenologist does when he "switches off the world" or, more precisely, the common-sense assumption that the world explains experience. … The world remains as a datum, but now as a datum to be explained, not as that which "explains" experience (Kohák, *Idea and Experience*, 36-7).

[136] Christian Beyer (in "Edmund Husserl," Stanford Encyclopedia [http://plato.stanford.edu/entries/husserl/] 2011) introduces this terminology. Similarly, Klaus Held ("Husserl's Phenomenological Method," in Donn Welton, ed., *The New Husserl: a Critical Reader* [Bloomington, IN; Indiana University Press, 2003], 3-31) distinguishes between "neutralizing our position on existence," or partially abstaining from belief in the being of objects of individual lived experiences, and the *universal epoché*, which abstains from the general thesis of the natural attitude—"world-belief"—and "neutralizes the validity of the *world*" (22).

discovering its essential features. One such feature is that, in addition to being self-given, conscious experience is *intentional*—it is always *of* or *about* something. In conscious experience, something always appears to consciousness, and appears in a certain way. Franz Brentano introduced the term 'intentionality' to designate this feature of mental phenomena, proposing that intentionality is *the* criterion of mentality—that all and only mental phenomena exhibit it.[137] While Husserl was interested in describing intentionality as a structure of conscious experience, he was not as interested in intentionality as a criterion for distinguishing mental from physical phenomena (on Husserl's theory, intentionality *requires* that intentional states have non-intentional components).[138]

When Husserl says that intentionality is the theme of phenomenology, what he means is that the "directional," "referential", or "attentional shape" of experience[139] is the organizing theme of phenomenological description as well as one of the central problems of phenomenology. Within any given experience, there are two poles or foci: the *noesis*, which is the mode of experiencing; and the *noema*, the intended-as-such, the object considered in the mode of givenness, the bracketed object. Phenomenology seeks essential correlations between noesis and noema, terms Husserl introduces in order to signal that "intentional act" and "intentional object" are now being viewed in the proper way (that is, from the standpoint of the transcendental reduction).[140] For

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[137] Franz Brentano, *Psychology from an Empirical Standpoint*, excerpt printed in David Chalmers, ed., *Philosophy of Mind: classical and contemporary readings* (Oxford: Oxford U. Press, 2002), 479-84, 481.

[138] *Ideas* I (1913). Kersten, Fred, trans. (1982),199-200, 203-4, 206.

[139] These characterizing terms are from Don Ihde, *Listening and Voice: Phenomenologies of Sound, 2nd ed.* (Albany, N.Y.: State University of New York Press, 2007), 35.

[140] An interpretive issue dividing Husserl scholars concerns how to interpret the noema. One influential interpretation (pursued by Føllesdall, Dreyfus, and Smith) takes its lead from the exchange of Husserl and Frege and their common concerns about meaning, sense, and objectivity. This interpretation sees the noema as being *ontologically distinct* from the intended object,

phenomenology, intentionality functions as a correlation rule—it is the noetico-noematic structure of experience that we seek to describe. Every conscious experience is directed toward an object in a certain way, and every object, with its way of appearance, refers back to consciousness.[141]

The foregoing remarks on the transcendental reduction already suggest a turn to essences. Concerning the connection between the reductions, Robert Sokolowski states:

> By virtue of the *transcendental reduction*, [phenomenology] contemplates intentionality and its object correlates, but it also brings out the eidetic structures of such noeses and noemas, and hence engages the *eidetic reduction*. It is concerned not with the experience and objects that I happen to have, but with the eidetically necessary structures of such experiences and objects, as they would hold for any consciousness whatever. Phenomenology aims at discovering how things and the mind have to be for disclosure to take place.[142]

Suspending the natural attitude turns us away from questions about the existence of things and toward questions about their *being* as noemata, i.e., features they possess essentially within experience. Through describing examples and performing a series of

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proposing that the noema is an *abstract* or *ideal* entity (a *Sinn*) *in virtue of which* a conscious act intends or refers to a transcendent object which may or may not exist. Originating with Dagfinn Føllesdall, this interpretation sees Husserl's noema as functioning in the same way as the Fregean *Sinn*, only generalized to the field of all acts of meaning. (John Drummond, *Husserlian Intentionality and Nonfoundational Realism: Noema and Object* [Kluwer, 1990] provides an extended historical and critical discussion of this and rival interpretations.) Others (including Drummond, Held, and Sokolowski) defend an interpretation of the noema as, alternatively, the "intended-as-such," the "object-in-the-How-of-its-givenness," or the "bracketed object." On this picture, the noema is the object itself, precisely as it is intended, and is not something ontologically distinct from the intended object. (David Woodruff Smith, *Husserl* (Routledge, 2007.)

Husserl's picture of the noetic element, which according to the theory of the *Logical Investigations* "animates" or "bestows sense" upon *hyle* (raw, nonintentional sensuous components), was subject to revision in his subsequent work. (Edmund Husserl, *Experience and Judgment: Investigations in a Genealogy of Logic* (1939/1948), James Churchill and Karl Ameriks, trans. [Evanston, Illinois: Northwestern University Press, 1973]).

[141] Ihde, *Listening and Voice*, 35, 37.

[142] Robert Sokolowski, *Introduction to Phenomenology* (Cambridge, UK: Cambridge University Press, 2000), 184.

eidetic variations,[143] we uncover essential noetico-noematic features of a given dimension or type of experience. While the *epoché* "horizontalizes" all phenomena by setting aside claims about what really exists, thus allowing us to consider and describe experience simply as lived, variational method "possibilizes" phenomena, allowing us to find the *invariant, essential* structures of lived experience.[144]

Eidetic variation is an important component of phenomenological method. For Husserl, it proceeds by modifying in one's imagination various features of an arbitrarily chosen initial example.[145] After gathering more and more variations, real or fictitious, a common set of abstract features begin to unfold. The goal of the eidetic reduction is to seize upon these features and grasp their essentiality, that is, to achieve eidetic intuition. One example of such an achievement is when, after considering a finite number of drawn or imagined triangle, one comes to understanding that the largest side of any (Euclidean) triangle always subtends the largest angle. As this example shows, eidetic variation and reduction is not a technique peculiar to transcendental phenomenology. Philosophical "thought-experiments" are a type of variational method, though they often go beyond what is intuitively fulfillable and thus are not *phenomenological* variations.[146]

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[143] Husserl explains the method of eidetic variation as a means of seeing pure essences in *Experience and Judgment Experience and Judgment: Investigations in a Genealogy of Logic* (1939/1948), James Churchill and Karl Ameriks, trans. (Evanston, Illinois: Northwestern University Press, 1973), 340-8.

[144] Don Ihde, *Experimental Phenomenology: An Introduction* (New York, N.Y.: G.P. Putnam's Sons, 1977), 36-9.

[145] Beyer, "Edmund Husserl," 2011.

[146] Sokolowski, 179-81. Ihde, in *Listening and Voice*, cites Strawson's supposition of "No Space" world as an example of an "empty intention," a mere (unfulfillable) supposing (31-2). This is a defining commitment of Husserl's phenomenology, going back to the *Logical Investigations* ([1900/1901], J.N. Findlay, trans. [London: Routledge and Kegan Paul, 1970.])—that all possibilities to be considered must *in principle* be intuitively fulfillable (Beyer, "Edmund Husserl").

What is the relationship between the transcendental and eidetic reductions? Merleau-Ponty's brief remarks in the Preface to *The Phenomenology of Perception*[147] suggest that they go hand in hand, though he does not specify how. Nor does the above quoted passage from Sokolowski tell us why a turn to describing pure experience should bring us to look for essences rather than, say, inductive generalizations.

In *Experience and Judgment*, Husserl explains that free variation requires treating the "point of departure" itself as an "arbitrary example," and further that performing the *epoché* is necessary for achieving *pure* essences—for example, that even a free variation on a tone will not bring us the pure *eidos* sound if it is connected to the belief that these sounds must be arbitrary sounds in the world, heard or hearable by us. "Pure" essences, then, must be free of all actuality and world-belief. Even ordinary imagining and variation, for Husserl, still "cling to actuality" in that, in every act of these, the actual world is co-posited.[148] Thus, being conscious of world-belief and putting it out of play is necessary for seeing pure essences generally, not just those pertaining to intentional experience.

The root word for 'reduction' is '*reducere*,'—"leading back to," or "returning." In Husserl's usage, 'reduction' signals a return from the objects of experience to the experiences in which they are given.[149] The natural attitude is partially characterized by the thesis of the natural standpoint, which already belies a set of convictions about what consciousness must be. According to this thesis, consciousness is one object among others. The thesis itself is an outgrowth of the natural attitude, which Erazim Kohàk

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[147] Maurice Merleau-Ponty, *The Phenomenology of Perception* (Paris: Gallimard, 1945), Trans. Colin Smith (London, U.K.: Routledge and Kegan Paul, 1962), xvi. He seems to present it as apparent that an exclusion of actuality is a turn to essences.

[148] Husserl, *Experience and Judgment: Investigations in a Genealogy of Logic* (1939/1948), James Churchill and Karl Ameriks, trans. (Evanston, Illinois: Northwestern University Press, 1973), 349-51.

[149] Sokolowski, 49.

characterizes as having an "object-directed" orientation.[150] The things we say about experience reflect an object-directed orientation; they are attempts to make our experiences fit into the world posited by the natural attitude. The "return" heralded by the transcendental reduction is a return to lived experience. Phenomenology insists that lived experience has an intelligible structure (intentionality) and that it is the ultimate context of the intelligibility of anything, including the elements of a scientific "explanation" of consciousness.[151]

The object-directed orientation is also an orientation toward extantness and particularity, and thus ordinary talk about experience tends to conceal or obscure the presence of *types* in experience (of *lamp* in my present experience, as something common to the individual lamps in view) prior to their articulation in judgment. In his formative clash with psychologism in *Logical Investigations*, and later in *Ideen I*, Husserl treats naturalism and nominalism as two sides of the same coin.[152] We are aware of, are familiar with and talk about, essence—the "what" of an individual—and consciousness in the natural attitude already operates with eidetic judgments. This is equally true of our awareness of experiences.

The eidetic "return," like the transcendental "return," is a type of recovery enabled by a disciplined avoidance of naïve habits of description. The eidetic reduction calls on us to attend to necessary structures rather than the particular facts that they condition. Together, the reductions bring out something that has been there all along: the inherently intelligible field of lived experience.

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[150] Kohàk, *Idea and Experience*, 24-7.

[151] Ibid, 6, 176.

[152] Ibid, 13-4 and Edmund Husserl, *Ideas Pertaining to a Pure Phenomenology and to Phenomenological Philsoophy*, Book I: *General Introduction to a Pure Phenomenology* (1913), trans. Fred Kersten (The Hague: Martinus Nijhoff, 1982).

4.1.2 The Method

The following are the components of phenomenological method as I will be using it. It will be useful for the reader to keep these in mind when discussing examples in this and the following chapter.[153]

1. Retention
2. Bracketing (transcendental reduction)
3. Description
4. Variation
5. Reduction (eidetic)

Though this enumeration and its elaboration in the following paragraphs suggest an ordered series of discrete steps, phenomenological practice does not really match this impression. (There might be a useful analogy with scientific method in this respect.) Results established by each use of the method must repeatedly be tested and compared, and it is simply impossible to put *all* of our sedimented beliefs and attitudes out of play; often, engaging in phenomenological practice is what brings us to an awareness of these beliefs and attitudes.

Retention: Recall that, according to Husserl, we have an awareness of the past that is distinct from memory. It seems that phenomenological reflection is incompatible with having some of the very experiences we would want to describe—seeing a mug, for example—since one cannot simultaneously have a perceptual experience and suspend belief in actual existence. In perceiving the mug, I take it to be real, and this is one aspect of the experience we want to clarify. In approaching perception, one must first *have* a perceptual experience and then describe it when it is "just-now," in retention. In developing results, one can consult remembered or imagined variations, but description should begin with an experience that is in retention. This having of an experience and shifting to grasp a feature of that experience when it is in retention, essentially attempting

153 This presentation of the method is modeled on the one developed in Harry Reeder, in *The Theory and Practice of Husserl's Phenomenology* (Lanham, Maryland: University Press of America, 1986), 45-57.

to "catch oneself in the act" of having an experience, is at the root of phenomenological practice.[154]

Bracketing: Earlier, I stated that there is a local as well as a global *epoché*. Rather than putting *all* existence assumptions out of play, the local *epoché* brackets particular existence assumptions depending on what is being investigated. For example, description of examples (of a given type or dimension of experience) should not depend on the truth of any existence or correctness claim concerning the contents or objects of those experiences.[155] This step involves setting aside sedimented assumptions and habits regarding the particular type or dimension of experience under investigation.[156]

The remaining steps are *description*, *variation*, and *reduction*. The first of these is to describe the experience. Description is guided by the theory of intentionality as well as the specific dimension of experience one is pursuing. The next step is to *vary* features of the initial example via imagination or perception and to distinguish features that seem to change the experience in some fundamental way from those that do not. The next step, which I am calling *reduction*, is to try to grasp these abstracted features as *essential* structures of the type or dimension of experience being considered.[157]

These last two steps are sparsely elaborated here. I return to them in the next chapter, where the use of this method will be exhibited more clearly. Here, I simply

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[154] As a first qualification of the overall method, I should point out that it is not *always* necessary to start this way. As we will see in this and the next chapter, certain types of phenomenological reflection (specifically those that involve aspect perception) are consistent with attention to present ongoing experience.

[155] Beyer (2011) argues that this local *epoché*, really the *epoché* invoked in actual phenomenological practice, is consistent with content externalism while the global *epoché* is not.

[156] Identifying these assumptions often precedes obtaining examples (that is, retentions of lived experiences), so in a sense it may have been just as accurate to present this and the first step in the reverse order.

[157] As Husserl states, variation and reduction can be confined to seeing a particular essence, or it can be more open-ended (*Experience and Judgment*, 357-9).

highlight phenomenological features of auditory experience and invite the reader to consult his or her own experience.[158]

4.2 Auditory Experience

In the following, I will provide descriptions of perceptual experiences, focusing on the auditory aspect. Each example will be elaborated upon with an eye toward general structures of auditory perception. I intend the style of these descriptions to reflect the way we often talk about (auditory) perceptual experience[159] and, more importantly, what it is like when we *undergo* such experience.[160] Consider the following:

> Sitting outside, I hear a bird chirping as it flies overhead. I lift my eyes and head in order to get a view. I heard and still hear the chirping advance outward and slightly downward. I direct my attention forward and catch sight of the bird further ahead. As it recedes and moves upward, the sound is drowned out by a gust of wind, which I hear on leaves and wind-chimes and which I also feel on my ears and limbs.

As an initial point, I attend to (I *intend*) the bird as it flies overhead, not the chirping sounds. Setting aside concerns about actual existence and prior convictions about what auditory consciousness is, what we primordially (primarily, in the first instance) hear in everyday auditory experience are not, for example, chirping sounds or chiming sounds but birds and chimes. Of course, we are also aware of sound and can make it the special object of focus if we choose, but that does not make it the *theme* or focal object in the experience we are considering. In the first instance sounds disclose ordinary things of

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[158] Reeder, *The Theory and Practice of Husserl's Phenomenology*, 138.

[159] Ordinary language is especially confused, even self-contradictory, when it comes to sound and auditory perception. As with other topics, considerations of ordinary language are useful as beginning guidelines but should not be the ultimate court of appeal. Pasnau argues against putting too much stock in ordinary talk about sounds (Pasnau, "What is Sound?" *Philosophical Quarterly* [49: 169, 1999], 310-11, 315-16).

[160] I will be shifting between using the first-, second-, and third-personal as well as collective pronouns. In each case, it is first-person subjective experience that is under discussion. The reader is either to imagine undergoing the experience being described, to recall or imagine experiences that afford analogous descriptions, or to try to hold a perceptual experience in retention and describe it along the auditory dimension.

experience— we intend *things* and *happenings* involving them (and somehow we do this *through* or *in* hearing sounds), though there can be a new experience in which sound is thematic.[161]

Consider next the following:

> As I walk across the hardwood floor of an old house, I hear and feel creaks in the floor beneath. I hear these sounds as extending outward from my feet. Each creaking noise presents a part or section of the floor, drawing visual attention at each point to a part or section of the surface. I hear parts of the floor and the house (some within view and others hidden from view) at varying distances from my body.

This experience presents an instance of sound bringing the unseen to presence, in this case the area beneath the floor. In this experience, hearing presents me with spatial extension; space is what is hidden from sight and brought to presence in this sounding.

While I feel the surface of the floor (and sense the creaking that I hear) through my feet, I may also hear my feet and (sequentially) the surface of the floor. The sound and the touch both have this "two-sided" aspect in which focus can move freely from one object to the other.

The experience of wind in the first example also shows how sound can make the invisible present. It might seem appropriate to say that we experience the wind only in its effects—in this example, in the sounding of wind-chimes, rustling of leaves, and pressure against my body, including my outer and perhaps inner ear (and, though not mentioned in the example, the seen motion of trees). We perceive only what the wind *does*.

It is more appropriate, though, to say that we experience the wind (itself) in tactile and auditory experience, while in visual experience we only (perhaps *can* only) experience wind as the cause of the motion of distal objects. Whatever else wind is, it is partly *constituted* by the motion of air—it certainly is not the *cause* of air motion. When

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[161] More will be said in the following section concerning the experience between sounds on the one hand and heard things and happenings on the other, as well as sounds as objects of hearing.

wind acts on my body, I have direct tactile awareness of something else moving. Of course, the preceding suggests that we hear distal objects (rustling leaves) as well as see them, and so perhaps much of our auditory experience of wind is only of its effects;[162] but the experience in this example also presents direct experience of air movement by proximal auditory and tactile sensations on or in the ear.

I take the above to be instances of direct (here this means *noninferential*) auditory awareness of individuals, environmental conditions, and spatial characteristics. Compare the above experiences of individuals located at given distances and directions with the following situation:

> You are writing in a notebook set on a wooden table and are interrupted by a distracting rattle. As you look for the source of the sound you see only still, silent objects (stacks of paper, books, a lamp, and a mug). After pushing at the edge of the table and hearing the rattle persist for some time, you gather that the object you are looking for must be relatively light and set unevenly on the table.

From here you can keep moving the table, scanning it until you see the distracting movement, or you can move the table and place your hand on the object that is likeliest to be set in audible motion (the mug). The latter case would rely on touch as a kind of experimental aid, where the heard sound locates the event (the rattling) inferentially rather than by direct location. Here, sound is not heard at the source in such a way that would allow you to locate the source from the sound alone. (In this sort of case the use of hearing *approximates* the use of the sense of smell or of warmth and coolness in searching for an object, where one simply moves about while waiting or responding to an increase in intensity.)

To summarize the points so far, sounds disclose *things*; we hear *events*, *processes*, and *objects*. Further, this disclosure is directly presented in sound and should not be

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[162] Although here, too, I insist that we hear the wind upon the leaves in the same way that we hear a rolling marble on a surface—just as we hear both the round shape of the marble and the texture of the surface (both presented sequentially), we also hear both the air and the leaves and can focus on either as we choose.

considered a matter of inductive inference. Don Ihde argues against what he calls the "sensory atomist" tradition, which takes each sense as an independent system with a set of objects and properties uniquely accessible to it. On this five senses picture, sense-experience (whether hearing, seeing, touching, tasting, or smelling) in the strict sense is modality-specific. Against this model, Ihde argues for the "global sense" of lived auditory experience. As he states, "I hear with my whole body," and the ear is simply the "focal organ" of hearing.[163] He further tries to show (as I have above) that sounds have spatial significance—that we hear directions and distances, surfaces and interiors of things (and that auditory awareness of surfaces is not always sequential, due to the phenomenon of echo).[164]

In citing these as characteristics of sound, we are not talking about what Ihde would call a "reduced" auditory experience or what P.F Strawson referred to as a purely auditory experience.[165] Strawson, assuming such a possibility, insists that correlations with data of other senses is a necessary condition for hearing to be spatial (though he also insists that, with this condition in place, we can detect spatial characteristics "on the strength of hearing alone"[166]). However, reflection should reveal that a reduced visual experience (assuming, as Strawson does, that such an experience is intelligible) would likewise be insufficient for an experience of egocentric space (of distances and directions *from me*). Strawson suggests that the case is different with vision in that the visual field and its objects (color patches) seem to be "intrinsically spatial" in a way that the auditory field and its objects (sounds) are not.[167] It is difficult to see, however, how this

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[163] Ihde, *Listening and Voice*, 44.

[164] Ihde, 61-71.

[165] P.F. Strawson, *Individuals: an Essay in Descriptive Metaphysics* (London, UK: Metheun and Co. Ltd., 1959), 64-5.

[166] Strawson, *Individuals: an Essay in Descriptive Metaphysics* (1959), 66.

[167] Strawson, *Individuals*, 74.

difference, if real, makes it more possible that a creature with a "purely visual experience" can identify objective particulars or have a sense of himself as something distinct from surrounding things.[168]

Ihde insists that in turning to sound and hearing, we attend to a dimension within perceptual experience rather than an isolated or isolable part. A purely auditory experience is an empty possibility—one that is not fulfillable in any perceiving or imagining.[169] The main point against Strawson's supposition of purely auditory experience is that excluding any connection with touch and kinaesthesia is inconceivable for both auditory and visual experience, for it amounts to excluding any experience of the body. The upshot might be that a multiple and integrated sensory access is required for any awareness of bodies or of the body.

4.3 Theories of Auditory Perception

We now turn to consider accounts of sound and of the objects or contents of auditory experience.

Strawson's *Individuals* contains an early and well-known discussion of sound and auditory experience. The context in which Strawson turns to consider the notion of a purely auditory experience and the world represented is his discussion of our awareness of objective particulars. Strawson asks whether it is necessary that a framework allowing for the distinction and reidentification of particulars has material (spatio-temporal) bodies as its basic particulars. This leads to the question of whether creatures lacking spatial awareness and possessing only temporal awareness (Strawson adopts the Kantian expression 'inner sense') would have a scheme for identifying (that is, distinguishing and

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[168] Another point, that color patches occlude one another more clearly than auditory objects (sounds) do, seems clearly false, given that a purely visual experience would (like a purely auditory experience) exclude any experience of touch or the body and thus any possibility of walking or reaching out.

[169] Ihde, 31-2.

reidentiying) particulars. In thinking about what such creatures would be like, he concludes that excluding all sensory experience aside from auditory experience would result in the kind of scheme he wants to consider—a scheme corresponding to a "no space" world.[170]

Concerning whether such creatures would have a way of (or have use for a way of) identifying objective particulars, Strawson's discussion is inconclusive.[171] Important for the present discussion is that he assumes a sensory atomist picture and denies to sounds any "intrinsic" spatiality. On both counts, more recent discussions have found him to be mistaken. Further, Strawson's view seems to be that sounds are the objects of hearing, and his discussion (particularly as regards whether one with purely auditory experience can meet the criteria for a non-solipsistic consciousness) suggests a further commitment to viewing sounds as having only a temporal location in the stream of conscious experience (thus as being "internal" objects).

As noted, Ihde objects to the model of sensory experience Strawson assumes (of the five senses as discrete systems, each working in isolation from each other and being set over distinct sets of qualities) as well as to the supposition of a purely auditory experience as a *mere* (empty) supposition. Ihde's phenomenological points concerning spatial hearing and the unity of perceptual experience in general (the latter is what Ihde refers to when he talks about the "global sense" of lived auditory experience) are also made in more recent philosophy of sound and auditory experience.

Concerning the spatiality of hearing, some philosophers have taken the phenomenological feature of locatedness to place constraints on theories of sound and auditory perception. Casati and Dokic (dividing theories of sound into proximal, medial,

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[170] Strawson, 65-6.

[171] He suggests that a master sound might serve as an analogue to position in space, and pitch fluctuations therein as an analogue to movement through space (a type of change along a nontemporal axis.) (Ibid, 74-7.)

distal, and a-spatial theories) claim that a distal theory of sound is necessary if we are to avoid an error theory concerning auditory experience—if sounds normally seem to be distally located, then a proximal, medial, or a-spatial theory is committed an error theory.[172]

Similarly, Robert Pasnau and Casey O'Callaghan both argue against the identification of sounds with sound-waves on phenomenological grounds.[173] The key phenomenological claim in both arguments is that sounds are usually heard as being at stable distal locations. If this is the case, the argument goes, then either the view that sounds are sound-waves is false or our auditory experience is "systematically illusory with respect to the perceived locations of sounds."[174]

Pasnau criticizes what he calls the "standard view"—that 1) sounds are the objects of hearing, and 2) sounds are qualities of the medium rather than of sounding objects. His critical discussion mainly concerns the second thesis.[175] The standard view, Pasnau, argues, is incoherent because it attributes an error theory—auditory experience, on this

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[172] Casati and Dokic also draw attention to nonegocentric spatial features disclosed in auditory experience. We can hear the "constituting matter" and "internal structure" of sources (for instance, by hearing them sound, or by shaking or knocking them); further, they argue, auditory streaming (the ability to hear distinct simultaneous sounds and sound sequences) is necessarily spatial. (Robert Casati and Jérôme Dokic, "Some Varieties of Spatial Hearing," in Casey O'Callaghan and Matthew Nudds, eds., *Sounds and Perception: New Philosophical Essays* [New York, NY: Oxford U Press, 2009], 97-110; 97-8, 103-6.

[173] Casey O'Callaghan, "Sounds and Events" (in Casey O'Callaghan and Matthew Nudds, eds., *Sounds and Perception: New Philosophical Essays* [New York, NY: Oxford U Press, 2009], 26-49, 28. Robert Pasnau, "What is Sound?" in *Philosophical Quarterly* 49: 196 (1999), 309-324.

[174] O'Callaghan, "Sounds and Events," (2009), 28.

[175] Robert Pasnau, "What is Sound?" (*Philosophical Quarterly* 49:196 [1999], 309-324). Hylas argues for the standard view in Berkeley's *Three Dialogues between Hylas and Philonous* George Berkeley, *Three Dialogues Between Hylas and Philonous* (Robert Merrihew Adams, ed.) (Indianapolis, Indiana: Hackett Publishing Group, 1797/1713), 17.

view, is systematically illusory in (normally) presenting sounds to be located right around their sources.[176]

In the course of his argument Pasnau invokes a distinction (cited in the previous section) between locative and non-locative sensory experience. Comparing the senses by way of analogy with the *HOT/COLD* game, Pasnau argues that the use of sound is more like seeing than it is like smelling or sensing by heat and cold, even if it is not as distinct as seeing.[177] Inferentially mediated location by hearing, such as in the last example discussed in the previous section, should not be taken as a model of auditory experience. Hearing is a *locative* sense; even in this example the heard sound is localized, though insufficiently.

Pasnau holds that sounds are qualities of sounding objects. In "What is Sound?" he does not consider alternatives to the view that sounds are properties of some sort. His discussion proceeds by consideration of the standard view that sounds are the objects of hearing and that they are properties of the surrounding medium (together with the assumption that sounds are properties of the external world[178]). After presenting the error objection, he considers the option of retaining the view that sounds are in the air while denying that sounds are objects of auditory experience. On this view, sounds would be the medium through which we hear ordinary things; this is counterintuitive, however, since the sound we hear and the objects we hear through them would be in two different places. It is more natural, Pasnau claims, to hold that listening to an object just is

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[176] Pasnau, 312 and 314-5.

[177] Ibid, 313-4.

[178] Pasnau claims that an error theory of hearing based in a "subjectivist account" of audible qualities is neither motivated by nor available to the standard view as he has formulated it (315). At the outset of his discussion, he announces an assumption to the effect that subjectivism about sounds and other sensible qualities is false—that these qualities are "features of the external world" rather than "intrinsic features of sensory experience"—remarking that only philosophers (and very few of them at that) accept such a view and further that, even granting subjectivism, we can still ask about the "external counterparts to the internal quality of sound" (309).

listening to the sound it *has*, and that the sound is located where the object is.[179] He further argues,

> If we do hear sounds, and if sounds are qualities of the air, then it is hard to explain how, in virtue of hearing those sounds, we also manage to hear the objects that make the sounds. It seems implausible, at best, to suppose that sounds are in the air, and that we hear these sounds, and thereby indirectly also perceive the objects that make the sounds. Can we really justify such a tangled account, when we might instead simply conclude that sounds, like colours, are the properties of the objects we perceive?[180]

These considerations point to advantages of Pasnau's property view (and other views holding that sounds are properties of distal bodies). The first is that it captures the apparent intimacy of sound and source in auditory experience. Further, property views offer a unified account of sensible properties and their bearers, and they straightforwardly handle the issue of how we hear sources in virtue of hearing sounds.[181]

The first and third advantages are preserved in O'Callaghan's mereological theory (presented further below), which concerns the audible relation between audible sounds and audible sources. The second is a source of weakness for the property view because sounds do not seem to be like other sensible properties. First, since they perceptibly bear sensible qualities such as loudness, timbre, duration and pitch, sounds are concrete individuals rather than properties. Second, sounds (unlike colors) are perceptibly identified in terms of changes in audible features over time; they are thus event-like.[182]

Further, unlike colors, sounds are heard as particulars rather than as repeatables. 'That (individual) sound,' in most contexts of use, is ambiguous in a way that 'that (individual) color,' in most contexts of use, is not. 'That individual color,' in most

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[179] Pasnau, 317.

[180] Ibid, 317-8.

[181] O'Callaghan, "Hearing Properties, Effects, or Parts?" *Proceedings of the Aristotelian Society*, Volume CXI, Part III, 2011 (at http://ocallaghan.rice.edu/research/papers/ocallaghan-2011-Hearing.pdf), 2-3.

[182] Ibid, 3-4, 5.

contexts, picks out a repeatable rather than a particular (if it picks out a particular, then there is likely a contextual indication of what sort of particular—which red *thing*—is being picked out), while 'that individual sound' may pick a collection of audible qualities (in musical contexts, we are perhaps likelier to refer to individual sounds as "times") or something more like a *particular occurrence*. Sounds, O'Callaghan urges, are normally thought of and talked about as "distinct, countable items," "tokens rather than types," and this norm is grounded in auditory awareness (of *that sound* versus *that color*).[183]

O'Callaghan's view is that we hear sounds and sound-sources and that audible sounds are heard as constitutive parts of audible events.[184] This account of the audible relation between sound and source is a version of the naturalized sense data theory originating with G.E. Moore and rehabilitated by José Luis Bermúdez.[185]

Part of the naturalized sense data theory is that sense data are bits of the external world—they are "out there" as facing sides of material objects. These sense data are objects of immediate perception, while the things we take ourselves to be in perceptual contact with are objects of mediated perception—we perceive things *in virtue of* perceiving their facing sides. However, Bermúdez claims that *direct* perception is not to be conflated with *immediate* perception.[186] While we perceive physical things mediately (in virtue of perceiving sense data immediately), we can nonetheless perceive them directly, where direct perception of a thing is a matter of being able to identify that thing demonstratively. In Bermúdez's presentation,

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[183] Ibid, 4.

[184] O'Callaghan, "Hearing Properties, Effects, or Parts?" 2.

[185] Jose Luis Bermudez, "Naturalized Sense Data," *Philosophy and Phenomenological Research* (61:2, 2000), 353-74. It is significant that Bermúdez intended his theory to apply solely to non-hallucinatory visual perception (354).

[186] Ibid, 355-6

> A *immediately perceives* Q if and only if A perceives Q and there is no R such that A perceives Q in virtue of perceiving R,

and this implies that

> If A *mediately perceives* Q, then there is an R such that A perceives Q in virtue of perceiving R.

If there can be direct perception of Q and perception of Q is in virtue of perception of R (a sound), then the most plausible relation in which R can stand to Q among the alternatives is that of being a mereological part.[187]

For O'Callaghan sounds are audible parts of more encompassing events (such as vibrations and collisions) in much the same way that facing surfaces are visible parts of more encompassing objects. Sounds function as the auditory surfaces of spatio-temporal events. They are objects of immediate perception because they determine how an event appears auditorily, and hearing them enables mediate (though direct) perception of sources, including their locations, qualitative characteristics, and their distinctness from audible surroundings.[188]

A component of O'Callaghan's view relevant to points in the previous and next chapters concerns an apparent disanalogy between hearing sources in virtue of hearing sounds and seeing objects in virtue of seeing their facing surfaces. With a visible object, the nonvisible parts can be brought into view by walking around it; on the other hand, some of the unheard parts of an audible occurrence (such as smoke from an explosion) are *in*audible and cannot be brought into earshot. Such a possibility seems to be required for the perceptual experience as of something including more than what is immediately given. O'Callaghan's response is in terms of multimodal perception: the possibilities for perceiving the source are not restricted to hearing alone, and this fact shapes the experience of hearing it. He notes that this response requires that "auditory experience

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[187] Ibid, 365-70.

[188] O'Callaghan, "Hearing Properties, Effects, or Parts?" 21.

shares objects with other modalities" and that "hearing as of something with [e.g.] visible features … affects auditory perceptual experience."[189]

The mereological view just outlined allows for attending to sound itself, since one can attend to a part without attending to the whole of which it is a part. Thus, this view allows for acousmatic listening while binding the sound to the source as a constitutive part of it. Further, the emphasis on multimodal perception connects with points raised in the previous chapter concerning non-auditory aspects of musical experience. If perceiving music is multimodal, there is the possibility of explaining the experience of melodic movement along the same lines suggested earlier, since there is a phenomenal difference made by having seen *and* heard a certain kind of action or movement in the past to the experience of only hearing an instance of that kind of action or movement. Further, the experience of rhythm discussed in the next chapter is one that is in principle accessible to every sense-modality and is, in many cases, a multimodal perception of unified features of actions and movements.

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189 Ibid, 23-4.

CHAPTER 5

THE EXPERIENCE OF RHYTHM

The primary focus of this chapter is the experience of meter and rhythm. I first characterize rhythm and meter before discussing the issue of musical time. I then outline variational method before applying it to a small set of examples and developing general structures of rhythm and musical rhythm.

While sound (conceived of as tone) is an important part of what we think of as music, rhythm, which is limited neither to the experience of music nor to the experience of any sound, is nonetheless closer to the essence of music.[190] Out of the triad of rhythm, melody, and harmony, rhythm is the most fundamental, and the only essential, component of the musical experience.[191]

It is the most fundamental component because melody, the only other viable candidate, can only occur with rhythm. One *can* say that rhythm (even in visual or tactile presentations) always occurs with melody (in a *very* extended sense of 'melody'[192]), since rhythm cannot simply be experienced alone; it needs sensible material. If the

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[190] Gurney notes that the sense of rhythm "is in no way confined to alliance with sound …" (Gurney, *The Power of Sound*, 135); however,

> … among the senses which take cognisance of rhythm, there is a very wide difference in respect both of keenness of apprehension and of power of appreciating complexities. … even in following rhythm of [the] most simple, the sense of regularity in a series of *flashes*, or *touches* is far less cogent and vivid and far less easy to recall than in a series of *sounds*" (Gurney, 135).

Thus, I take it that Gurney would agree that the "alliance with sound" thus described, though natural, is not essential to the experience of rhythm.

[191] Hamilton (citing Christopher Hasty) agrees with this assessment in stating that "music could be defined as *the rhymicization of sound*" and that "rhythm is the one indispensable element of all music" (11-2).

[192] Though not an impossible one. The conceivability of non-auditory melody depends on the possibilities of variation afforded by other sense modalities (specifically, if anything can function analogously to pitch space).

concept of melody is appropriately extended, I would agree that it is the essential component (since it would then be distinguished from rhythm only abstractly). However, the notion of melody is tied closely enough to sound, specifically to sounds as tones, to make such a use of 'melody' strained.

That harmony is not a viable candidate can be easily shown. Harmony can be understood *either* as simultaneously sounding tones or chords *or* as harmonic relationships among tones. (In this latter sense, one might think that melody presupposes harmony.) In the second, abstract sense, harmony alone is not even a musical entity but is rather a static set of tonal relationships. As a musically active force, this system of relationships can only make itself known in the unfolding of musical events. Harmony in the first sense is an ornament that we can easily imagine music without.[193]

Rhythm is the only essential component of the musical experience because, while there is no clear line between musical and nonmusical experience, experience becomes musical when the rhythmic aspect (the dynamic profile) of what is experienced becomes thematic and guides listening and performance.[194]

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[193] Again some measure of agreement (on similar grounds) can be found in Gurney:

> It is true … that, owing to the development of … Harmony, coherence of a sort can be supplied to successions of notes even in the absence of distinct rhythm. But the point and importance of music, of getting into the blood and clinging to the memory, are so dependent on the certain guidance of the ear in its cardinal expectations, that occasions of which this can be dispensed with must be comparatively rare … For all vivid pleasure, for any individual and possessing motive of whatever sort, this definiteness of time is (save in the most exceptional cases) as truly essential as variety of pitch … without it a prolonged succession of the most beautiful sounds is no more melody than a block of Parian marble is a statue (Gurney, 155).

In the same passage, he also claims that distinct rhythm is indispensable to "distinctness and completeness of melodic structure." (It is important to note that 'rhythm' is being used here in the sense of melody minus pitch; when referring to repetitive stimuli (appropriately spread apart in time) he speaks of "strict rhythm." (Gurney, 128-9, 139).

[194] While this feature of my view does give rise to a distinction between musical and nonmusical sound art (though I believe it is a distinction more of degree than of kind), it makes my view more generous than restrictive concerning which experiences count as musical.

In what follows, I seek to identify and describe essential structures in the experience of rhythm. Whether or not the reader agrees with me that tonality and audition are inessential to musical experience (and that, in principle, it is possible for beings without a sense of hearing to engage in a musical practice), I hope the reader comes to see a common set of structures in the experiences to be considered—at the very least, some set of essential structures of paradigmatically musical experience that can be accessed and described without specific reference to auditory experience.

5.1 Preliminary Characterization of Rhythm

Defining or characterizing rhythm in advance is very difficult. In ordinary language, the term is often used to describe repetition or periodicity. Of course, rhythm does not require repetition, and musicians are likelier to use the term 'meter' to describe periodicity and regularity. A rhythmic phrase, like a melody, can extend indefinitely and without repetition. Speech is often described as rhythmic, and even a gestural hand movement—a single occurrence that, unlike speech, does not involve a metrical grid—has a kind of rhythm to it. We can extend these observations to how a person walks or how a train sounds when passing by and more generally to movements of physical objects. A ball that is thrown, following its trajectory until it hits the ground, also has a kind of rhythm. More precisely, in perceiving the unfolding of the occurrence, that unfolding (and thus the occurrence) has a certain dynamic profile; this profile,[195] whether it characterizes movements or patterns of movements, is what I understand by rhythm.[196]

The reader might be inclined to say that what is "rhythmic" in these examples is really the perceiver's (or the actor's) conscious engagement of an event or process. I

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[195] Dynamic profile is a feature of all occurrences. (So to perceive something as static is to perceive it according to its dynamic profile.

[196] Since audible sounds are event-like, they are always rhythmic (whether or not they undergo alteration or change in the course of their unfolding).

would respond by pointing out that ordinary language seems more inclined to ascribe rhythm to the actions themselves, especially when discussing human actions and gestures. More importantly, the *experience* of rhythm presents it as a feature of the very actions and events perceived—the dynamic profile of a given movement is part of what we are conscious *of* in perceiving movement.

Even if these points are granted, it might be tempting to see such rhythm as the result of a *projection* of the sort proposed by Hume (on some readings) when discussing our notions of cause and effect. Whatever the eventual gloss on the examples turns out to be, the following discussion requires careful attention to what the experience of rhythm itself shows and a relaxation of our natural tendency to provide explanations for features of experience or otherwise make them fit within the natural attitude.

My starting notion of rhythm draws on Christopher Hasty's opening characterization in *Meter as Rhythm*,[197] though it is narrower in application. Hasty seems to hold that *anything* that "holds potentiality for rhythmic experiences,"[198] even a painting or a block of wood or a furnishing arrangement, counts as rhythmic. While it is true that even the visual perception of mute, stable objects involves rhythmic eye movement, there are important differences between these experiences and the experience of objectual movement and change (allowing that both sorts involve processes). Surveying aspects of a static object or arrangement, on the one hand, and coordinating perceptual activity to an ongoing event or process, on the other, both involve "participation and sympathy" with what is being observed, but I confine talk of "rhythm" to experiences which present consciousness with some sort of objectual change. Thus, the way in which rhythm is "in" a painting is different from the way in which rhythm is in an event or process.

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[197] Christopher Hasty, *Meter as Rhythm*. (New York, NY: Oxford University Press, 1997), 10-13.

[198] Ibid, 12

Meter itself is fairly difficult to characterize. Normally, it is denoted by time-signature, though it should not be identified with time-signature. It is often communicated or explained by counting along with a recording and emphasizing the "one"—"ONE, two, three, four, ONE …"—which music theorists describe as metrically strong or accented beat relative to the others. Meter (which always involves metrical accent) is the structure of regularity and determinacy within which rhythmic patterns play, and they can play with or against metrical accent.[199] There is a sense in which meter is never heard—"one" retains its structural role (its "place"), whether or not it is marked by a note or a drum hit, and if there are audible events on each beat we hear a rhythmic pattern, not a meter. While it can be difficult to explain the concepts of time-signature and meter to a nonmusician, everyone who listens to recorded music or watches music performances and sings, dances, or simply nods or taps has an understanding of meter.

London suggests that a more useful question than "What is meter?" is the question, "What is meter for?" The first answer he suggests—"To help you play rhythms properly"—clearly gives way to the more general view that meter underlies our very ability to hear rhythm.[200] The question of what meter is then becomes the question of what it is that enables listeners to hear rhythms properly.

Another useful question to ask concerning meter is whether it is in the music or in the listener. London (who holds that meter is the mode of attending and rhythm is that to which we attend) clearly thinks that meter is in the listener while rhythm (structured durations of sounds and silences) is more or less in the music. On one of Hasty's formulations, meter is an aspect of rhythm.[201] His talk of meter as projection presents

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[199] Hamilton, *Aesthetics and Music*, 130-1.

[200] Justin London, *Hearing in Time: Psychological Aspects of Musical Meter* (New York, N.Y.: Oxford U Press, 2004), 3-4.

[201] Hasty, xi, 5.

meter as a "process," though it is unclear whether he is talking about a mental process separate from what is attended to or a component process in what is being heard. One of my aims in what follows is to clarify this question.

5.1.1 Rhythm and Objectual Time

Rhythm, then (at least as I am using the term), neither is nor implies periodicity, regularity, or repetition. Rhythms can be metrical or non-metrical. In my usage, events, processes, and movements have rhythm, while stationary entities or arrangements do not.

Events, processes, and movements have their own time. In perceiving an event or process, we have an experience of duration that cannot be conceived as separate and distinct from the very event or process we perceive. Rhythm presents us with a qualitatively filled duration rather than a duration that is empty, homogenous, and separate from the rhythmic process itself. We perceive it as having *its* time, non-relationally with respect to surrounding objects or events; we see changes or movements in it as non-relational characteristics. Because this time is perceived to be *of* the event or process, I refer to it as *objectual* time.[202]

Where ongoing events and processes are involved, we *synchronize* our perceptual and bodily activity with them (in a sense, we move in sympathy with them).[203] This type of synchronizing attunement—the coordination of internal time with the objectual

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[202] A dramatic example of objectual time is provided in music. Each song has its own ("intrinsic," non-relational) time. It is not that "time" (that is, clock-time) simply "goes faster or slower" or that it is more difficult to "keep track of time" when listening to music. What is important in this regard is the feeling of incongruity one has when listening to a song and suddenly seeing the stereo display seconds passing by.

[203] Hasty makes similar observations. For examples: "Although the rhythm of an event is but one of many properties we might ascribe to the event, we cannot abstract rhythm from the wholeness of the event or from the event's particularity;" and a paragraph earlier he states, "Something in each case [of the experience of rhythm] attracts and holds our attention. We follow the event or observe the object with interest. Rhythm in this sense implies participation and sympathy. We are drawn into the object or event in order to experience 'its' rhythm" (Hasty, *Meter as Rhythm*, 12).

time[204] of an ongoing process—is most clearly involved in the perception of pulsed and metrical rhythms discussed in Section III.

5.2 Musical time

In this section I will argue against a certain conception of musical time and suggest that the concept of objectual time is sufficient to describe or explain whatever is of interest in "musical time."

My discussion is informed by the phenomenological framework introduced in Chapter One. This framework has points of contact with other frameworks for discussing the experience of temporal objects and processes, some of which have already been discussed. As noted, Levinson's notion of quasi-hearing is, roughly, the auditory/musical living present. Much of Hasty's discussion of "projection" transposes straightforwardly to the language of protention, retention, and primal impression. The following strongly suggests such a transposition:

> If the new beginning is a cause of there being a determinate end for the earlier event, and if this end is a condition for the durational determinacy of this event, then the new beginning can be said to participate in the creation of the first event's determinate duration. But the new beginning does more than end the presence or becoming of the first event. It also makes this event presently past and, in so doing, *necessarily* (simply for there to be an awareness of succession) involves this past event in the now of the present event.[205]

It is clear that, for Hasty, notions like retention and protention are unavoidable when describing the experience of meter. The projection of a mensurally determinate duration, itself a unified conscious act, involves an intricate interplay of retended and protended

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[204] 'Objectual time' is distinct from objective time. The latter is "world" or "clock time," which I want to distinguish from objectual time. A different use of 'objectual' (though it is related and the topic is important for the present study) is involved in Bayne's and Chalmers's talk of *objectual unity*—phenomenal experience often provides us with a robust sense of sensory qualities within and across sense modalities as being *of* the same object, even of the same feature of an object. Tim Bayne and David Chalmers, "What is the Unity of Consciousness," in Axel Cleeremans (ed.), *The Unity of Consciousness: Binding, Integration, Dissociation* (Oxford, 2003).

[205] Hasty, 93.

elements and a determination of their respective roles within the structure of the living present (in Hasty's terms, their "meaning" or "being" for the present experience).

London describes meter as a form of *entrainment*, a type of attending that involves synchronizing bodily or perceptual activity with repeating events in the environment. London states that entrainment is an aspect of our general evolved ability for successful prediction of and interaction with ongoing events in the environment, and *metric entrainment* is a specific form aimed at finding patterns of temporal invariance in the musical environment.[206]

When it comes to the actual, real time experience of meter, London's description is static and third-personal. Hasty, by contrast, provides rich, dynamic first-personal descriptions of the projective process. Though Hasty accuses London (along with Lerdahl and Jackendoff, whose framework is followed by London) of failing to "take to time seriously,"[207] their disagreements do not strike me as fundamental. It is easy to see entrainment as the sort of synchronization of internal and transcendent time (the latter understood as objectual time) discussed at the beginning of this chapter. (London's framework is actually close to the one assumed in the discussion of examples later in this chapter.)

Langer, in addition to distinguishing between lived time and objective time, also wrote about music's enactment of a "virtual time." She cites Basil de Selincourt's observation that music "suspends ordinary [clock-] time and offers itself as an ideal substitute,"[208] and speaks of music as providing an image of lived, experienced time—

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[206] London cites Jeffrey Pressing's hypothesis that "*Musical rhythm arises from the evolved cognitive capacity to form and use predictive models of events*" (quoted in Ibid, 5). Pressing also suggests that the "time-scale" range for the perception of metrical rhythm corroborates this hypothesis (Ibid).

[207] Christopher Hasty, "Just in Time for More Dichotomies—a Hasty Response" (review-essay response), in *Music Theory Spectrum* 21: 2 (1999), 275-93, 279.

[208] Susanne Langer, *Feeling and Form: a Theory of Art Developed from* Philosophy in a New Key (New York: Charles Scribner's Sons, 1953), 109-11.

> The passage of life that we feel as expectations become "now," and "now" turns into unalterable fact. Such passage is measurable only in terms of sensibilities, tensions, and emotions; and it has not merely a different measure, but an altogether different structure from practical or scientific time … Inward tensions and outward changes, heartbeats and clocks, daylight and routines and weariness furnish various incoherent temporal data, which we coordinate for practical purposes by letting the clock predominate. But music spreads out time for our direct and complete apprehension … *Music makes time audible, and its and form and continuity sensible*.[209]

It is a correct and important observation that the sense of passage that we get from music is distinct from our sense of clock time, a "one-dimensional, infinite succession of moments;" the former is more akin to our "direct experience of time," from which the latter is abstracted.[210] It is not clear, however, why we should think that the time music evokes is "virtual," as Langer clearly states:

> The semblance of this vital, experiential time is the primary illusion of music. All music creates an order of virtual time, in which its sonorous forms move in relation to each other—always and only to each other, for nothing else exists there. Virtual time is as separate from the sequence of actual happening as virtual space from actual space … There is no supplementing of one sort of experience by another.[211]

The time of a piece of music, then, is like the space between two elements of a picture. Just as the actual space between the outlines on the canvass is suspended in favor of the pictured space between two objects, and just as the space of the studio is, in a sense, interrupted by the space that is created by the painting, so the actual durational and successive relationships among sound events is suspended in favor of their specific unfolding and relation to each other in musical time, which are entirely separate from actual, ordinary events.

De Selincourt himself noted a disanalogy between the two cases. Whereas virtual space has clear boundaries such that I can have a simultaneous experience of pictorial

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[209] Ibid, 109-10.

[210] Ibid, 111.

[211] Ibid, 109.

space and the space surrounding the picture, the "ideal" time of music "demands the absorption of the whole of time-consciousness; our own continuity must be lost in that of the sound to which we listen …"[212] However, as Alperson points out (and as the previous sections attest), such synchronized attention to unfolding unities occurs in everyday experiences like hearing a train pass or hearing a sentence; but we certainly wouldn't say that ordinary time is "suspended" in these experiences.[213]

The following rich passage (again from Langer) might suggest a reason for claiming that the time of music is analogous to pictorial space:

> The phenomena that fill time are *tensions*—physical, emotional, or intellectual. Time exists for us because we undergo tensions and their resolutions. Their peculiar building-up, and their ways of breaking or diminishing or merging into longer and greater tensions, make for a vast variety of temporal forms. If we could experience only single, successive organic strains, perhaps subjective time would be one-dimensional like the time ticked off by clocks. But life is always a dense fabric of concurrent tensions, and as each of them is a measure of time, the measurements themselves do not coincide. This causes our temporal experience to fall apart into incommensurate elements which cannot be all perceived together as clear forms. When one is taken as parameter, others become "irrational," out of logical focus, ineffable. Some tensions, therefore, always sink into background; some drive and some drag, but for perception they give *quality* rather than form to the passage of time …
>
> The direct experience of passage … is, of course, something actual, just as actual as the progress of the clock or the speedometer; and like all actuality it is only in part perceived, and its fragmentary data are supplemented by practical knowledge and ideas from other realms of thought altogether. Yet it is the model for the virtual time created in music. There we have its image, completely articulated and pure …[214]

Thus, maybe it is like so: subjective time, rather than being a unified (and unifying) field, presents us with a multiplicity of tensions and relaxations, ebbs and flows, each vying for "logical focus." Music is able to impose order on this inner chaos, presenting us with a

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[212] Quoted in ibid, 110.

[213] Philip Alperson, "'Musical Time' and Music as an 'Art of Time'," *Journal of Aesthetics and Art Criticism* 38: 4 (1980), 407-17, 411-2.

[214] Ibid, 113.

picture of something qualitatively *like* subjective time but stable enough to undergird and organize durable forms, setting them into clear relations (perhaps musical meter, being "like" clock time, allows for the experience of the "single, successive organic strains" that Langer mentions as never occurring in actual subjective time). Thus, the time that music presents is a kind of make-believe time, one that we have must engage to the exclusion of everything else if we are to experience the musical unfolding of events.

However, this does not at all show why musical time is "make-believe." Essentially, the line just rehearsed is that the time of music is only the *image* of subjective time, not the real thing, because in contrast to our normal run of subjective temporal experience, musical experience engages our subjective time-sense uniquely and presents it with form and organization. This does not show why musical time is "make-believe" or even show that it is such a radical departure other types of experience (consider nature sounds or, again, the sound of a train). Alperson notes that the same description Langer gives can characterize subjective time, for "both 'times' are emergent qualities which arise in the perception of a succession of tensions and resolutions …" The emergence of temporality in the one case does not seem different from the other. Further, Alperson says, it does not help to appeal to the uniqueness of musical forms or the fact they are made, for this only describes a difference in material and production rather than in temporal experience.[215]

The notion of musical pulse and meter as a type of clock time setting for music might suggest a different route for considering musical time to be an image of time (and music to be an art of time[216]). Perhaps musical meter is a type of play-acting—we

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[215] Alperson, "'Musical Time' and Music as an 'Art of Time'," 413-14.

[216] Since, as Hamilton (*Aesthetics of Music*, 120) points out, time is not a medium but a dimension, specifying what it means to say that music is an art of time requires more filling in than saying it is an art of sound. (Note that emphasizing music's nature as a temporal art is simply acknowledging the importance of temporal features of the medium and organization; it does not commit one to figuring what sort of "use of time" is unique to music.) Alperson objects to the characterization of music as an art of time (Alperson, 408-10).

pretend that something is beginning, continuing, and ending, keeping a sort of make-believe time. Thomas Clifton's refers to this kind of make-believe as evident in sporting activities. For Clifton, this phenomenon serves to illustrate a general feature of our experience of time in both musical and nonmusical contexts—that we *enact* it.[217] In discussing music, Clifton contrasts "the time a piece *takes*" with "the time which a piece *presents* or *evokes*," the former understood as ordinary lived time and the latter as musical time.[218]

At the beginning of his extensive study, Jonathan Kramer complains that musical time has been neglected, notwithstanding a massive literature on rhythm and meter by music psychologists and theorists.[219] Rhythm and meter, he says, are "notated parameters" along with pitch, whereas "motion, continuity, progression, pacing, proportion, duration, and tempo" are much more difficult to describe yet equally part of musical time. He approvingly cites Lewis Rowell's distinction between the quantities and *qualities* of musical time—the latter being "vital dynamic and kinetic properties" which are the correlates of "the subtle impulses, feelings, and intuitions by which the temporal structure of music is created and perceived."[220]

Kramer is certainly correct in saying that an understanding of musical time is central to the enterprise of understanding music. However, I hope it is clear by now that adequate description of rhythm and meter already contains much of what Kramer points to as the more challenging aspects of musical time. I am also confident that my notion of objectual time and my discussion of the experience of meter can do much of the

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[217] Clifton, *Music as Heard: A Study in Applied Phenomenology*, 55.

[218] Ibid, 81-2.

[219] Jonathan Kramer, *The Time of Music: New Meanings, New Temporalities, New Listening Strategies* (New York, N.Y.: Schirmer Books, 1988), 1-2.

[220] Ibid, 1-2, 81-2.

descriptive work of Kramer's (excessive) distinctions between the sorts of time involved in the development of a given performance or recording.

Kramer places many features of music under the rubric of musical time, including progression (as opposed to mere succession) in musical events and beginning and ending (as opposed to starting and stopping).[221] Ultimately, we might ask whether everything Kramer discusses presents a unified phenomenon.[222]

In addition to getting at something important about musical time, Alfred Schutz's characterization of music as the sharing of inner time[223] (between producer and producer, producer and hearer, or hearer and hearer) also says something important about the experience of musical rhythm. One characteristic of the experience of musical rhythm presented in the following section is that in paradigmatically musical contexts the production is heard as an *action* that can be followed correctly or incorrectly. Musical performance is fundamentally a *communicative* act—in performing a musical action, the performer ("simultaneously," in the same act) enjoins the listener to a way of coordinating his inner time with the sound; in so doing he communicates his own temporal experience in producing the sounds.[224] What these pieces suggest together is

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[221] Ibid, 137.

[222] His ambitions for a theory of musical time are set fairly wide; he intends it to characterize music itself. At the beginning of his work he states that "music becomes meaningful in and through time," and further on that the "meanings of music reside not primarily in the emotions … nor in stories or images associated with program music, nor in the inherent beauty of musical sounds … Rather music is meaningful … primarily through time" (1). (Compared to this, my own aims in discussing musical time are more modest. I assert that an essential characteristic of the musical experience is a certain kind of engagement of time-consciousness and consider a limited set of experiences.)

[223] Christine Skarda, "Alfred Schutz's Phenomenology of Music," in F. Joseph Smith, ed., *Understanding the Musical Experience* (New York, NY: Gordon and Breach,1989), 43-101; 64-5, 80-1, and 84-6.

[224] Charles Nussbaum develops Ruth Millikan's notion of pushmi-pullyu contents in his account of musical representation (Charles Nussbaum, *The Musical Representation: Meaning, Ontology, and Emotion* [Cambridge, Mass.: MIT Press, 2007], 95, 98-100). I take Nussbaum's discussion to be helpful in identifying the kind of meaning and communication involved in musical performance, an issue which I intend to pursue in future work.

that musical time is partly characterized as shared inner time (or as the correlate of shared inner time). The points of the next section provide further characterization of musical rhythm and musical time.

5.3 Rhythm

As stated at the outset, rhythm is an essential structure of the experience of movement and change. All perception of movement and change involves coordination of attention with perceived movement, of inner time with objectual time via body movement. The experiences discussed in this section are auditory experiences of rhythm conditioned by pulse or meter, since this is of most interest in a discussion of musical understanding. However, the points should carry over to the experience of nonmetrical rhythms (which also involve attunement to objectual time) and to visual, kinaesthetic, and tactile experience. Again, such experiences are never isolated, and even the somewhat reduced experiences to be considered involve more than audition.

In what follows, rhythm and meter will first be considered in nonmusical contexts. My aim in this initial discussion is to show that rhythm and metrical rhythm are general structures of perception and action, and that the ways in which they structure perception and action are what enable the experience of musical rhythm. What remains from there is to characterize musical rhythm.

5.3.1 The Method of Variation

As noted (in Chapter Three), eidetic variation is central to phenomenological practice. By varying (imaginatively or or perceptually) aspects of a given set of experiences, we uncover essences and correlations within the experiences and highlight their intentional structure. My use of the terms ‘imaginative’ and ‘perceptual’ in distinguishing different types of variations should not be taken too rigidly; similarly for the talk of “noematic” and “noetic” strategies for achieving variations (alternatively, “noematic” and “noetic variations”). Concerning the former set of terms, the point is that varying (in “free phantasy”) some sensible feature within an experience that is in retention (the color or

shape of the mug I just-now perceived) is a different phenomenological procedure from achieving structural variations upon a constant presentation.[225]

The talk of "noematic" and "noetic variation" is adapted from Don Ihde's illustration of phenomenological method by use of multistable figures in *Experimental Phenomenology*.[226] In any instance of "aspect perception" (such as with the "duck-rabbit" figure or the Necker cube) two things can be noted: first, there is variation in how the object is presented or what the object is; second, there is variation in the mode of attending. Shifting aspects can be achieved either "noetically" by adjusting focus or "noematically" by adopting a different take on what the object is.[227]

5.3.2 Beginning Examples

The first experiences under consideration involve what I will be calling *pulses*—sequences of sound-events that are qualitatively uniform and isochronous. One way in which pulse experiences vary is in the sense of propulsion from one onset to the next. Hearing water drops or hammer strikes seems to involve more "buildup" or expectation from event to event than hearing beeps or clicks from an electronic device. The sense of buildup from the onset of one sound to the onset of the next is partly conditioned by how we understand the processes involving those sounds, but such a sense seems to be present in all experience of pulse.

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[225] The latter method is the one Ihde elaborates at length in *Experimental Phenomenology: An Introduction* (New York, NY: G.P. Putnam's Sons).

[226] Ibid. He introduces the corresponding distinction at 87-8.

[227] Two more points on the procedure are worth stating. First, an eidetic variation can either be part of the process of discovery of an essence, or it can serve as an illustration of an essence. What follows are mainly illustrations. Second, some phenomenologists insist on *perceptual* rather than imaginative variations. Again, both are indispensable, but the gist is that if we vary experiences using only imagination and conception, we might be led to miss important similarities and difference. Achieving perceptual variation is more difficult, but it offers a richer, fuller view of essential noetico-noematic correlations. The following is intended to instruct the reader in achieving perceptual variations.

Also conditioning our experience of propulsion (and our general experience of pulse) is how rapidly onsets of events follow one another. Though we may be able to discern separate and equally spaced events in the sound of a sustained telephone ring, we do not in our hearing of it have a sense of propulsion or a *sense* of pulse (even though, according to the definition of 'pulse' given in the previous paragraph, the experience would count as an awareness of pulse). The pulse experiences of interest involve pulses that afford or invite attentional synchronization—what London calls *entrainment*. On the other hand, very slow but steady water drops can mark durations that are too far apart for us to experience them as equal.[228]

Related to our sense of propulsion (though a distinct feature of pulse-experience) is that often, when attending to a pulse, we hear the events as grouped in twos, threes, or fours. In attending to a sequence of repeating single events, propulsion does not always move from onset to onset.

Considering a less reduced experience, when walking (particularly when the destination is well out of view), awareness is structured around the very activity itself. If I attend to this experience and its components (visual, tactile, auditory, and kinaesthetic sensation) as they are lived, I find in the first instance a unified presentation: the footsteps

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[228] The perceptual threshold for pulse experiences is suggested by the work on temporal perception summarized in London's *Hearing in Time* and in Susan Pockett's summary of her findings (in "How long is 'now'? Phenomenology and the specious present," *Phenomenology and the Cognitive Sciences* 2: 55-68, 2203). First, the smallest interval at which we can distinguish the occurrence of two successive onsets rather than one single onset is 2 ms (London, 29 and Pockett, 58-9), while the smallest interval at which we recognize two separate, successive onsets can range from 10 to 20 ms (Pockett, 59-60). Where the onsets differ in pitch, the smallest interval at which we can detect their order (high to low or low to high) is around 20 ms (London, 29).

As an approximation, London suggests that "the shortest interval that we can hear or perform as an element of rhythmic figure, is about 100 milliseconds (ms)" and that "the upper limit is around 5 to 6 seconds, a limit set by our capacities to hierarchically integrate successive events into a stable pattern" (London, 27). London considers this the perceptual threshold for musical meter. London also specifies the threshold for perception of *tactus*—the level of beats that is conducted and at which we naturally coordinate body movement such as foot tapping—(which is closer to characterizing the set of experiences I have in mind) at 200 ms to 2000 ms (London, 31-3).

form a temporally structured sequence to which I will return, but in the meantime note that the sound of the feet on the pavement, the various touch-experiences (particularly the bounce by which I sense my feet and the ground), the movement I feel in my four limbs, and the sight of the footsteps are components of a unified perception of footsteps. I can try to detach a purely visual perception of my foot-motions, but really all I can do is attend to the visual component of my footsteps as (globally, unitarily) perceived. I can thus bring the visual component into focus, but I can't simply "cancel out" the broader unity within which it is placed. In Ihde's terms, I cannot have a "reduced" visual experience. The same applies for attending to auditory, tactile, or kinaesthetic components.[229]

What I attend to, even when I focus on a certain dimension or component, are footsteps, and my attending is a unified act. The temporal structure of the experience will be apparent, whatever dimension of it I am focusing on. How is this awareness structured?

If my walking is in the background of my conscious experience, I will have marginal awareness of a pulse. If it is foreground, I notice that the right and left footsteps seem organized in the way they follow one another, and this organization is exactly mirrored in my attending to them. Was this organization already present in the footsteps and my marginal awareness of them before being made thematic, or did the act of attending "bestow" this organization? There is a difference between willful attending and the kind of attending that simply emerges; thus, sometimes the organization seems to be enacted by a focusing act of attention, while at other times it arises organically within a broader attentional field.

Focusing on the auditory component (and remembering that the other components are not completely severed), I hear a pulse of alternating events differentiated by heard

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[229] Ihde, *Listening and Voice*, 42-4, 61.

location, sound-pattern (clip-clop with one step, clap with the other), sound-quality (higher or lower), and relative loudness. Does this experience have a “one-two-one-two” organization? When walking, at least, such organization, if heard, is a structure of the awareness of alternating events.

If a “one-two” organization is not heard when attending to the sound of the footsteps, there is still a “one-one” or “pulse” organization—each is experienced as tending toward, leading into, the next. This experience, it seems, is bound up with the body’s movement, step to step. Whether or not a “one-two” organization is heard in this experience, my temporal awareness of steps is correlated with consciousness of body-movement.

It should be noted, however, that although I labeled these organizations as “one-two-one-two” or (we might say) “one-one-one-one,” the organization is distinct from and does not involve counting or numerical judgment (though it can be enacted in this way). What we are dealing with are iterated actions-within-a-duration, where the duration involved is not a separate thing from the actions—rather than functioning as container for the step, the duration itself is (qualitatively) weighted . Notice that, by “starting attention over,” I can hear the left footstep as marking the beginning of the process, the right one as a continuation and lead-in back to the beginning, or I can hear the right footstep as beginning. To shift from hearing the left as one to the right as one is not to shift my attention; it is rather to reorganize it.

In each of the above examples of indefinitely repeating audited processes, there is on the noematic side some distinct and recurrent initiation, beginning, or “one” that is the start of the repeating event. Correspondingly, on the noetic side, there is a repeating enactment (sometimes taking the form of emphatic body movement) of an initiation, beginning, or “one” that we might call a sort of “mental accent.” In cases where we understand the repeating sound as part of a larger repeating pattern, there tends to be a more pronounced experience of each interval leading into the next onset. When there is

little sense of propulsion, events still tend to be organized or grouped into twos, threes, or fours. The tendency to hear such groupings in twos or threes, and the ease with which one can switch the organization, is conditioned by the rate of onsets in relation to body movements possible for me.

5.3.3 Variations on metrical rhythm

The next example is a series of qualitatively identical events ('X') with a one-second interval between each onset, with an additional event, slightly softer ('x'), occurring at the "same place" relative to the preceding 'X' onset (rate, or "inter onset interval") is provided in milliseconds):

0	250	500	750	1000	1250	1500	1750	2000	2250	2500	2750
X	x			X	x			X	x		

A natural way to hear this sequence is to hear each 'X,' as a beginning of a sound event with 'x' as its continuation. 'X' and 'x' are heard together as one event. 'x' is heard *with* 'X' continuing or completing the event. 'X,' distinguished by loudness, is "structurally more important" (to use the terms of music theorists and psychologists)—it "heads" the event. As with pulses, repetitive sequences such as these are instantiated in daily sound. Considering what was said above concerning simple pulses, the rate of 'X' onsets relative to bodily movement or perceptual attending affects how the sequence is understood (*noematically*)—the grouping of 'X' onsets and the heard relational structure between 'X-x' pairs. Consider the following:

0	250	500	750	1000	1250	1500	1750	2000	2250	2500	2750
x			X	x			X	x		X	x

On this hearing, 'X' and 'x' are still heard together, but x is heard as an initiation that is distinct from the initiation of the 'X-x' event. We might also hear the repetition of a longer event—'x-----X'—in which case the beginnings or initiations coincide as with the first hearing.

These variations bring out a sense of duration that is distinct from the durations of heard events. (Reflection on the initial examples reveals that this sense of duration is always at work and is a necessary feature of pulse experiences.) The sense of the beginnings of these (mensural) durations is not a matter of qualitative features of the sounds, since either 'X' or 'x' can be heard as beginning; nor is it a matter of what sound appears first, since 'X' can appear first and be heard as a "pickup" into the first 'x' (this is the phenomenon referred to as *anacrusis*). The notation so far reflects (clock) time elapsed, duration between onsets, and phenomenal difference and order. In what follows, I will place an '**.**' under a given sound (or silence) to reflect this distinct sense of beginning and duration and to exhibit variations along this dimension:

0	250	500	750	1000	1250	1500	1750	2000	2250	2500	2750
X	x			X	x			X	x		
.				.				.			
	.				.				.		

The first and second lines correspond to distinct hearings—one in which 'X' is heard as "one" or as beginning a duration and one in which 'X' is heard as leading into the beginning of a duration.

In the hearing corresponding to the second line, which of 'X' and 'x' is heard as more structurally important? On the one hand, 'X-x' can be heard as a unified motion with 'X' heading the event, but in another respect 'X' is heard as leading into (hence as structured by) 'x.' This situation illustrates an important distinction in the psychology of music and music theory—that between "metrical" and "structural accent." Neither of these should be confused with "phenomenal" or "stress accent."[230] Though distinct, the

[230] These are the terms Lerdahl and Jackendoff adopt to distinguish these features of metrical rhythm (Fred Lerdahl and Ray Jackendoff, *A Generative Theory of Tonal Music* [Cambridge, Mass.: MIT Press, 1983], 17). Meyer and Cooper refer to phenomenal accent as "stress," thereby distinguishing it from "accent" (Grosvener Cooper and Leonard Meyer, *The Rhythmic Structure of Music* [Chicago: University of Chicago Press, 1960], 6-8). Musicians often refer to stress or phenomenal accent (rather unfortunately) as simply "accent".

mutual influence of metrical and structural (and phenomenal) accent is subtle and profound.[231] Though I won't be saying much more about the different types of accent *per se*, these points should be kept in mind when considering the next example:

0	250	500	750	1000	1250	1500	1750	2000	2250	2500	2750
x	x	x		x		x	x	x		x	
.				.				.			
.						.					

One way to achieve these hearings is by clapping the sequence and nodding at each beginning ('**.**'); another is to clap louder or produce a different sound at each '**.**' initially, and attempt to make each clap more uniform.

These hearings reveal a new type of variation. These variations involve what parts of the sequence are heard as beginnings, but the difference here is more pronounced than with the previous example. The second can be heard as part of a repeating process in the same fashion as with the previous example; it can be considered an embellished pulse (though with longer intervals). While the sequence on the first hearing eventually "lines up" and repeats within a duration—the shortest such repetition starts at every third beginning—it is less likely to be *heard* as repeating itself than it is on second hearing. Even though the first hearing features the same repeating element as does the second, the repetition is heard *across* the beginnings of determinate durations, as continuing through them.[232]

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[231] One of the earliest observations concerning "subjective rhythmization" (basically, the grouping of events in a pulse), and one of the first to be empirically tested, is that listeners will hear the first in each group as louder or longer. Concerning metrical and structural accents, Eric Clarke illustrates the effects on performance of setting "the same" melody in terms of notes, durational values, and dynamic markings to different metrical contexts has. Differences in time signature and in bar line placement yield subtle expressive nuances, which reflect what part of the pattern is regarded as a focal point or as organized around a focal point (Eric Clarke, "Structure and Expression in Rhythmic Performance," in Howell, Cross, and West, eds., *Music, Structure, and Cognition* [London, U.K.: Academic Press, 1985], 209-36).

[232] These hearings also illustrate the difference between hearing in duple and triple meter. In the next set of variations, the first is in duple meter while the rest are in triple meter.

The remaining hearings apply the variational techniques accumulated so far:

0	250	500	750	1000	1250	1500	1750	2000	2250	2500	2750
x	x	x		x		x	x	x		x	
		.				.				.	
	.				.				.		
				.						.	
		.						.			
	.						.				

Each horizontal line of dots corresponds to a possible hearing. (The first line corresponds to a hearing in "duple" meter, while the remaining ones correspond to alternative hearings in "triple" meter; other variations are possible along both lines.) Going through each will reveal that some hearings are easily achieved, some occur "naturally," while others are more difficult to achieve or sustain. However one hears this naturally, an essential structure of this experience (the experience of this sequence) is that there is *some* rhythmized hearing or other. Hearing the sequence as a mere sequence or succession is not a possibility for this experience.

5.4 Structures of the Experience of Rhythm

First, we should consider the role of counting in these variations. Leibniz's characterization of music as involving "unconscious calculation"[233] needs to be examined if it is to be taken as characterizing metrical attending. If 'calculation' is applied broadly enough to cover any instance of anticipation or prediction within an ongoing act of listening, it is clear that listening to music involves calculation; in this case, however, it is certainly something we are *conscious* of. If, on the other hand, what is meant is that processes of division, subdivision, accumulation, and addition upon durational quantities are constantly at work when we are listening to a given stretch of

[233] Qutoed in Scruton, *The Aesthetics of Music*, 24-5.

music, structuring our retention of what has passed, our anticipation of what is to follow, and our overall quantitative grasp of the duration within which the musical process is occurring, then there are problems of descriptive and explanatory adequacy.

First, consider that such a calculation of durational quantity would involve counting. What is being counted when we listen to music? Though the usual goal of counting (that is, of arriving at a summation) is absent, or perhaps present but subordinate to the task of predicting and understanding musical events, the musical experience, in one respect, does seem to present a richer and more complex version of the bell-toll example (numerical judgments do occur when experiencing larger-scale patterns, particularly on the performer's side). We might say that there are discrete acts of counting and even some implicit or unconscious calculation, and this seems plausible if what is being counted are *events*—notes, silences, rhythmic and melodic phrases—rather than points or stretches of the time in which those events occur.

Whatever has been said so far, though, does not involve metric attunement of the sort that was exercised in the above variations. Although conscious counting can help as a noetic strategy in achieving variations on the above examples (and achieving a given hearing in musical contexts), counting (whether conscious or unconscious) is entirely insufficient for describing what we are doing in metric attunement. At the most basic level, there is *felt* duration and awareness not of *one* but of *beginning*.[234]

Felt regularity, then, is not to be construed as "unconscious counting" but is fundamentally a matter of bodily coordination with a salient level of periodicity. Felt regularity is a precondition for constituting durations by acts of counting (whether conscious or unconscious) and not vice versa.[235]

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[234] While counting is insufficient for describing the experience of meter, it may be *necessary* (though still not sufficient) for our experience of longer beats as subdivided.

[235] Compare with Philonous' discussion of extension and motion in Berkeley's *Dialogues* (1713/1979), 24-6. There it is pointed out that a measuring device must have units, and

Certain invariant structures of the experiences considered in the previous section were noted there. The sense of propulsion noted for pulse experiences, and the influence of this sense on how the sound elements are heard (as "pickup" or as "return," for instance) are also present in each of the variations on the final examples. The final examples and their variations show the basis in perceptual experience for the distinction between rhythm and meter and between different kinds of meter. Concerning the variations, it was further observed as a necessary feature that *some* such structuring of the sequence is heard. We turn now to consider structures of *musical* rhythm.

One feature that characterizes much of the experience of musical rhythm is the thematic nature of the rhythmic process or event precisely as rhythmic. Consciousness is motivated to attend to the sequence of events by its notice of the rhythm itself (because it is, for example, interesting, engaging, or pleasing). This occurs in experiences that are not paradigmatically musical—recall the description of walking, in which the rhythmic sound of the footsteps simply emerges for consciousness—but it is especially pronounced in musical settings, where production of the sound is intended to capture interest.

Another such feature is the experience of multiple sequences as levels of the same rhythmic organization. To hear simultaneous events and processes as parts of a unified process (and further, a unity that structures itself into foreground and background levels of rhythmic organization) is a central characteristic of musical experience. This aspect of the experience of music affords a distinctively rich sense of objectual time.

The most important feature distinguishing musical rhythm is that it is heard as a communicative action—among the available ways to hear a rhythmic production there is a sense of correctness to hearing it in this way rather than another. The musical setting is

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that these units be *phenomenally* small or middle-sized to serve as measures of size or motion; a similar point can be made for the perception of metrical rhythm and musical time.

partly defined by the *communication* (in the sense of either transmitting or sharing) of *this* understanding of the sounds in sequence.

I have not defined musical rhythm or the experience of it; the above are either necessary or salient features of that experience. To define the experience in such a way that would exclude all nonmusical experience of rhythm and include all musical experience of rhythm is an impossible task. (The reason for this is expressed in Hamilton's line that "Music and life are interfused."[236]) Even if possible, such an undertaking would (like the undertaking of defining music) involve issues that go beyond the concerns of this work as announced in the introduction (and in Chapter 2)—of offering an internal characterization of the necessary conditions for basic musical understanding, the most fundamental form of which is the perception of musical rhythm.

[236] Hamilton, 145.

CHAPTER 6

MUSIC AS EXPRESSION AND AS LANGUAGE

There are two directions for a study of musical experience and understanding concerning which I have had fairly little to say thus far. One direction is to consider the connection between music and feeling—after all, it is heavily suggested by common sense that music's connection with feeling is at the core of what music is, why it is valuable, and how we evaluate music. One might think that to understand a passage (such as the opening of the Second Movement of Beethoven's 3rd Symphony) or piece without understanding that it is, for example, sad is simply not possible. The way we talk and think about music and the way composers and performers often talk about their goals and criteria suggest that this study would be remiss without some discussion of the connection between music and the emotions.

Thus, the first part of this chapter presents (with historical background) the philosophical issues of musical expression and arousal. What has preceded this chapter does not, as far as I can see, determine which theory of musical expressiveness (and value) is most acceptable, but I will defend the contour theory as most in keeping with the spirit of the project of this work.

The other direction is to pursue an analogy with language. In broad respects, the study of (occurrent) musical understanding is taken in this work to be much like the study of (occurrent) linguistic understanding, specifically the perception and understanding of speech. The idea of moving beyond loose comparisons of music and language and studying music in a way that is analogous to the study of language is considered in the second section of this chapter.

These topics are joined in this chapter because, as we will see, they are intertwined in the issue of musical representation—what pure instrumental music represents, if it represents anything at all. One candidate for an account of musical

expressiveness is a representational theory, which can (but need not) suggest a sort of semantics of musical expression. Further, the theoretical analogy of music and language can (but need not) involve a musical semantics. The authors of the generative approach to musical understanding considered in this chapter maintain a formalist attitude toward "musical meaning"—their theory is exclusively one of musical "syntax" (where 'syntax' should be understood simply as meaning formal structure and does not imply any transposition of syntactic categories from language to music).

6.1 Music and Expression

A widely held view is that what is essential to music is some aspect of its connection with emotion. It seems to follow from this view that any theory of musical understanding (that is, of the appropriate response to music, in *some* sense of 'appropriate') should reflect or say something about the precise nature of this connection. For the larger part of the history of thinking on music, the relationship between music and the emotions has been *the* philosophical problem about music.[237]

This heading—the connection between music and the emotions—really contains two distinct problems: on the one hand, the impact of music on the listener; on the other, the phenomenon of musical *expressiveness*—that music can be expressive of, or is often described as expressing, e.g., happiness, elation, joy, melancholy, triumph, and fulfillment.

Another twofold problem is the autonomy of music. This involves both the autonomy of music from the social functions to which it has traditionally been subordinated and the autonomy of music as a unique art form with its own aims and

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[237] The connection between musical harmonics and numerical principles governing the cosmos, as discussed by the ancients, is not really a matter concerning "music" in the sense we normally mean. Plato thought that the auditory experience of musical harmony was only a stepping stone to the true (*a priori*, mathematical) study of harmonics. Andy Hamilton, *Aesthetics and Music* (London, U.K: Continuum International Publishing Group, 2007), 19 and 24-5.

functions.[238] Philosophical issues related to autonomy in both these senses are how music should be defined, what distinguishes musical from nonmusical experience (including other art forms), and what, if anything, is unique to musical value and enjoyment.

What follow is, first, a largely historical presentation of accounts of musical expressiveness: the arousal theory, the self-expression theory, and the representational theory. Following that, I will discuss Eduard Hanslick's criticisms of the arousal and representation theories and discuss the formalist options of either rejecting expressiveness altogether or offering an account that is not a version of the arousal, self-expression, or representational theory.

6.1.1 The Arousal and Expression Theories

Historically, the dominant approach to specifying the connection between music and emotion has been the *arousal theory*. Broadly, the view is that the expressive properties of music are to be understood in terms of its standard emotional effects on listeners.[239] The simplest version of this theory implies straightforward dispositional analyses of expressive properties—for example, the sadness of a sad song is, centrally, its disposition to arouse sadness in listeners.

Stated thusly, the arousal theory does not seem to distinguish between the expressiveness of music and its emotional effect. According to Peter Kivy, Arthur Schopenhauer was the first theorist to treat these as substantively distinct topics (he seems to be the first to provide distinct treatments for each).[240] I say 'substantively'

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[238] Hamilton, *Aesthetics and Music*, 69, 84-5.

[239] Peter Kivy, *Introduction to a Philosophy of Music* (Oxford, U.K.: Clarendon Press, 2002), 7-12. Laird Addis characterizes this as one type of causal approach; the other is the expression theory, which holds that the emotion or affective state that a piece of music is expressive of is the one occupying a causal of the general sort that is appropriate to standard expressions of joy, fear, and so on (Laird Addis, *Of Mind and Music* [Ithaca, NY: Cornell U Press, 1999], 7-12).

[240] Ibid, 21.

because a dispositional theory can avoid saying that the emotion or feeling expressed is the very same emotion or feeling as the one caused and can thus treat these as distinct topics. As well, one can hold that music (always or sometimes) arouses the emotions it is expressive of, *without* endorsing a dispositional analysis of musical expressiveness in terms of the arousal of emotions or feelings.[241]

Any arousal theory must provide an account of *how* emotions are aroused by music, what it is about a sad song that standardly causes, e.g., sadness in listeners. Historically, the two main responses have been a mimesis-sympathy theory and a physiological theory. I will present these in order.

Plato saw music as having an influence on character. He thought that rhythms and melodies imitate expressive human speech and gesture, and that the hearer automatically mimics or imitates what he hears.[242] Aristotle also thought that music is imitative, but that it imitates the emotions themselves rather than their outward expression. According to Aristotle, this induces the soul of the listener to "move in sympathy."[243] According to this model, the mechanism of the impact on the listener is some resemblance or mimesis on the side of the music, and imitation and sympathy-response on the side of the listener.

Plato and Aristotle were cited 2,000 years later by the Florentine Camerata. Vincenzo Galilei, the principle theoretician associated with the Camerata, believed that the music of ancient Greece was very emotionally moving and that current musical practice ought to follow this example. Galilei believed that the sound of impassioned human speech often takes on a "tuneful" quality and that musical figures ought to

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[241] Critics of the arousal theory (Davies and Kivy, for example) are divided concerning whether listeners are ever moved to sadness in response to music expressive of sadness.

[242] Kivy, *Introduction*, 15.

[243] Ibid, 16.

represent or resemble this sound as closely as possible.[244] Following Plato and Aristotle, Galilei believed that the *way* in which music moves is by sympathy: in listening to a melodic line that resembles the sound of a speaking voice overcome with sadness, the listener is moved to feel sad.[245]

The rise of instrumental music brought with it a tonal range and musical complexity exceeding the potential of the human voice and in any case not plausibly resembling it. Kivy states that this development exerted pressure away from the sympathy theory and toward a more physiological account of emotive arousal. This account arose from Descartes's theory of emotions. The view is that emotional states are caused by movements of the animal spirits, which he held to be in the nervous system. The perception of a dangerous object, on this view, sets the animal spirits into a motion that triggers escape or defense behavior; such a movement in the animal spirits corresponds to the experience of fear. Kivy points out that a consequence of this view is that one can have an experience of an emotion without having perceptions or beliefs relating to any object *of* that emotion. Thus, if one's animal spirits are caused to move in a way appropriate to sadness, one will experience sadness without being sad *about* anything. Kivy states the implications of this for music theorists:

> The idea was that music, characteristically described then, as now, in terms of motion, might, with *its* so-called 'motion,' mimic the motions of the animal spirits, set them into sympathetic vibration, as it were, and in so doing arouse the emotions directly, circumventing the usual perceptual and cognitive pathways. Descartes's *Passions of the Soul*, then, gave music a new representational project: to represent, in musical tones, the motions of the animal spirits specific to the

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[244] In *New Essays in Musical Understanding* (Oxford, U.K.: Clarendon Press, 2001) 46-8, Kivy presents this as part of a broader development toward the representation of expressive speech in vocal music and the emergence of vocal music as a representational art. He discusses the Counter-Reformation prescription for arrangers, composers, and performers of Church music that melodic vocal arrangement should not simply please the ear but should instill in the listener the meaning of the words. According to Kivy, the elaborate polyphonic arrangements which were then predominant approached the words as precious jewels for which the music is to provide ornamentation.

[245] Kivy, *New Essays*, 49.

> arousal of the basic human emotions. In this way, its expressive vocabulary could be amplified … And because the animal spirits could be imagined to move in intricate, rapid, even violent way, they provided imagined objects of imitation that comported well with the new instrumental melodic figures, intricate, rapid, violent, as the motions of human speech did not.[246]

Kivy cites Johann Mattheson's *Der vollkommene Capellmeister* as exemplifying this project. He quotes Mattheson claiming that "one can form a sensitive concept of all the emotions and compose accordingly." For example, since "joy is an expansion of the soul," one can "best express this affect by large and expanded intervals;" also, since sadness is a kind of contraction, small intervals are suitable for its expression.[247]

In sum: the arousal theory holds that the sadness of a sad song is a disposition to arouse sadness in listeners. For Kivy, the Camerata theory adds to this via resemblance and sympathy, while the physiological theory adds via excitement of animal spirits.

We can think of theories of expressiveness as trying to answer the question of how music can express emotions, given that music does not seem to be the kind of thing that can experience emotion. Noting that listeners are often moved emotionally by the music they are listening to, the arousal theorist places the emotion the music is expressive of in the listener. The *self-expression theory* cites a different causal relation in locating the relevant emotion. According to the self-expression theory, the expressiveness of a piece of music is a matter of its being an expression (of sorts) of the composer's or performer's sadness. This view has some common-sense basis—performance and composition are often characterized as ways of expressing one's own feelings (or of expressing oneself generally). Nonetheless, it is a highly implausible view. I now turn to consider objections to the arousal and self-expression theories.

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[246] Ibid, 51. Kivy presents this narrative as the story of the formation of an "expressive code" in Western music. Indeed, the influence of these views compositional practice provides a rather literal illustration of the notion of music as a language of the emotions.

[247] Ibid, 52.

Addis classifies both of these as *causal* theories of expressivity. As he notes, fairly simple counterexamples arise for the attempt to analyze the expressive properties of a given piece of music in terms of a causal connection between the music and whatever emotions it is expressive of, whether these are listener's or producer's emotions.[248] One can listen to a sad song, recognize that it is expressive of sadness (and, one can add, be *moved* by the sad song) without feeling sad, and one can write or perform a sad song without feeling sad. In fact, it is plausible to think that the opposite is more often the case. Thus, it seems that neither the arousal nor the expression theory accounts provides necessary conditions for musical expressivity.

Further, the expression theory does not provide a sufficient condition, since a composer (perhaps in the grip of habit or due to a lack of skill), may produce a sad musical figure even though he meant to express joy. Perhaps the arousal theory provides a sufficient condition. After all, who would deny that if normal listeners under normal conditions tend to feel sad when hearing a song, it is a sad song? If 'sad song' simply means 'saddening song' (the way we often talk about sad states of affairs) then this *would be* a sufficient condition. This is precisely what is at issue, though.

Addis contrasts causal theories with what he calls *inherence* theories.[249] The reason, I take it, arises from an issue with the arousal theory that I will call the *problem of the separable affect*.[250] The arousal theory runs the risk of making the expressivity of music into a *mere* dispositional property, something that, in principle, a pill could just as well possess. Recall that in the introduction I stated that, whatever else we may say about the musical experience, it seems like one that it is appropriate to speak of in terms of

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[248] Addis, *Of Mind and Music*, 12-13.

[249] Ibid, 13.

[250] This is adapted from Malcolm Budd's talk of "the heresy of the separable experience," quoted in Charles Nussbaum, *The Musical Representation: Meaning, Ontology, and Emotion* (Cambridge, Mass.: MIT Press, 2007), 190.

understanding. If music has *expressive* features as well as rhythmic features, melodies, etc., then it is plausible to think that these, too, are grasped in musical understanding and not simply felt. I *understand* a sad song to be sad, and whatever I understand seems to outstrip facts about my own emotional states as I listen to it. What seems important for the composer is not that her audience members experience sadness but that they somehow *hear* it.

Of course, the historical variants on the arousal theory just discussed do try to explain emotive arousal in terms of features of the music itself: in the case of Plato's mimetic theory, there is (intentional) imitation of human gesture on the side of the music, which elicits the listener's imitation; in the Camerata theory, the likeness that certain musical figures bear to impassioned speech evokes sympathy from the listener; and the physiological theory, at least the Cartesian variant, seems to involve something like the representation of emotions (if not of their consciously accessible features, then at least of their proximate causes).[251] In their own ways, each of these accounts presents a possible route away from the arousal theory towards a *representational* theory that places the relevant emotions in the music rather than in the listener.[252]

The lesson I draw from the foregoing is not that the arousal and expression theories are false or untenable.[253] The lesson is that, whatever "expressive meaning" is, if it is a component of musical understanding then it cannot *simply* be a matter of some causal connection that music bears to affective states. Musical experience is a conscious,

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[251] Among these, the physiological theory seems most vulnerable to the problem of the separable affect, since the resemblance need not be recognized by the listener—the process of arousal seems to require no awareness of resemblance or representation, which seems to be required for a sympathetic response (at least in the *conscious* sense).

[252] On Kivy's reading, Johann Mattheson preceded Schopenhauer in endorsing a representational theory (Kivy, *New Essays*, 95; also, *The Corded Shell: Reflections on Musical Expression* [Princeton, NJ: Princeton U Press, 1980], 39-45).

[253] I'll resume discussion of the arousal theory in the section on Eduard Hanslick.

cognitive activity, and the understanding that characterizes it (whether it is the sadness of a passage or its place within a larger section) must be a matter of understanding something about the music itself.[254]

5.1.2 The Representational Theory

As with the discussion of the arousal theory, I will proceed historically. The following interlude is more involved than the previous one. This is because during the period under discussion thinking about musical expressiveness was bound up with thinking about the status of absolute music—music unsubordinated to text, title, program (perhaps even emotive function)[255]—as an art form. In fact, the problem Schopenhauer took himself to be addressing involved the latter topic more so than the question of what the musical expression of emotion consists in.[256]

Kivy attributes to Schopenhauer the accomplishments of securing a place for absolute music on the list of fine arts, of being the first major philosopher to suggest that music expresses emotions by representing them, of being the first thinker to give distinct treatments of expressivity and the emotional influence of music, thus treating them as

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[254] It follows from this that the subliminal influence of music on emotions or moods—whether it is the relaxing effect that "background music" has on adults or nursery songs on infants, does not really bear on the question of expressiveness as a potential object of musical understanding.

Interestingly, within the expression theory a listener *can* understand the feelings of the composer or performer and respond with sympathy; after all, this is one of the goals of "expression" in the usual sense. Sympathizing with someone who is sad does not imply feeling sad, and according to this view the sadness one understands in hearing a bit of music is perceived or understood rather than felt. It seems that, in certain respects, considerations driving 19th and 20th century alternatives to the arousal theory can be accommodated within the expression theory.

[255] 'Absolute music' often simply means instrumental music without lyrics or explicit program, but as Roger Scruton points out, the term as it was introduced and used came to imply an ideal of musical purity and a commitment to the complete autonomy of music. (Roger Scruton, *New Grove Dictionary of Music and Musicians*, 36-7.)

[256] Kivy sees Schopenhauer's claim—that music represents the Will and thus occupies the highest place among the arts—as partly a response to Kant's verdict on instrumental music in his *Critique of Judgment*.

separate issues, and, finally, of initiating the representational theory of musical expressiveness.[257]

In *The World as Will and Representation*, Schopenhauer describes the world as having two aspects. There is the will as the ultimate, noumenal foundation, and there is the world as representation, the will as it "objectifies" itself and appears to us. Though this notion of the will as thing-in-itself has its foundation in Kant, Schopenhauer doesn't identify it with the will of a self-conscious, rational subject; rather, it is an energy-like striving—blind, purposeless, and irrational—and it expresses itself (as representation) in the form of ceaseless and ubiquitous strife.[258]

Aesthetic experience provides one means of escape from striving. For Schopenhauer, as for Kant, we behold the aesthetic object with an attitude of disinterestedness—the subject "ceases to consider the where, the when, the why, and the whither of things, and looks simply and solely at the *what*."[259] We are brought to a kind of will-less perception that Schopenhauer calls "perfect resignation." We perceive the object free of the modes of cognition (which Schopenhauer summarizes as cause and effect, motive and action, premise and conclusion, and space and time), and in doing so we see through the appearances the Platonic ideas that lies behind them.[260]

Schopenhauer ranks fine arts other than music in the following way: lower, to the extent that they represent the world of appearances; higher, to the extent that they represent the world of Platonic ideas. Music surpasses the other arts in that it represents the very will that lies behind those ideas. Music *does* represent, according to

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[257] Kivy, *New Essays*, 93-5. Susanne Langer deserves credit for bringing the last contribution to widespread attention.

[258] Hamilton, 76.

[259] Quoted in Hamilton, 77.

[260] Robert Wicks, "Arthur Schopenhauer," *Stanford Encyclopedia of Philosophy* (http://plato.stanford.edu/entries/schopenhauer/, 2011)

Schopenhauer, but its subject matter is radically different in kind from the subject matter of other representational arts and is unique to it. In representing the will, music represents the thing in itself and is thus, for Schopenhauer, the most metaphysical of the arts, a kind of language that conveys intuitive, nonconceptual knowledge of what philosophy seeks to understand in terms of concepts:

> In a language intelligible with absolute directness, yet not capable of translation into that of our faculty of reason, [music] expresses the innermost nature of all life and existence … the composer reveals the innermost nature of the world, and expresses the profoundest wisdom in a language that his reasoning faculty does not understand.[261]

It is plausible to think that among the things belonging to the "innermost nature of the world" that music might represent are features of conscious life, including the emotions.[262] Schopenhauer held this view but qualified it, insisting that absolute music expresses the emotions "in the abstract to some extent" (e.g., joy itself, rather than any particular joy) independently of text, dramatic setting, or program, and in a way that does not rely on imitation of anything in the phenomenal world. Further, the emotions represented in music is a completely separate matter from the emotions felt in listening to music—in fact, the value of the representation lies precisely in the fact that the emotion itself is presented for the listener's will-less contemplation. Also embedded in this passage is the thesis, endorsed by later representational theorists, that what music communicates is *ineffable*. In all these respects, Schopenhauer initiated the representational theory of music and, with it, the representational theory of musical expressiveness.

It is better to say 'representational theory of absolute music.' Although Schopenhauer saw music as a representational art, he disapproved of programme

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[261] Quoted in Hamilton, 77.

[262] Kivy, *The Corded Shell* (1980), 44-5.

music[263] and of the imitation in music of nonmusical sounds (such as birdsong[264]).[265] He thought that these forms *degrade* musical representation either by subordinating it to narration or by merely copying of the world of appearances; thus, he distinguished both from properly musical representation.

Nonetheless, in saying that music is a "direct copy" of the active principle behind everything that appears and citing structural analogies between music and the physical world, Schopenhauer seems to understand musical representation at least partially in terms of resemblance. This is also born out in his claim that "music reproduces all the movements of our innermost being but quite divorced from phenomenal life and remote from its misery," suggesting that music represents the form of emotions by sharing their dynamic qualities and thus resembling them.[266]

It is a familiar point by now that representation can never be simply a matter of resemblance or structural similarity (since representation, unlike resemblance and isomorphism, is an asymmetric relation) and often occurs without it. What is there about music that *makes* it a representation, aside from resemblances or structural parallels? In

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[263] Programme music is narrative or descriptive music usually accompanied by a "programme" or specification of an extra-musical theme; it aims at depicting objects, characters, and events in such a way that the theme determines the development of the music. (Roger Scruton, "Programme Music," *New Grove*.) A clear example of programme music is Hector Berlioz's *Symphonie Fantastique*. The programme is five short paragraphs relating the story of a young artist's romantic obsession, despair, and nightmares induced by the opium with which he tries to kill himself.

[264] Beethoven's Sixth Symphony (the "Pastoral") features imitation of birdsong and thunderstorms. Hamilton states that this symphony provided the initial inspiration for programme music (Hamilton, 67-8).

[265] Hamilton emphasizes that, while there seem to be affinities between the representational theory of music and the rise of the programme music of Berlioz, Liszt, and Wagner, and between formalism about music (discussed below) and the "absolute music" of Haydn, Mozart, and Brahms, the first major philosopher to put forward the representational theory was himself committed to the latter. "Through his highly abstract interpretation of the aesthetic of expression [as opposed to what Hamilton calls the "aesthetics of form"], he [Schopenhauer] stands as one of the foremost proponents of absolute music" (ibid, 77-8).

[266] Ibid, 78.

addition to speaking of music as a copy, Schopenhauer also speaks of music as a *manifestation* of the will, which seems to accord it the same ontological status as the will itself.[267]

Concerning the ontological status of musical representation, then, Schopenhauer seems to think of it as a *natural* or *mind-independent* relation. This may seem implausible, but it is one way (the clearest and most straightforward way, I think) of designating a specifically musical sort of representation and setting it apart from imitation or arbitrary symbolism. Susanne Langer and Laird Addis both offer versions of the representational theory along Schopenhauerean lines[268] and present different accounts of the nature and status of musical representation. When it comes to specifying what makes music an iconic symbol of features of emotive life, Langer adverts to the intentions and choices of composers, performers, and listeners.[269] It seems, then, that musical representation ultimately rests on the conventional, systematized, intentional use of natural structural resemblances between music and emotive life (and it seems to follow from this that music could be replaced by a different dynamic medium). Addis, drawing on the theory of unconscious symbolism, suggests that sounds are uniquely suited to serve as *quasi-natural* signs of states of consciousness ("quasi-" because *that* they represent depends on consciousness, and "natural" because, given their appearance to

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[267] Kivy, *New Essays*, 27.

[268] I say this because of the components of representation (perhaps of emotions in the abstract), the distinct accounts of emotions in the music and emotions in the listener, and ineffability, and because neither views music as a conventional, arbitrary symbol system.

[269] Or so it seems in Langer, *Feeling and Form*:

> … a symbol is used to articulate ideas of something we wish to think about, and until we have a fairly adequate symbolism we cannot think about it. So *interest* always plays a major part in making one thing, or realm of things, the meaning of something else, the symbol or system of symbols (Langer, 28).

consciousness, they necessarily represent *what* they represent) in virtue of an ontological affinity between sound and consciousness.[270]

The view that absolute music is representational—whether the claim is that it represents emotions, features of conscious life, or metaphysical verities—has challenges beyond the clarification of the *what* and *how* of musical representation. Soon after the widespread acceptance and approval of Schopenhauer's views on music, powerful objections were raised against the very notion of musical representation.

Before turning to this stage in the story, it would be good to take stock of how what has been said so far relates to the question of musical understanding in the sense of having or being disposed to have experiences that are appropriate (in some sense) to music. For the arousal theory, the appropriate experience is an affective state of some sort, be it an emotion or a mood. The mechanism of arousal may involve awareness or grasp of something about the music or it may not. For the expression theory, understanding on the part of the listener is a matter of grasping the music as an expression of the producer's feelings. The representational theory treats musical understanding as a matter of grasping some type of representational content. The latter construal, it seems clear, necessitates a corresponding notion of musical meaning. All three allow a place for recognition of the producer's intentions, but only the expression theory, it seems, would explicate the notions of musical meaning and understanding in terms of it.

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[270] Addis, 40-1, 69, 72. Here I leave out Charles Nussbaum's representational theory, since it is "representational" in a sense that does not imply anything about whether music is a representational art in the sense that painting and poetry are, or about the issue of musical expressivity.

5.1.3 Formalism

Eduard Hanslick's *The Beautiful in Music*,[271] like Schopenhauer's *The World as Will and Representation*, had a profound influence not only on musical aesthetics but on the course of music history.

The Beautiful in Music is the title of the first English translation (in 1891 by Gustav Cohen) of *Vom Musikalisch-Schönen*. A more recent translation of the work is titled *On the Musically Beautiful*, which may be a closer reflection of Hanslick's attitude toward aesthetics. To speak of "the beautiful in music" suggests the sort of conception of artistic beauty expressed in Robert Schumann's claim that the "aesthetic principles of one art are those of the others, the material alone being different."[272] Hanslick opposed this conception and saw the specialized study of the different arts as a significant advance over general aesthetic theories that approached the fine arts as a unified system. For Hanslick, "the laws of beauty for each art are inseparably associated with the individuality of the art and the nature of its medium."[273] He notes that studies of other arts other than music seem to have advanced in the direction of a "scientific" approach that attends to "the things themselves"—to the beautiful objects rather than the subjective impressions associated with them, and to the beauty specific to each art form rather than a "general metaphysical conception" of beauty.[274]

This apparent equation in the opening pages of *The Beautiful in Music*—of conceiving of artistic excellence in terms of subjective effects with seeing it as the same across all arts, of subjectivism with essentialism—is difficult to defend or motivate (as is

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[271] Eduard Hanslick, *The Beautiful in Music*, trans. Gustav Cohen (London and New York, 1891), ed. Morris Weitz (New York: The Liberal Arts Press, Inc., 1957). *Vom Musikalisch-Schönen* was written in 1854.

[272] Quoted in ibid, 8 fn. 1.

[273] Ibid, 8.

[274] Ibid, 7-8.

Hanslick's peculiar claim that a "scientific" approach to aesthetics is equally opposed to both). In the views Hanslick considers, however, the tendencies do seem to coincide. The idea that music is distinguished by some special connection with the emotions and that we should understand musical excellence in terms of this connection is operative in both views Hanslick criticizes: that the special office of music (the "object and aim") is to arouse emotions; and that emotions are the intended subject matter of music.[275]

Hanslick sees the *first* view as easily put to rest. First, he claims that all arts aspire to create works of beauty, and while the contemplation of these works in the imagination excites feelings, their beauty is objective and independent of those feelings (which are "secondary effects").[276] Even if music is more closely connected with feeling than the other arts, this would not show that the point of music is to arouse feelings. (Often, the feelings we have or even seek in listening to music do not even involve close attention to the music.) Second, instances of all types of artistic product operate on feelings; the only way to show that music is unique in this respect would be to cite the "degree of intensity of this force." It is most probably false, however, that great musical works always move us with a higher degree of intensity than other great artistic products.[277] Third, the influence of music on the emotions is too "transient" to provide any guidance or principles concerning musical excellence. "In reality," he claims, "there is no causal nexus between a musical composition and the feelings it may excite." The feelings excited by a given work can vary from listener to listener and across generations, *sans* disagreement concerning the excellence of the work.[278]

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[275] Ibid, 9.

[276] Ibid, 9-10. Here Hanslick states: "The beautiful … is nothing but a form which … has, as such, no aim beyond itself … The beautiful is and remains beautiful though it arouse no emotion whatever, and though there be no one to look at it."

[277] Ibid, 13.

[278] Ibid, 14-15.

The first consideration shows that it is not *the* aim and object of music to arouse emotions, though Hanslick seems to conclude that emotional response is always irrelevant or incidental to the aesthetic appreciation of music. This latter conclusion does not follow—even if it is not *the* aim and object of music to arouse emotions, it does not follow that it cannot be one of its aims, and even if many emotional responses to music do not reflect, much less require, close attention to the music, it does not follow that all emotional responses to music are likewise irrelevant to its aesthetic appreciation.[279] The next and most important step in Hanslick's critical discussion suggests a way to the conclusion he wants (though Hanslick, oddly, does not take it).[280]

Hanslick's next step is to argue that it is not the principle artistic aim of music, its standard of excellence, to represent emotions. He first argues that music is *unable* to represent emotions. The emotions, Hanslick says, "have no isolated existence in the mind." "Definite feelings" such as hope, sadness, and love essentially involve cognitions ("ideas and notions"). Hope involves the notion of a happier state to come, sadness involves the notion of a past state of happiness, and love requires either an image of the beloved or a desire for its possession. These "definite conceptions," and not any phenomenal intensity or inner dynamic, are what constitute these feelings as feelings of hope, sadness, or love. Without these cognitions, there is only a "vague sense of motion," at most a general feeling of pleasure or discomfort. Since music cannot, like literature or painting, provide concrete conceptions, Hanslick infers that it cannot represent "definite feelings," i.e., emotions thusly understood.[281] Hanslick concludes that the excellence of

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[279] Malcolm Budd, *Music and the Emotions: the Philosophical Theories* (London: Routledge and Kegan Paul, 1985), 20, 28.

[280] The third consideration might be taken as a (bad) argument from disagreement. Hanslick draws a similar inference concerning the representation of emotion, so I will consider them together in what follows.

[281] Hanslick, 21-2.

music consists neither in its arousing emotions nor in its representing them—it is, rather, a specifically musical kind of beauty.

For Hanslick, music consists in "tonally moving forms." Its essence, he says, is sound and motion. In taking the beauty of music to be specifically musical, Hanslick is counted as the first formalist in musical aesthetics.[282] Music, and hence musical value, resides entirely in sounds and their combinations and patterns.[283] Hanslick further states that the only thing in the emotions that music can represent, given the nature of the medium, is their dynamic qualities. It follows that when we describe music as sad or joyful, we are either speaking nonsense or we are describing features of the music itself. This suggests a theory of musical expressiveness, or rather of expressive language in describing music, according to which talk of expressive features is simply the easiest way to describe purely musical features.

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[282] Formalism is a general position in aesthetics, typically opposed to referentialism. Formalism in music is associated with the slogan (from Stravinsky) that "music means nothing but itself." Andy Hamilton points out that Hanslick is not *strictly* a formalist about music (since formalists hold that only formal properties are aesthetic properties). Hanslick acknowledges non-formal aesthetic properties (since sound is included in the essence of music), and claims that in music form and content are fused. Further, he states that music can represent the dynamic qualities of emotions.

[283] Although Hanslick often compared music to nonrepresentational arts such as architecture, he was impressed with the "logic" and "sense" displayed in music. In this respect, music is not simply like an arabesque (even a "living arabesque") or a kaleidoscope; while not representing or depicting anything, it does share something with language and with pictures. He suggested that a kind of quasi-syntactic organization is centrally involved in musical beauty (Ibid, 48, 50-1)—that is, a syntactic organization without semantic content. Hanslick further stated that "the most important factor" in musical enjoyment is the intellectual satisfaction derived from following and anticipating the composer's designs, further noting that the sequential nature of musical listening makes such attentive tracking especially challenging (Ibid, 98). These remarks of Hanslick's are suggestive of Gurney's views concerning musical understanding and enjoyment discussed in the first chapter, as well as Leonard Meyer's implication-realization theory introduced in in *Emotion and Meaning in Music* [Chicago: U Chicago Press, 1956]).

Of course, this is a passing reference to a surface parallel between music and language. The presence of parallels seems to be beyond question; the following section takes up the issue is how and whether we should be guided by noted similarities between music and language (in the above, between linguistic syntax and "musical syntax")—whether a fruitful analogy can be developed in terms of affording progress for our understanding of musical understanding.

In arguing that music cannot represent emotion, Hanslick is assuming a version of the cognitive theory of emotion. The cognitive theory can be traced back to Aristotle, who defined each emotion in terms of pleasure or pain at the thought of some state of affairs. The noncognitive aspect of each emotion can be and has been characterized in different or additional terms (one might, for instance, include behavioral or physiological components); the same holds for the cognitive aspect (one might hold that the thought must express an evaluation or be connected with desire, or that the cognitive state need not be a judgment).[284] However these are spelled out, the cognitive theory claims that the object (-directedness) of a given emotion is more distinctive and important than its inner dynamic quality (its "phenomenological profile") or physiological component.[285]

The cognitive theory of emotion, if correct, seems also to tell against the view that music can arouse emotions, where these do not pertain to the music. If emotions necessarily involve cognitions, then music cannot arouse emotions in the way suggested by the arousal theory, since there does not seem to be anything for the listener to be, e.g., sad about when listening to sad music.[286]

One might agree with Hanslick that arousal or representation of feelings is not the point of music while rejecting the stronger claim that music *cannot* arouse or represent feelings. One way of doing this is to deny the theory of emotions Hanslick assumes. Another way for the arousal theorist is to concede the point about the "garden variety" emotions (joy, sadness, anger, and so on) and say that music can arouse feelings rather than emotions. Langer's representational theory concedes the point about the garden

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[284] Budd, 4-10. Charles Nussbaum chooses this latter alternative; he defends the view that emotions are valent perceptual experiences rather than judgments (*The Musical Representation*, 191-2).

[285] Stephen Davies, "Emotions Expressed and Aroused by Music: Philosophical Perspectives," in Patrick Justin and John Sloboda, eds., *Handbook of Music and Emotion: Theory, Research, Applications* (New York, NY: Oxford U Press, 2010), 15-43, 18.

[286] Kivy attributes this point to Hanslick in *Introduction*, 24.

variety emotions, insisting that music represents the *forms* of emotive life (where these are to be understood as structural features of emotive states rather than as, e.g., sadness-in-general).

In arguing against the view that musical excellence is not to be understood solely or chiefly in terms of its connection with emotion, Hanslick took himself to be arguing against a majority view. It is difficult to assess how widespread the view really was then or is now, but I think most would agree that music can be expressive of emotion, however we should understand that, and that musical expressiveness is at least *one* musical-excellence-making property. While Hanslick is correct in saying that whatever is relevant to appreciation and understanding must concern the music itself, it is a striking and (it seems) valuable feature of music that it can be expressive of emotions.

Levinson presents a set of desiderata for musical expressiveness. Here are the three I take to be most central[287]:

> *The analogy requirement*. Musical expressiveness should be seen as parallel or closely analogous to expression in its most literal sense, that is, the manifesting of psychological states through outward signs, most notably, behavior.
> *The externality requirement*. Musical expressiveness should be seen to belong unequivocally to the music—to be a property or aspect thereof—and not to the listener or performer or composer.
> *The immediacy requirement*. Musical expressiveness should be something an attuned listener experiences or perceives immediately, rather than arrives at intellectually, through reasoning or weighing of evidence, at least in basic cases, i.e. ones of simple expression.

When I stated previously that expressiveness must be something understood, I was voicing agreement with the externality requirement as stated here. It is typically motivated on phenomenological grounds, though the appeal can be challenged. The analogy requirement most obviously rules out accounts that identify expressive properties with purely musical properties as well as accounts that claim that emotion-terms are

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[287] Levinson, *The Pleasures of Aesthetics: Philosophical Essays* (Ithaca, NY: Cornell U Press, 1996), 91-2.

applied metaphorically to music. Suitably interpreted, the phenomenological claim of the immediacy requirement (that the experience of expressiveness must be immediate or direct) would count against the representational theory.

I take the three of these together to provide motivation for the contour theory of musical expressiveness. The phenomenological claim on which it rests is that the sadness of a given musical passage appears as a feature of the passage itself (rather than as something read off of it). The contour theory is so-called because it states that music is expressive in virtue of resemblances or structural analogies between the "contours" of music and perceived (facial, vocal, or behavioral) expressions of emotions.[288] Stephen Davies argues that the use of terms like 'sad' to describe an emotion-characteristic in a given appearance (for examples, a weeping willow, or a basset-hound's face) is a secondary, though literal, use of such terms. Musical motion, which he takes music to possess literally, is analogous to gaits, carriages, and so forth that bear emotion-characteristics in their appearance, sufficiently so that music can be said to present emotion-characteristics in sound.[289] The point is not that music resembles standard expressions of emotion and thus represents them as a symbol would; on this theory, musical expressiveness is a matter of presentation, not representation.[290]

Addis distinguishes among inherence theories between representative-inherence theories and pure-inherence theories, claiming that the latter risk becoming resemblance theories or listener-causal theories.[291] I think that the contour theory can distinguish itself from any kind of representative theory. Having a thing or property called to mind is

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[288] Kivy, *An Introduction*, 40.

[289] Stephen Davies, *Musical Meaning and Expression* (Ithaca: Cornell U Press, 1994), 228-9.

[290] Kivy, *An Introduction*, 40-1.

[291] Addis, 14-8.

not the same thing as *perceiving* a thing or property. The "animation" (in Kivy's terms) or seeing-as involved in the grasp of expressive properties is a *perceptual* seeing-as which is to be distinguished from seeing-in.[292] One might think that the contour theory collapses into a resemblance-representative theory if one thinks that the only way in which a resembling item can ground an experience as-of what it resembles is by functioning (by "calling it to mind" or "putting the perceiver in mind of it") the way a *picture* would.

Out of the alternative accounts considered in this section, the contour theory is the most adequate to the experience of musical expressiveness. It is also most in keeping with the spirit of this work. Recall that rhythmic organization must be perceived as communicated in order to be perceived as musical and musical rhythm is tied to meaningful, involved communicative action. What this means is that an experience of musical rhythm is always an experience as of involved movement, and as such it can have expressive or emotive content as analyzed by the contour theory.

5.2 Music as Language

Most of us, I am sure, are familiar with the suggestion that music is in some sense a language. Plausibly, what happens between the performer and the listener appears to be the communicative use of structured sound. Davies states that music has *some* sort of content that invites understanding,[293] and a natural direction to take such a broad characterization is to say that musical meaning is governed by rules similar or analogous to the rules governing linguistic meaning. Just as language has syntax and semantics, perhaps it makes sense to speak of musical syntax and musical semantics.

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[292] The distinction, introduced by one of Richard Wollheim's discussions of representation and the arts, is cited in Levinson, *The Pleasures of Aesthetics* (1996), 109-10.

[293] Stephen Davies, *Musical Meaning and Expression*, 2.

Of course, this is only *one* way to pursue the suggestion. Few who are spontaneously inclined to characterize music as a language would go on to say that pieces or passages of music have *propositional* content (though at least one philosopher of music says precisely this), and upon being asked, for example, what a given bit of music is *about*, most will qualify the suggestion by saying that music represents pictorially or symbolically, or they may jettison the notion of extramusical representational content and claim that the content communicated in music is expressive. While it is a commonplace that music is a "language of the emotions," what is most often meant is that music is a communicative medium (in some sense) with remarkable expressive powers.

Another way to develop the notion of music as a language is to say that we shouldn't expect to be able to *say* what music is about because what it communicates is *ineffable* and not the sort of thing that can be translated, paraphrased adequately, or paraphrased at all. This thesis of ineffability is consistent both with taking music to have representational content, even propositional content that is determined, as with language, compositionally, and with denying that music has any representational content.

5.2.1 Musical Semantics and Musical Syntax

It is not difficult to understand the motivation for applying a syntactic analogy to music. Music seems to display a compositional syntax. Further, as stated earlier, a semantic construal of the notion of musical meaning is a straightforward direction for developing it.

In 1973, composer, performer, and conductor Leonard Bernstein delivered a series of lectures at Harvard, titled *The Unanswered Question*. The titles of the first three lectures—"Musical Phonology," "Musical Syntax," and "Musical Semantics"—clearly reflect a commitment to understand music on a linguistic model.[294] These lectures

[294] Leonard Bernstein, *The Unanswered Question: Six Talks at Harvard*, DVD (1976; Kultur Video, 2001).

present a concerted (and courageous) effort to approach music in the terms of the study of language. Particularly interesting, for our present purposes, is the lecture on musical syntax. The idea presented there is that musical understanding proceeds by deriving, through the application of a finite set of transformation rules, the structure we hear in a given musical phrase, passage, or piece. Bernstein attempted further to discern musical analogues to "parts of speech" such as nouns and verbs.

There is much of interest in Bernstein's talks, particularly his engaging and down-to-earth discussion of the history of Western tonal art music (especially his discussion of the Romantic period in the fourth lecture, "The Delights and Dangers of Ambiguity); however, his specific attempts at developing a linguistic model for music are of mainly historical interest. In this section we will first consider attempts at treating music more or less as a full-blown language (containing, for examples, devices for reference to extramusical items, including states of affairs, and logical connectives) and then move on to consider a theoretical analogy restricted to the grasp of formal structure.

5.2.1.1 *Coker and Cooke on Musical Meaning*

Stephen Davies presents a formidable list of desiderata that must be satisfied by any system of signs if it is to be considered a language.[295] He considers linguistic representation as part of a comprehensive discussion of candidates for how music might represent (the others are pictorial and symbolic representation). Scruton similarly applies strict criteria for considering something a language. Both see Wilson Coker and Deryck Cooke as authors who understand what invoking an analogy with language demands and who try to pursue it fully.

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[295] The list of necessary conditions Davies adopt is as follows:

> … a language must possess (1) discrete and repeatable elements (2) which, when strung together, suggest or evoke ideas or feelings (3) because they constitute a vocabulary; it must also possess (4) indexical and characterizing elements, (5) force-showing devices and modalities, as well as (7) logical connectives; in being thus, (6) it must admit the possibility of metalinguistic assertions about itself (Davies, *Musical Meaning and Expression*, 5).

Cooke attempts to show that music has something like a lexicon by identifying types of figures used by a variety of composers to produce similar effects. Since he wants to analyze examples in which the intended effect is clear, Cooke considers music with accompanying texts. Scruton notes that this aspect of Cooke's project already invites skepticism, since it casts doubt on the claim that what will emerge from it is a genuine musical vocabulary. He further objects that effective musical expression is not rule-governed in the way Cooke seems to suggest.[296] Scruton and Davies both point out that if this theory is intended to show that musical meaning is compositional in the way linguistic meaning is, it fails.[297]

Coker explicitly takes on the challenge of showing music to have parts corresponding to parts of speech (beyond predicates). In a phenomenological vein, he refers to the lived subjective experiences that ground our awareness of logical connectives. For instance, our awareness of disjunction is grounded in a feeling of uncertainty or hesitation. Hence, a musical figure that has a sense of uncertainty or hesitation about it (such as a trill) might be seen as expressing the logical form of disjunction.[298] If this is intended to show that music has devices that function in the same way as logical connectives do in language, there are insuperable problems. Davies takes note of issues concerning what the scope of a given "connective" is supposed to be, the difference between the connectives (specifically negation and conjunction), and whether the connected elements are statements or names. Further, it is simply not the case that disjunction is hesitation, interruption negation, or entailment expectation.[299]

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[296] Scruton, 203-8.

[297] Ibid, 206 and Davies, 26.

[298] Wilson Coker, *Music and Meaning: a Theoretical Introduction to Musical Aesthetics* (New York, NY: The Free Press, 1972), 111-2.

[299] Davies, 23-4.

5.2.1.2 *The Generative Approach to Musical Understanding*

Though the particular views presented in Bernstein's talks were not met with widespread agreement, the talks had far reaching and profound effects on the study of music and music cognition. One long-term effect was the publication in 1983 of *A Generative Theory of Tonal Music* (hereafter *GTTM*), co-authored by music theorist and composer Fred Lerdahl and linguist Ray Jackendoff (the latter a former student of Noam Chomsky). Lerdahl and Jackendoff emphasize that the important aspects of Chomskyan linguistics for the study of music are its psychological concern and its formal nature.[300] Substantive parallels between linguistic and musical structure, they say, cannot be presupposed at the outset; such parallels, if any, can only emerge when the theory off the ground.[301]

The project announced in the introduction of *GTTM* is a theory of musical competence that would explain (by providing formal descriptions of) the musical intuitions of competent listeners.[302] 'Intuition' can refer to conscious grasp of structure, more importantly it is

> the largely unconscious knowledge (the "musical intuition") that the listener brings to his hearing—a knowledge that enables him to organize and make

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[300] The phrase 'psychological concern' (the formal aspects of the theory will be discussed at greater length) indicates that for these authors music theory (like linguistic theory) is ultimately a branch of psychology. They hold that developing formal theories for musical idioms should yield hypotheses about innate universal principles, and they motivate this claim with something like a poverty of stimulus argument:

> … the more the study of the listener's knowledge reveals complexity and abstraction with respect to the musical surface, the more necessary a theory of musical cognitive capacity becomes; it is no longer obvious how the listener obtains evidence for his structures from the musical surface (Lerdahl and Jackendoff, *A Generative Theory of Tonal Music* [1983], 4).

[301] Ibid, 5.

[302] Ibid, 1. Another work (contemporary with and independent of Lerdahl and Jackendoff's book) that develops a Chomskyan approach to the study of music is John Sloboda, *The Musical Mind* (New York: Oxford U Press, 1985).

> coherent the surface patterns of pitch, attack, duration, intensity, timbre, and so forth.[303]

Lerdahl and Jackendoff note striking similarities between musical and linguistic intuitions, and further take these similarities to suggest that a generative theory could explain our understanding of music. The sorts of intuitions to be explained concern which events should be heard as forming a group (a rhythmic or melodic phrase) and which events should be heard as composing larger sections, the relative structural importance of beats and where they occur (meter), how parts within melodies might relate to earlier or later parts (for instance, which parts count as an answering, elaborating, or continuing an earlier part), and tension and relaxation.[304] While Lerdahl and Jackendoff endorse a generative approach to the theory of music, they are opposed to proceeding by way of surface analogies between language and music.[305]

Two important methodological choices announced at the outset are 1) to consider the understanding of *competent* or *experienced* listeners and 2) to consider the "*final state*" understanding rather than the real-time process of listening to a piece. The first of these "idealizations" does not require much justification. Their initial elaboration of the experienced or competent accords with that given above:

> Such a listener is able to identify a previously unknown piece as an example of the idiom, to recognize elements of a piece as typical or anomalous, to identify a performer's error as possibly producing an "ungrammatical" configuration, to recognize various kinds of structural repetitions and variations, and, generally, to comprehend a piece within an idiom.[306]

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[303] Ibid, 2.

[304] Scruton, *Aesthetics of Music*, 187-8.

[305] Lerdahl and Jackendoff, 5-6

[306] Ibid, 2.

The authors intend this notion to be a place-holder, though they note (given the other idealization) that the competent or experienced will grasp more about a given piece than many average listeners.[307]

The second idealization of musical intuition—that "final state" understanding rather than real-time processing is to be considered first—is defended on the grounds that theorizing about processing is not fruitful without an understanding of what that process is trying to do.[308] This presents an interesting difference with the spirit of the present work and some of the authors it has considered most closely (e.g., Gurney, Hasty, and Levinson). Lerdahl and Jackendoff insist that this idealization is strictly a methodological preference, and Jackendoff considers real time musical processing in later work.[309] I will turn to his discussion after presenting the outline of the *GTTM* theory.

The form of the theory departs from that of the theory of language in offering *preference* rules along with well-formedness (and transformation) rules—the latter specify the available or possible structural descriptions while the former designates (according to such criteria as plausibility or coherence) the "preferred" ones that correspond to the listener's hearing of the piece. Lerdahl and Jackendoff note that the preference rules do most of the work in their analyses. They justify their reliance upon such rules by comparing the sorts of intuitions linguistic and music theory, respectively, are supposed to explain. Since music is not tied to meaning or function (and thus presents itself as "pure" or free structure), the interesting issues concern mostly the coherent or "preferred" way of hearing a given piece rather than judgments about grammaticality or ambiguity.[310]

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[307] Ibid, 3.

[308] Ibid, 3-4.

[309] Chapter 7, "Musical Parsing and Musical Affect," in Ray Jackendoff, *Languages of the Mind: Essays on Mental Representation* Cambridge, Mass.: MIT Press, 1992), 125-55.

[310] Lerdahl and Jackendoff, 9.

Before setting out the theory, I want to note an ambiguity in the idealized notion of an experienced listener that is relevant to whether and in what sense preference rules contribute to an explanation of the structure heard in the musical surface. In introducing preference rules as components of the theory, Lerdahl and Jackendoff state,

> We have found that a generative music theory, unlike a generative linguistic theory, must not only assign structural descriptions to a piece, but must also differentiate them along a scale of coherence, weighting them as more or less 'preferred' interpretations (that is, claiming that the experienced listener is more likely to attribute some structures to the music than others).[311]

The parenthetical explication of the term 'preferred' suggests that it should be read as *average*. However, in the same sentence *coherence* and *preference* appear as interchangeable notions; this, and the authors' emphasis on the experienced listener as an idealization (at times the experience listener is idealized to the point of being a *perfect* listener), suggest that the notion of the experienced listener is distinct from the notion of an average among listeners with enough exposure to an idiom to follow a piece, recognize mistakes, and so on. Perhaps the predominant intuitions of actual listeners competent enough with a given idiom and the intuitions of idealized listeners would not turn out to be different, but it seems clear that how this matter is clarified is relevant to clarifying the role of preference rules in the theory.

The content of the theory is a set of well-formedness and preference rules for each of the following hierarchical aspects of musical structure:

> *Grouping structure*—pieces are segmented hierarchically into motives, phrases, and sections.
> *Metrical structure*—events of the piece are related to a regular alternation between strong and weak beats at a number of hierarchical levels.
> *Time-span reduction*—to pitch-events in a piece there is a hierarchy expressing their "structural importance" with respect to their position in grouping and metrical structure.

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311 Ibid.

> *Prolongation reduction*—for pitch-events in the piece there is a hierarchy expressing harmonic and melodic tension and relaxation, continuity and progression.[312]

Grouping is an instance of a broader aspect of cognition—the "chunking" of elements and sequences of events into groups. The ease with which this is done depends on the match between the intrinsic organization and the cognitive machinery (the unconscious principles) for grouping. Lerdahl and Jackendoff consider this "the most basic aspect of musical understanding." To infer a grouping structure—what the units are, and which ones go together—from the data given in the musical surface (the "pitches, attack points, durations, dynamics, and timbres in a heard piece") is already a big step towards making sense of a piece, and necessary for understanding more complicated structures.[313]

The other aspect of rhythmic structure (aside from those that involve pitch) is *meter*, the pattern of strong and weak beats inferred by the listener and related to actual sounding musical events. Lerdahl and Jackendoff describe meter as the level of beats that is conducted and observed by tapping or nodding.[314]

Thus, the grouping structure partitions pieces into units that are either subordinate or superordinate to each other, and metrical structure associates with each piece a grid of strong and weak beats. The remaining structures deal with the interaction of rhythm and pitch relations, and marks the events of a piece in a hierarchy of relative structural importance—as "structural" or "ornamental" relative to others.[315]

In a later discussion[316] Jackendoff introduces the *GTTM* theory and moves it beyond the "final state" analysis by considering the real time processing of music. Since

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[312] Lerdahl and Jackendoff, 8-9.

[313] Ibid, 13.

[314] Ibid, 17.

[315] Jackendoff, *Languages of the Mind* (1992), 129.

[316] Ibid, 128-37.

this is in line with the emphasis of the present work, considering this discussion will bring out some respects in which the generative approach to musical understanding and the approach pursued in Chapter Four are at odds, and some respects in which the theories are orthogonal to each other.

Jackendoff states that a theory of music perception should provide an account of the following:

1. The abstract structures that the listener constructs (unconsciously) "musical structures of which events at the surface are only the audible part"
2. Principles for assigning these abstract structures to the surface
3. How the listener applies these principles in real time
4. Faculties of the mind for applying such principles

GTTM provides accounts of the first two in the form of a *grammar*—an account of the final-state understanding of pieces, or those "structures that the listener can attain, given full familiarity with the idiom and with the piece, and no limitations of short-term memory or attention."[317] What a theory of musical perception should further do is show how this grammar can build musical representations in the course of listening to a piece, and how the rules for the final-state analysis can explain the listener's experience.[318]

Jackendoff considers the experience of hearing the first two phrases (through the fourth bar) of "Ich bin's, ich sollte büssen" from Bach's *St. Matthew Passion*,[319] specifically a description of the listener's step-by-step inference of the metrical structure of this passage. The description assumes that no phenomenal accents are at work to determine interpretation of meter and that the listener is hearing the piece for the first time.[320]

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[317] Ibid, 127

[318] Ibid.

[319] The full (final-state) analysis for this piece is given in Lerdahl and Jackendoff, "An Overview of Hierarchical Structure in Music," *Music Perception* 1, 229-252.

[320] Ibid, 131. Jackendoff also argues that lifting these assumptions does not significantly change how musical parsing takes place 146-8.

Jackendoff discusses the processing of this passage as it is being heard, taking note of metrical and tonal indeterminacy persisting well into the passage before being resolved. The description invokes the following metrical preference rules (stated in *A Generative Theory of Tonal Music*):

> MPR 5 (Length): Prefer a metrical structure in which a relatively strong beat occurs at the inception of a relatively long pitch event.
> MPR 6 (Bass): Prefer a metrically stable bass.
> MPR 8 (Suspension): Strongly prefer a metrical structure in which a suspension is on a stronger beat than its resolution.[321]

Jackendoff describes how metrical indeterminacy persists up until right around the eighth event (the fermata and the following note are "now" heard as a pickup to the following measure in a duple meter). Though involved and complex, the analysis of the step-by-step processing of this passage does not even convey every aspect of the inference of musical structure. Since whatever is doing the processing (the processor or "parser") has to account for all possibilities of metrical (and other) analysis, assessing each for plausibility along the way, Jackendoff reasons that it is best to understand the parser as branching out at choice points (for example, whether the first pitch event is metrically going to be strong or weak), conducting multiple analyses in parallel fashion, dropping some as they fall below a certain "threshold of possibility." The remaining branches at the end "contain viable structures for the piece as a whole." Since we are only ever conscious of one structure (the other analyses are conducted unconsciously), Jackendoff adds to the model a selection function which designates the most salient interpretation as the one to appear for conscious awareness as *the* structure.[322]

Jackendoff notes the advantages of this model over the serial processing model in that it avoids the difficulty of having to compute all possible analysis in advance of choosing one, as well as the problem of having to "backtrack" every time a chosen

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321 Lerdahl and Jackendoff, *A Generative Theory*, 80, 84, 88-89.

322 Ibid, 140.

structure is rejected (and meanwhile having to keep up with the music in real time so as to avoid losing information). Further, Jackendoff claims, with the addition of the selection function the model does not imply that we experience multiple metrical interpretations at once, a claim that would be strongly at odds with the phenomenology of musical experience.[323]

What is left is to explain the "retrospective" perception of meter and key that often happens in musical listening. How is it that we seem to hear the meter and key immediately if the parser does not determine the meter and key until later? Citing Daniel Dennett, Jackendoff argues that in the above example the selection function chooses a structure that characterizes (represents) an extent within the scope of the "perceptual present"; thus, even though it chooses this structure (thus replacing the initial or preceding heard structure) *after* the preceding events, we hear the structure "as having been 'the' structure of the music all along."[324]

Jackendoff claims that there are other analogies with the processing of language, for which he also endorses a parallel multiple-analysis model. He cites results based on priming experiments as suggesting that all possible meanings for a word are unconsciously accessed before the processor drops meanings ruled out by surrounding semantic or syntactic context.[325] He also cites evidence that clause boundaries of sentences are where all but the most salient syntactic analyses are discarded, drawing a parallel with Lerdahl's suggestion that boundaries of cadenced groups are where the parser discards implausible analyses.[326]

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[323] Ibid, 140.

[324] Ibid, 142. Jackendoff further claims that the processor is "informationally encapsulated" from memory; thus, it can initially select an erroneous structure as the "most likely or plausible," even assuming perfect familiarity with the piece (147-8). See the following paragraph for a linguistic analogy.

[325] Ibid, 142-4.

[326] Ibid, 145.

Jackendoff considers the following example of a garden-path sentence:

1. The horse raced past the barn fell.

The correct analysis of this sentence emerges when it is seen as a reduced form of 'The horse *that was* raced past the barn fell'. Such a reduction is acceptable, as in

2. The picture painted by Bill was beautiful.

In hearing sentence 1, the listener settles on a contextually plausible analysis early on (since horses often race) and is led to an incorrect analysis. In the case of 1, the listener is unable to revise the analysis of 'raced' as the main verb, even after the real main verb is heard at the end.[327]

Garden-path sentences present cases in which the language-parser settles on a single interpretation of a sentence early on, and subsequently is unable to backtrack for a new alternative when it is disconfirmed. Jackendoff notes that an interesting question is at which point the other possible interpretations drop out. He draws attention to cases like the following:

3. The horse led a long way down the road fell.
4. The horse led a long line of wagons down the road.

In these cases, whether 'led' is to be interpreted as the past participle or the main verb in the sentence is not determined until later, yet there is none of the "shock" that characterizes the hearing of sentence 1. Jackendoff takes this to suggest that multiple analyses are being considered up until the choice points (at 'way' and 'line', respectively). These latter cases, Jackendoff states, are analogous to the Bach example: there is no sense of surprise when the interpretation of the passage is finally determined at the eighth event. On the other hand, if the evidence does not determine the correct analysis after a sufficient amount of time, the selection function chooses one over another

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[327] Ibid, 144.

"on the basis of frequency or plausibility or structural simplicity—whatever extracontextual factors may be at its disposal."[328]

Are there even analogies to garden-path sentences in music? One kind of situation in which one seems to be stuck in an interpretation, unable to revise it, is in the disorienting experience of losing the beat. For some, this is likely to happen when listening to recorded jazz (particularly if the ride cymbal is very fast). One is often consciously aware of not hearing properly; such cases can be unpleasant precisely because they can persist even in the face of "implausible" musical events. The intuition here, however, is not that the music is "ungrammatical," and it is clear to the listener that all that is needed is to stop and start paying attention again, or for a familiar musical event to take place and reorient the listener.

In looking for situations in music to correspond to garden-path sentences, we eventually run into a pronounced disanalogy between language and music. Scruton notes that preference rules are supposed to function in music in much the same way that semantic factors function in language.[329] We might ask what, in the case of music, determines the processor to select an interpretation as the one that is going to be heard, or what determines whether an analysis is actually wrong.

Scruton objects that it is unclear what preference rules are supposed to explain. He points out that preference rules do not uniquely determine a structured musical surface but merely derive the structure from a set of rules that are sometimes in conflict. There is no clear sense in which the listener can be said to *follow* the rules rather than merely act in accordance with them—that it is unclear in what sense they are even rules, how they *constrain* musical hearing and thus how they explain musical intuition.[330]

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[328] Ibid, 145.

[329] Scruton, 189, 192, 197-8.

[330] Scruton, *Aesthetics of Music*, 191-4.

He constructs an analogy with dot-works to illustrate this point. Suppose, he says, there is a tradition of making artworks by arranging dots on a screen. These works are enjoyed and evaluated from the *Gestalt* which is seen, and part of this enjoyment is in seeing how this surface form is related to ("derived from") the organization of the dots on the screen. Suppose further that certain rules of composition, essentially summaries of successful practice, are familiar to dot-workers and to viewers of dot-works. These "rules," of course, can be broken; they do not constrain the making acceptable dot-works or the ability of viewers of these works to understand them. Now, one *can* construct a generative grammar that would derive, for each of the finite set of successful works, which forms are seen on the surface (especially with the addition of preference rules); such a derivation, Scruton claims, is always trivially possible. However, that such a derivation is possible does not show anything about what is involved in the understanding of dot-works. The rules of such a grammar would merely formalize intuitions rather than explain them, because the way these viewers came to understand dot-works was not by grasping and applying rules but rather by "by comparing the surface forms of examples, and acquiring a feel for shape and composition."[331]

In some respects, the parts of the generative theory that concern rhythm (grouping) and meter are orthogonal to my phenomenological description of rhythm and meter. For one, the rules they state are at a different level from what I describe; in a sense, what I say nods in the direction of accepting that there is a set of "rules" and "principles" for "deciding" which interpretation of a given single stimulus is going to be heard (though I am hesitant to refer to unconscious, subpersonal operations according to a set of rules and principles). What I draw attention to are general essences—for example, *that* some interpretations are more salient than others and that salience is connected with consciousness of body movement. Such essences do not specify *what* kinds of

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[331] Ibid, 193-4.

interpretation are most salient. It is open, of course, that certain of these rules reflect essential features of the experience of music.

As I indicated in the introduction, my project is a constitutive theory of musical understanding (specifically the understanding rhythm and meter). One respect in which these approaches are at odds is in my effort to describe the faculty of musical understanding in such a way that whatever it does or is doing is accessible to conscious awareness. A description of the conscious processes that distinguish musical understanding—of the experiences which ground our awareness of musical structures—is the task of the phenomenological theory of musical experience and understanding of which Chapter 5 of this work is the first step.

CHAPTER 7

SUMMARY AND CONCLUSIONS

The main work of this project has been to initiate a phenomenology of musical experience. A guiding conviction of it is that such a phenomenology—not a description of instances of recorded or performed music and how they show up in their full experiential context, but rather a close description of the most basic kinds of syntheses involved in musical hearing—can not only clarify certain problems in philosophy of music but also reveal more general structures of consciousness.

The core theses are that 1) musical rhythm is the most fundamental, and the only essential, component of the musical experience and that 2) the key to musical hearing is not essentially or particularly a kind of focus within auditory experience but is rather a particular kind of engagement of our consciousness of time.

In the introduction, I announced the topic of musical understanding. There I noted that the problem of musical understanding can be taken as 1) that of what we hear, or what we listen for, when we hear sounds as music or listen to them musically, or as 2) the problem of *how*, what explains or accounts for the fact that, we hear musical forms (rhythms, melodies, sections, and organizational forms) in certain sequences of sound-events. This discussion has been geared toward the first (though the two are related)—toward a *constitutive* rather than an explanatory theory—which means that the interest is in the intrinsic, internal characterization of musical hearing. I also motivated a focus on what I (following Jerrold Levinson) call "basic musical understanding"—the grasp of melodic, rhythmic, and harmonic or progressive events at the smaller-scale, local level of hearing—and argue for the relevance of phenomenological description of this level of musical experience to the theory of musical understanding. Following Levinson, I take the experience of such objects as melodic and rhythmic phrases and short progressive sequences to be basic and fundamental to musical understanding and appreciation.

Chapter 2 discussed Levinson's concatenationist view of musical understanding, which he develops from his reading of Edmund Gurney's *The Power of Sound*. Gurney emphasized the sequential nature of music and how musical experience differs essentially from the experience of viewing arabesques or architectural facades. He further emphasized that the essential achievement of musical hearing lies in the synthesis of successive non-simultaneous sounds into a unified movement.

Concatenationism holds that musical understanding is centrally a matter of apprehending individual moments of music and immediate progressions from moment to moment, and develops related theses concerning musical enjoyment, form, and value. Levinson bases this view in a consideration of the nature and scope of momentary hearing. He develops the notion of *quasi-hearing* to express the type of aural grasp that takes us beyond the auditory or musical instant (though not far enough to apprehend larger-scale formal features). Quasi-hearing, for Levinson, is composed of instantaneous, literal hearing, vivid remembering of what has just passed, and vivid anticipation of what will immediately follow. Quasi-hearing is what is required for hearing musical movement, and Levinson claims it is constitutive of basic musical understanding. "Understanding music" he says, "is fundamentally a matter of hearing it a certain way," and this involves "aurally connecting together tones currently sounding, ones just sounded, and ones about to come, synthesizing them into a flow as far as possible at every point."

I considered Levinson's analysis of quasi-hearing in connection with the phenomenological theory of time-consciousness. I indicated that the structure of quasi-hearing characterizes auditory consciousness generally and is not by itself a specification of basic musical understanding. The chapter concluded that while Levinson is correct in his understanding of the priority of basic musical understanding, his analysis of quasi-hearing does not give an adequate characterization of it.

Chapter 3 opened with consideration of three definitions of music, each of which develops (in different ways) the notion of music as organized sound and each of which implicates musical hearing. The conclusion of that discussion was that musical hearing centrally involves some communicated organization of sounds. (Musical practice, like linguistic practice, is fundamentally communicative.)

The following consideration of Roger Scruton's account of musical hearing led to the conclusion that musical hearing does not fundamentally involve imaginative or metaphorical perception, at least not in the case of hearing musical rhythm (the case of melody turns out to be more difficult). I further concluded that musical hearing does not fundamentally or essentially involve detachment of sound from source and hence that Roger Scruton's acousmatic thesis about musical hearing is false.

Chapter 4 opened with a presentation of phenomenological theory and method. A significant part of the phenomenological outlook is that it sees lived experience as the ultimate context of intelligibility for any claim concerning reality, whether philosophical or scientific. What this means is that a theory about what sound and auditory experience are must ultimately base itself in how sound is experienced and what hearing is like. The lived experience of sound reveals that sound relates us primarily to environmental things and happenings. The theory of auditory experience that I endorse in this chapter has it that we hear happenings in the environment in virtue of hearing sounds, which are constitutive parts of those happenings. Acousmatic listening, on this account, is a matter of attending to the audible surface and remains tied to the happening of which that surface is a part. I further reinforced a point from Chapter 3, that music (and especially musical rhythm) is paradigmatically and in the first instance the object of a multimodal perception.

Chapter 5 described rhythm as an objective feature of events and processes, a nonrelational temporal organization calling for synchronization of perceptual attending. The noematic correlate to this act of synchronization is what I called the time of the

object of perception or objectual time. I then considered the issue of the relation between subjective or lived time, clock time, and musical time. I concluded that musical time need not be considered a kind of virtual time but is rather the objectual time of musical performance actions. I also took note of Alfred Schutz's characterization of music as involving the sharing of inner time as offering further characterization of musical time. To develop these notions further, I pursued eidetic (or phenomenological) variations on a series of metrical rhythms. Variations can either be obtained imaginatively or perceptually. In either case, the purpose of variation is to reveal essential features or structures of the experience being considered. The variations that I offered are simple perceptual variations; the examples were artificial, since achieving such variations with actual musical examples, while possible, is very difficult. What the variations and the discussion of them were intended to reveal is that metrical organization is a necessary feature of the experiences under consideration. Metrical organization is conditioned both noetically (by the tactus level and by how one willfully chooses to attend) and noematically (by one's take on the event or process being perceived). I also noted the distinctness of felt regularity from counting.

Concerning musical rhythm, what is central is the communication or sharing of inner time, of how the perceived events and processes are metrically organized. Salient features are the interest in rhythm (in unities of rhythmic phrases over time) and in the hearing of a primary rhythmic level, perhaps as organizing distinct sequences. I emphasized at the end of Chapter 5 that I have not defined musical rhythm; rather, I have noted necessary and salient features for a kind of experience that is ubiquitous in human life and not limited to musical practice.

From my view that rhythm is uniquely essential to musical experience it follows that nonauditory musics are conceivable. Accepting this conclusion is consistent with acknowledging that sound plays an important part in music as we know it and that a

philosophical theory of musical understanding must also address the phenomena of tonal space and movement in music.

Another conclusion from the discussion in Chapter 5 regards the value of music. Recall that an essential features of musical rhythm is that it is experienced as a communicative action enjoining the sharing of subjective inner time. Among the things that make music valuable is something that is apparent at the most basic level of musical experience; it is that it provides us with an intimate sense of communication or shared perception.

Chapter 6 considers the questions of musical expressiveness and the prospect of understanding music by analogy with language. The first (largely historical) discussion concluded that musical expressiveness is to be understood neither as the arousal of emotions in the listener nor as the expression of the emotions of the composer or performer. The notion that music represents emotions was considered along with Hanslick's critical discussion, part of which invokes a cognitive theory of emotion. In arguing against the representation of emotions in music, Hanslick advocated for a formalist (that is, non-referentialist) position in music.

The contour theory of musical expressiveness presents itself as an alternative to the representational theory, one that takes expressive features to characterize the music itself rather than to be represented by music as a sign or symbol. According to the contour theory, music bears a resemblance to the "contours" of certain behavioral expressions of emotion such that when we hear music we animate, or perceive emotion characteristics in the music itself. While the contour theory faces challenges, it is nonetheless correct in claiming that the experience of musical expressiveness is phenomenally distinct from that of the representation of emotion.

The second part of Chapter 6 considered the prospect of developing musical analogues to syntax and semantics (since after all, such would amount to a theory of musical understanding) and indicated challenges in the way of doing so. I also presented

the generative theory of music (which treats musical understanding as parallel to the understanding of language), considered the explanatory status of rules within the theory (particularly the preference rules), and outlined how the generative theory and my phenomenological approach to musical understanding are related.

As I indicate in the introduction, I am interested in musical understanding as a conscious process and a conscious achievement—I am more interested in understanding what consciousness does that is constitutive of grasping musical forms than in understanding the psychological determinants of which interpretation is favored, and I am skeptical of the explanatory value of the unconscious processes posited by the generative theory (particularly as these involve pursuing different metrical interpretations).

My view concerning musical experience can be summarized in contradistinction to Scruton's. Scruton combines the acousmatic thesis with the thesis of necessary metaphorical perception (attending to sounds as moving, dancing, etc. metaphorically). My view, on the other hand, combines a thesis about attending to rhythm for its own sake (rather than to sound divorced from worldly context) with a thesis about attending to rhythm as communicated by a performance action.

One of my long-range goals is to develop a comprehensive phenomenological theory of musical understanding that also takes into account the role of pitch. Such a theory would keep description of the structures heard in music as well as musical hearing at the conscious, first-personal level. As such, the theory would be in significant contrast to cognitive theories such as the generative theory discussed in the Chapter 6. Another goal is to develop an account of musical meaning along lines analogous to Grice's reductive account of sentence-meaning.

A shorter-range goal is to make good on the promissory note that the phenomenology of basic musical experience can clarify philosophical problems pertaining to music, particularly musical expressiveness. The section on expressiveness goes as far as saying that it should be seen as belonging to the music rather than to the

listener, composer, or performer and that it should be fairly immediate (it should be perceived rather than inferred or read). These desiderata on an account of musical expressiveness are not enough to determine any particular theory of expressiveness. To develop a phenomenologically adequate theory of musical expressiveness requires further attention.

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