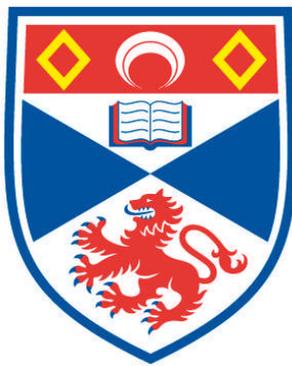


**CARMEN UNIVERSITATIS : A THEOLOGICAL STUDY OF  
MUSIC AND MEASURE**

**Steven R. Guthrie**

**A Thesis Submitted for the Degree of PhD  
at the  
University of St Andrews**



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*University of St Andrews*

# CARMEN UNIVERSITATIS

**A Theological Study of Music and Measure**



A Thesis Submitted to  
the Faculty of Divinity  
in Candidacy for the Degree of  
Doctor of Philosophy

STEVEN R GUTHRIE

St Andrews, Scotland, UK  
1 June 2000

## Abstract

In every era and every culture, human beings have made music. Moreover, in most cultures—certainly through most of Christian history—music has played an important role in worship and religious ritual. But why should music of all things, be a universal feature of human culture? And why should this particular activity be so regularly paired with religion? Theologians and philosophers have proposed one answer or another to these questions. In the first part of the thesis, we consider Schleiermacher’s *Christmas Eve* dialogue. I conclude that the dialogue suggests a deep affinity between religion and music, because (1) both have essentially to do with feeling, not knowing; (2) both involve us at the level of the spontaneous and pre-conceptual, rather than at the level of the reflective and analytical; and (3) both give voice to the universal, rather than the particular. Interestingly enough, other theologians have proposed an explanation which nearly inverts the one found in *Christmas Eve*. This “Pythagorean” tradition locates the power of music, not in our spontaneous inward experience, but in the rational, mathematical and structural truths in which music participates. Music is prized as a source of knowledge, and is thought to possess a mathematical complexity which invites analysis. I find that both proposals have some ground for their claims, but that both present serious difficulties as well—in their description of music, in their characterizations of the Christian religion, and in the categories and oppositions they employ.

In the middle section of the thesis, I begin to construct a more adequate account of music, drawing in particular on the fields of psychomusicology and the philosophy of music. Drawing on philosopher Mark Johnson, I argue that distinctive conceptual categories are made available to us through the embodied experience of music. These categories may then be metaphorically extended across a whole range of thought and experience.

In the third part of the thesis, I bring this analysis back into more explicit dialogue with theology, through a study of St. Augustine’s *De Musica*. *De Musica* provides an alternative to locating the power of music in either *feeling-not-knowing*, or in *knowing-not-feeling*. Music is described as *scientia bene modulandi*—the knowledge of maintaining right measure, proportion and relationship. Drawing upon our earlier analysis, I argue that music depends upon holding together many different elements in a differentiated unity. Music arises from and gives voice to the perichoretic, “polyphonic” nature of reality and of our own humanity. I consider why this sort of experience should be conducive to worship or religious ritual, and offer a theological analysis of some of the distinctive categories music may open up to our experience.

## *Declarations*

- (i) I, Steven Richard Guthrie, hereby certify that this thesis, which is approximately 100 000 words in length, has been written by me, that it is the record of work carried out by me and that it has not been submitted in any previous application for a higher degree.

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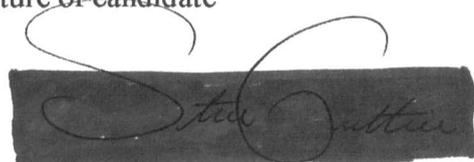
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- (ii) I was admitted as a research student in October 1997 and as a candidate for the degree of *Philosophiae Doctor* in May 1998; the higher study for which this is a record was carried out in the University of St. Andrews between 1997 and 2000.

Date 2/6/00

Signature of candidate



- (iii) I hereby certify that the candidate has fulfilled the conditions of the Resolution and Regulations appropriate for the degree of *Philosophiae Doctor* in the University of St. Andrews and that the candidate is qualified to submit this thesis in application for that degree.

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Signature of supervisor



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*For Julie*  
*Joel and Noah*

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*Music is a strange thing. I would almost say it is a miracle. For it stands halfway between thought and phenomenon, between spirit and matter, a sort of nebulous mediator, like and unlike each of the things it mediates—spirit that requires manifestation in time, and matter that can do without space.*

—Heinrich Heine, *Letters on the French Stage*.



*Music, O Music, such a funky thing.  
The closer you get, the deeper it means.*

—King's X, "Welcome to the Groove Machine," *Tape Head*

# Preface



This started out as a thesis on hell.

That I should instead end up writing 300 pages on *harmony*, has been the happy surprise ending to this period of study—the unexpected resolution of a deceptive cadence.

Music has always been an important part of my life. I grew up playing and listening to music, and went on to study music theory at university. For a while after that, I managed a trio of music-related jobs. In the mornings and afternoons I worked as a church director of music and youth; in the afternoons and early evenings I gave piano lessons; and at night, I played in a band. Much as I enjoyed each of these vocations, after five years, I was beginning to think about pursuing a different course. A promising record contract the band had been negotiating suddenly fell through; the senior pastor of the church where I worked moved to a new congregation; and I was finding it harder and harder to keep up a schedule of late nights followed by early mornings. It seemed it might be time to strike out in a new direction. And so, (not entirely sure just what that new direction might be), I decided I would quit the band, sell my gear, and (why not?) enroll in seminary. Three years after that decision—and to my eternal amazement—I was in St. Andrews, Scotland, beginning doctoral research on the doctrine of hell.

Trevor Hart, Professor of Divinity, oversaw that early research. He also knew of my background in music, and from time to time would mention the *Theology Through the Arts* project being directed by Jeremy Begbie. I listened with great interest. Meanwhile, six months into my own work, I was becoming less and less excited about going through Hell to get a PhD. One evening, I read through one of Begbie's essays, and decided to write a short review of it. That sketch developed into a longer piece, which developed into a paper, which then evolved into a research proposal for this thesis.

The months of study and writing that have followed have been marked by a kind of reunion joy. Reflecting on the whole process, it brings me great delight to consider how God used music to lead me to theology, and theology to lead me back to music.

## Acknowledgments

I have been fortunate during this time to have a supervisor who possesses both a keen theological mind and a Fender Strat. As I have indicated, this study probably would not have been started, and certainly would not have been completed, without the discerning and supportive direction of Trevor Hart. His contributions—both to the thesis and to these very pleasant years in St. Andrews—have been considerable, and I offer him my deeply felt thanks.

I would also like to thank Dr. Jeremy Begbie of Ridley Hall, Cambridge, for demonstrating that theology and music do indeed have a great deal to say to one another. His work gave me the confidence to attempt my own modest contribution to the conversation. Dr. Begbie also allowed me to read a rough draft of his *Theology, Music and Time* (Cambridge University Press, forthcoming) and corresponded with me about its contents. These were encouraging exchanges, and I am grateful for the time he invested in my learning.

It is a special pleasure to thank my uncle, Dr. Pat A. Manfredi, of the Department of Philosophy at Southern Illinois University. Pat took time from his teaching and research to read a rough draft of my thesis, and he pointed out (in the way only family can) just *how* rough it was in places! It has been a lot of fun to talk through different issues with him, and to interact with a favorite family member in a brand new context.

Over the last year I have shared an office at St. Mary's with David Hogg; an arrangement that has made that time far less productive for him and far more enjoyable for me. He also read portions of the thesis, (and endured unsolicited readings of other sections of it), contributing helpful insights at every point. Most important of all, he taught me how to juggle.

As I made a mental tally of those I might thank in this preface, I realized that more than twenty different individuals and four churches (on two continents) have supported my family financially through these years! A far greater number have aided us through earnest and consistent prayer. It makes me very glad indeed to think of this degree, not as the individual pursuit of a private ambition, but as a work of the Church of Jesus Christ, to which many have contributed. I thank these sisters and brothers for allowing me to work alongside them, and for their creative, consistent, and sacrificial labor on our behalf.

My wife and I would like to express our deepest gratitude and affection to our parents. Richard and Sarah Guthrie have been devoted encouragers; cheering us on, and believing deeply in the importance of this time of study. They have helped us financially and have managed our affairs in the United States. Ronald and Mary Waterloo, my parents-in-law, have been no less supportive and caring. In addition to helping us meet our financial obligations, they have kept up a steady stream of e-mail from home, have come to help us after each of our two children were born, and have made it possible for three of Julie's sisters to visit us during this time. Both sets of parents have prayed for us faithfully. And both have valued our best interests and obedience to God, more than their own desire to have us closer to home.

Finally, while I have spent these years reading and thinking about beauty and grace, my wife Julie has embodied those qualities, and has made them the distinguishing mark of our home. Through all of my anxieties, uncertainties and thesis related mood swings, she has remained firmly and passionately convinced of the importance of this topic. And despite my pessimism and crises of confidence, she has been unshakable in her belief that by God's grace, this thesis would be completed. She has taught me more about joy than any text I have read over these years, and more about melody and harmony than any song I know. I dedicate this completed project to her with gratitude.

Steven R. Guthrie  
St. Mary's College  
1 June, 2000



# The Question of Music

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*It is the enterprise and privilege of the aesthetic to quicken into lit presence the continuum between temporality and eternity, between matter and spirit, between man and 'the other'. It is in this common and exact sense that poiesis opens on to, is underwritten by, the religious and the metaphysical. The questions: 'What is poetry, music, art?', 'How can they not be?', 'How do they act upon us and how do we interpret their action?', are, ultimately, theological questions.*

—George Steiner, *Real Presences*

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## INTRODUCTION

*Sing joyfully to the LORD, you righteous; it is fitting for the upright to praise him.*  
Psalm 33:1

*Praise the LORD, for the LORD is good; sing praise to his name, for that is pleasant.*  
Psalm 135:3

It is good and right and fitting that the people of God should praise him. Throughout the Psalms, the poet directs attention to God's acts and his person and calls for an appropriate response; and time and again—in an extraordinary array of circumstances—

the response urged is that of song: The LORD's unfailing love surrounds the one who trusts him the psalm declares, so *sing!* (Ps. 32:10-11) The LORD destroys the wicked and avenges blood, so *sing!* (Ps. 9:2-12) The LORD is a shield and refuge; let those who find shelter in him *sing!* (Ps. 5:11) *Sing!* God's people are urged, for the LORD's anger lasts only a moment (Ps. 30:4). *Sing!* for the word of the LORD is true and he is faithful and just. (Ps. 33:1-5)

On and on it goes. Perhaps it is the very frequency of such commands that keeps us from asking why they are given. It seems fitting to us too, obvious, that the worshipper should worship in song. But on first reflection, there is no reason why it should be so. Why music? Why singing? Why doesn't the Psalmist urge the people of Israel, "Dig ditches you saints of his, for the LORD is good!"? Why not "Do beadwork, you righteous!", or "Mime to him joyfully O Israel!"? Admittedly, other human activities are urged in praise of God, and the Apostle Paul teaches us that even eating and drinking can be done to His glory (1 Cor. 10:31), but few activities in scripture are associated with God's praise and presence as frequently as that of singing and making music.

In the same way, James writes, "Is anyone happy? Let him sing songs of praise"(James 5:13) —as if our joy could find no more immediate or spontaneous expression of delight than in song. The link is apparently self-evident to James. He provides no argument or justification for it, and though separated by two millennia and several cultures, neither do we expect any explanation of him. We accept with little argument that it is fitting to praise God in song, not only because of the biblical record, but because of our own experience. Indeed, the history of Western music has been until very recently bound together with the history of the Christian church. Music is a prominent feature of most worship services and in most Christian churches "worship"

would be considered nearly synonymous with “music” (whether or not such an identification is theologically legitimate). *Of course* one sings for joy we say, just as surely as one does not wash dishes for joy, or lick gummed envelopes for joy. But *why?* Why *music?*

We could consider the various cultural and historical forces which have shaped liturgical practice, and if song were a feature of Christian worship only, then perhaps this sort of study would provide an adequate answer to the question I have raised. However, the association between the musical and the spiritual is not limited to Christianity. We know of no culture which lacks its own music, and in nearly every culture where we encounter music, we find it linked with ritual and religion. One ethnomusicologist reflects upon his studies in the music of different cultures and concludes, “I seriously doubt, in fact, that one could find any religion, large or small, that does not concern itself with the ways ‘music’ is . . . vital to conveying the word of God . . . . Music is thus a preferred medium for expressing religious meaning.”<sup>1</sup> Even beyond the boundaries of formal religion, even in secular and post-Christian settings, song and spirit still seem bound up with one another. The association is invoked not only (or even primarily) by theologians, but by musicians, performers and listeners struggling to locate a vocabulary which can articulate their experience of music. George Steiner writes that

Music and the metaphysical, in the root sense of that term, music and religious feeling, have been virtually inseparable. It is in and through music that we are most immediately in the presence of the logically, of the verbally inexpressible but wholly palpable energy in being that

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<sup>1</sup> Philip V. Bohlman, “Is All Music Religious?,” in *Theomusicology. A Special Issue of Black Sacred Music: A Journal of Theomusicology*, ed. Jon Michael Spencer (Durham: Duke University Press, 1994), 11.

communicates to our senses and to our reflection what little we can grasp of the naked wonder of life.<sup>2</sup>

In music, it would seem, we encounter “traces of transcendence” (to use Hans K ung’s phrase<sup>3</sup>).

The question, “Why Music” then, can be broadened beyond the boundaries of the music of worship. “Is it not strange that sheep’s guts should hale men’s souls out of their bodies?”<sup>4</sup> Strange indeed. Why should a series of rhythmic pulses make our own pulses quicken? Why should a group of sounds with no lexical meaning *speak*, eloquently and powerfully? I would like to suggest that an answer to such questions might tell us not only about music, but perhaps also something about how God has made us and the world in which we live. Answering these questions may also allow us to consider why this musical experience should draw us to, prepare us for, or somehow be associated with worship.

## Disciplinary hegemony?

To some, both within and outside the discipline of theology, all of this may seem extraordinarily wrong-headed. These questions—about the way music affects us, and why—belong to the psychologist, the anthropologist, the philosopher, or better still, the musician—but certainly not the theologian. To those outside the discipline of theology, such a project

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<sup>2</sup> George Steiner, *Real Presences: Is there anything in what we say?* (London: Faber and Faber, 1989), 216-17.

<sup>3</sup> Hans K ung, *Mozart: Traces of Transcendence*, tr. John Bowden (Grand Rapids: Eerdmans, 1993).

<sup>4</sup> William Shakespeare, *Much Ado About Nothing*, Act II Scene 3, [text on-line]; available at Internet Public Library: <http://tech-two.mit.edu/Shakespeare/Comedy/muchadoaboutnothing/muchadoaboutnothing.html>

“BENEDICK:

Now, divine air! now is his soul ravished! Is it not strange that sheep’s guts should hale souls out of men’s bodies.”

may seem, at best, a quaint bid to return to the musical-metaphysical speculation of the medievals (offering sober explanations of the three perfect musical consonances in terms of the three persons of the Trinity, and so on). At worst, theological reflection on music may be interpreted as an aggressive violation of disciplinary boundaries. From this perspective, the implicit ambition of a Theology of Music is the reinstatement of theology as Queen of the Sciences. The theologo-musician seeks to set over all other disciplines and fields of inquiry this one meta-discipline, with the theologian the final arbiter of all intellectual endeavor. Precisely this sort of perceived presumption has recently prompted angry criticisms of Jon Michael Spencer's Theomusicology project.<sup>5</sup> Critics charge that by co-opting musicological conclusions as material for theological reflection, Spencer has adopted a stance of "philosophical superiority" toward all other, properly musicological disciplines.<sup>6</sup>

Others within the fields of theology and biblical studies would likewise regard this sort of project as fundamentally misguided.<sup>7</sup> In a recent article titled "Theology and Music"<sup>8</sup> Francis Watson wonders about the very possibility—and certainly the value—of any comprehensive theological engagement with music. We should not assume any natural link between these two areas of human endeavor, says Watson: "There is . . . no prior guarantee that theology will have anything pertinent to say about music."

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<sup>5</sup> Jon Michael Spencer, *Theological Music: Introduction to Theomusicology* (Westport, Conn. : Greenwood Press, 1991); idem, ed. *Theomusicology*.

<sup>6</sup> Terry E. Miller, review of *Sacred Music of the Secular City: From Blues to Rap*, ed. Jon Michael Spencer, *The Hymn* 44:1 (January 1993): 46. As cited in Jon Michael Spencer, "Preface," in *Theomusicology*. vi.

<sup>7</sup> Following a paper on my research I recently presented at King's College, Aberdeen, Watson indicated to me in conversation that he indeed felt such a project was misguided.

<sup>8</sup> Francis Watson, "Theology and Music," *Scottish Journal of Theology* 51 (1998): 435-63.

One would not expect an inquiry into the relationship between theology and, say, *chess* to be particularly illuminating. Will music necessarily prove any more illuminating as a dialogue-partner?<sup>9</sup>

Like Spencer's critics, Watson is concerned that any broad theological reflection on music will transgress the legitimate borders of the discipline. He warns that "a theology rightly concerned to preserve the particularities of its own practice must respect the boundaries of this other, quite different practice."<sup>10</sup> God may be Lord of all reality, but this does not automatically mean that the theologian has something relevant to say about every area of human endeavor.<sup>11</sup> By what right or qualification Watson wonders, does the theologian presume to make pronouncements about music? Conversely, on what basis should we expect musical practice to shed light on theological issues? What indeed has Carnegie Hall to do with Jerusalem?

#### Speaking when spoken to

Watson's question is fair enough. What expertise or competence does the theologian bring to musical matters? Perhaps none at all. There is an important distinction however, between theology speaking for other disciplines, and theology answering questions other disciplines have put to it. And other disciplines do pose properly theological questions; the obvious example being the natural sciences. The interdisciplinary dialogue between theology and science is widely recognized as not only excusable, but imperative. T. F. Torrance, who has contributed significantly to this dialogue, argues that "because [theology] operates in the same world as natural science it cannot pursue its activity in a sealed-off enclave of its own, but it must take up the relevant problems and questions *posed by the other sciences* in clarifying knowledge of its own subject-matter."<sup>12</sup>

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<sup>9</sup> *Ibid.*, 436.

<sup>10</sup> *Ibid.*, 437.

<sup>11</sup> *Ibid.*, 436.

<sup>12</sup> Thomas F. Torrance, *Space, Time and Incarnation* (London: Oxford University Press, 1969), viii. My emphasis. Of course there are many other instances of legitimate inter-disciplinary conversation. Can we imagine the shape of theology if it were forbidden any contact with philosophy? Can we imagine the shape

Music, I am suggesting, no less than the sciences, poses properly theological questions. “How do we sing?” is a question for a physiologist; “How do we sing with interpretive sensitivity?” is a question for a conductor or vocal instructor; but “Why do we sing?” is manifestly a question for the theologian. *Why do human beings sing? What is the nature of human musical creativity? To what extent is musical creation determined by material or cultural constraints?* These are questions theology is well qualified to answer because they are not simply questions about music, but about the nature of humanity, the world in which we live, and the way world and humanity are related to one another. I am not suggesting that the theologian issue pronouncements *ex cathedra* on disputes in music analysis (“*on the basis of Genesis 22:15, we declare that the controversial original repeats in Beethoven’s C Minor Symphony shall be observed!*”). I do believe however that when music raises matters of fundamental concern to theology, theologians should have the common courtesy to respond.

In addition, as I have already suggested, there are compelling reasons that the theologian should have a particular interest in music: the universality of music,<sup>13</sup> the widespread association of music with spirituality, and the near universal marriage of music and Christian worship.<sup>14</sup> Anthropologically and historically, music is demonstrably

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of either theology or biblical studies if history were roped off? What about the conversation between biblical studies and philology or linguistics?

<sup>13</sup> “There have been cultures without counting, cultures without painting, cultures bereft of the wheel or the written word, but never a culture without music.” John D. Barrow, *The Artful Universe: The Cosmic Source of Human Creativity* (Boston: Back Bay Books, Little, Brown and Co., 1995), 186. “Musicality is not something one may or may not have, but something that—along with other factors—is constitutive of man.” Victor Zuckerkandl, *Man the Musician. Sound and Symbol: Volume Two.*, tr. Norbert Guterman (Princeton, N. J.: Princeton University Press, 1973), 8. “Like language, music is a uniquely human activity.” Ray Jackendoff, *Patterns in the Mind: Language and Human Nature* (New York: Basic Books, 1994), 165. “There is so much music in the world that it is reasonable to suppose that music, like language and possibly religion, is a species-specific trait of man.” John Blacking, *How Musical is Man?* (Seattle: The University of Washington Press, 1973), 7.

<sup>14</sup> One well known early citation concerning the practice of music among Christians is found in Pliny’s letter to the Emperor Trajan (early 2nd century): “They [the Christians] affirmed however, that this was the extent of their fault or error, that they were wont to assemble on a set day before dawn and to sing a hymn among themselves (*carmen . . . dicere secum invicem*) to the Christ, as to a god.” As cited in *Music in Early Christian Literature* James McKinnon, ed. (Cambridge: Cambridge University Press, 1993), 27. Clement goes beyond formal corporate worship when he writes: “Throughout our entire lives, then, we celebrate a feast, persuaded that God is present everywhere and in all things; we plough the fields while giving praise, we sail the seas while singing hymns, and on every other public occasion we conduct ourselves skillfully.” *Stromata* VII, vii, 35.; as cited in McKinnon, 36. Two good introductions to the place

more than just one of many practices in which humans engage. It is a distinctively and some would even argue, a constitutively human activity. Should we not expect the theologian to offer a framework, a view of the world, which interprets and makes sense of this? We would not be surprised if a theologian were to ask, *Why do human beings go to war? What does it tell us about humanity that we seek out human companionship?* or, *What does it tell us about the world and how God has made us that we use language?* Alongside these questions the theologian may legitimately set another: *Why do human beings make music? What can we learn about humanity, about the world and God who has created both by looking at the human practice of music?*

### Coming to terms with music

Watson wonders not only whether theology has anything to say to music, but also whether music has anything to say to theology. Why should we expect the study of music to yield theological insights? Is not such an approach a form of natural theology? Watson expresses these misgivings in his critique of Jeremy Begbie's work. Begbie has suggested that the arts offer us a valid and distinctive means of cognitive access to the world. Watson responds, "From the standpoint of theology, the question is why, in the light of Christian faith's own 'cognitive access to the world', this supplementary or alternative route is needed."<sup>15</sup> Again, reflection on the parallel interdisciplinary dialogue with the natural sciences is instructive.

Consider, for instance, the various theological interpretations of evolutionary biology. Moltmann indicates his intention to "find a new interpretation of the Christian doctrine of creation *in the light of the knowledge of nature made accessible to us by evolutionary theories.*"<sup>16</sup> In the same way Colin Gunton, (drawing on Zizioulas) maintains that the theory of evolution has shown Christian theology that there is a continuity

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of music in Christian worship have recently been published: Andrew Wilson-Dickson, *A Brief History of Christian Music: From Biblical Times to the Present* (Oxford: Lion, 1997); and Paul Westermeyer, *Te Deum: The Church and Music* (Minneapolis, Minn. : Fortress Press, 1998).

<sup>15</sup> Watson, 435, footnote 2.

<sup>16</sup> Jürgen Moltmann, *God in Creation. An Ecological Doctrine of Creation* (London: SCM Press, 1985), 206. My emphasis.

between the human and non-human creation. He writes, “*In teaching us this the theory of evolution is salutary for Christian theology.*”<sup>17</sup> This is not natural theology nor an abdication of disciplinary sovereignty, but theology properly engaged in the vital task of “translation”: “responding with new ways of expressing [the church’s] message, by relating that message to the constantly revised account of the world offered by the contemporary world-view, by answering today’s questions and concerns.”<sup>18</sup>

It is indicative of the way the sciences have dominated modern Western thought that theology has taken so seriously questions and concerns raised by the natural sciences, while remaining relatively uninterested in the questions and issues posed by the arts. One can scarcely imagine a contemporary theologian raising Watson’s objection concerning the natural sciences: *the question is why, in the light of Christian faith’s own ‘cognitive access to the world’, the supplementary or alternative route of the sciences is needed.*<sup>19</sup>

Theologians commonly speak of “coming to terms with” or “taking account of” the conclusions of science. The conclusions of science, the language suggests, are absolute and immovable—these are the hard facts about the world, and we must find a way to accommodate them. The arts however (on this account), are strictly the products of imagination and human creativity. They do not reflect the universal truths of the natural or physical world, but only the local and particular truths of cultures and individuals. We may reflect upon them, admire them, learn from them—but we certainly do not need to “come to terms” with them in any absolute sense. However I will argue that music, no less than the sciences, gives us a picture of what the world is like; one that is distinct from a scientific picture of reality, but no less authentic.

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<sup>17</sup> Colin Gunton, *The One, the Three and the Many: God, Creation and the Culture of Modernity* (Cambridge: Cambridge University Press, 1993), 3. My emphasis.

<sup>18</sup> Trevor A. Hart, *Faith Thinking: The Dynamics of Christian Theology* (Downers Grove, Ill. : InterVarsity Press, 1995), 188.

<sup>19</sup> I’m reminded of a fundamentalist preacher friend, who warned me about the dangers of a liberal arts education as I headed off to university. “Why are you going off to some university” he asked, picking up his Bible, “when all the education you need is between the covers of this here book?” The same question could be stated more attractively: “the question is why, in the light of Christian faith’s own ‘cognitive access to the world’, this supplementary or alternative route is needed.”

## A commitment to careful listening

And so we should regard the charge of disciplinary hegemony as a warning, not a barrier to interdisciplinary theological study. At the same time, it is an important warning; it alerts us to the very real danger of disciplinary arrogance. Theologians rush in where musicologists fear to tread, assuming rather than demonstrating links between the two disciplines, and oblivious to problems and issues that have already been explored. Watson's concern reminds us that if theology is to speak competently of music, it must learn to *listen*; first of all to music itself, and beyond this, to musicians, music theorists, musicologists and others in the field. In this way, theologians may avoid another undeniable pitfall: that their musical-theological reflections will be all theology and no music—merely a thin veil of musical terminology draped over independently derived theological or philosophical reflections. The dialogue between music and theology is only valuable insofar as it is an authentic dialogue, one which attends to the particularities of music.

A commitment to dialogue of this sort has dictated the structure of the present work. In addition to theologians, we will hear from philosophers, musicologists, and exponents of the new musical subdiscipline of psychomusicology. These scholars will help us get a better understanding of what music is and how it functions. In addition to this, I will evaluate their work in the light of the more fundamental questions we have raised. Ultimately, I will argue that a Christian theological framework can offer answers to these questions which are at least as coherent and satisfying as those of any alternative accounts we shall examine.

### **Identifying “music”**

Watson's essay touches on a second, even more serious objection to this study: what if there is no such thing as “Music”? The preceding argument for music's importance—really, this entire thesis—presumes that there is some single entity which we may identify as music. But this may not be so. It may be that there are only “musics.”

It may be that the musical events of various cultures are irreducibly particular, that there is no single set of parameters that can encompass all the musics of the world, and that to speak globally and generally of “music” is to turn a tone-deaf ear to the rich polyphony of musical norms and practices. Music, Watson contends, is the product of human cultures and traditions, not the mystical encounter between an individual genius and cosmic truth.<sup>20</sup> On the other hand he charges, broad theological assessment of “music” presume that all the different particular instances of human music can be addressed under a single heading. If no single entity “music” exists, then the question *What is music?* becomes meaningless. Our conclusions, like our questions, can only be local and particular, and the sort of universal issues we have raised—*what does musical practice tell us about humanity?* and so on—reflect an embarrassing naïvete. At best, the study of music may tell us something about the norms and values of a particular culture or subculture.

It is tempting to apply G. K. Chesterton’s retort to this argument for irreducible particularity, (he was considering a similar objection made by H. G. Wells):

When Mr. Wells says (as he did somewhere), “All chairs are quite different,” he utters not merely a misstatement, but a contradiction in terms. If all chairs were quite different, you could not call them “all chairs.”<sup>21</sup>

But this is a bit too glib, and may miss the force of the objection. The question is not whether or not we can come up with rough and ready categories for the purposes of simple communication, but whether there is any helpful description of “music” which can be applied with equal validity to:

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<sup>20</sup> Watson, 436-7.

<sup>21</sup> G. K. Chesterton. *Orthodoxy* (New York: Image, Doubleday, 1959; reprint, New York: Dodd, Mead & Company, 1908), 35.

- Bach's *St. Matthew's Passion*
- the improvisation of a Fulani Drum ensemble
- Aleatory music
- 9<sup>th</sup> Century monastic plain chant
- Javanese gamelan music
- Rap
- The Serial works of Berg or Schoenberg

Like Watson, a growing number of philosophers are answering this question negatively, speaking out against “the cultural centrism that once presumed to project onto all musics the qualities and values of a particular range of practice.”<sup>22</sup> Such facile generalizations have been toppled by “recognition of the radical diversity and sociocultural situatedness of musical practices, awareness of the historicity and contingency of musical values, and a growing awareness that the boundaries of ‘the musical’ are negotiable and fluid.”<sup>23</sup> This broadened perspective can only lead us to conclude that “the word ‘music’ is not the name of any single entity or ‘thing’ to which we can point in the world; nor is there a single way it all is, or a single end it all serves.”<sup>24</sup>

In an influential essay, Francis Sparshott argues that

even within our own civilization, the word “music” covers an inherently unstable variety of practices linked functionally, and/or procedurally, and/or institutionally, in all sorts of ways. . . . It seems likely that nothing one said would apply to everything that could on any occasion and for any reason be legitimately called “music.”<sup>25</sup>

As with the first objection we considered, this second protest raises significant issues, and deserves our attention. The first criticism reminded us that any theological

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<sup>22</sup> Wayne D. Bowman. *Philosophical Perspectives on Music* (Oxford: Oxford University Press, 1998), 15.

<sup>23</sup> *Ibid.*

<sup>24</sup> *Ibid.*, 16.

reflection on music should begin by listening carefully to those already involved in the field. This second criticism is an even more fundamental reminder that we must begin with listening to music itself—attending to all the vivid variety of musical sounds and styles and practices. If we begin speaking before we have listened well, we will miss the distinctive and particular qualities of individual voices; a living, sparkling chorus of a thousand colors will be drowned out by the dull recital of sterile and insipid generalizations.<sup>26</sup>

However, as with the first objection, this criticism should serve as a warning rather than a barrier. First of all, as Sparshott suggests, we identify a particular activity or event as “music” based upon a complex cluster of functional, procedural, institutional and material criteria. In fact it seems likely that there are a whole host of criteria for inclusion in the class of “music,” with individual instances of music linked in a series of family resemblance relationships. Such relationships resist exhaustive analytic description, but can be recognized intuitively as “a network of overlapping but discontinuous similarities, like the fibres in a rope, or the facial features of members of a family.”<sup>27</sup> It may be that we cannot in any instance identify the “three essential elements” (or whatever) which establish a given entity as an instance of music. We may also find all sorts of questionable candidates at the borders of music, over which there will be sharp disagreement. In particular, our idea of what “music” is will be stretched and challenged by those *avant-*

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<sup>25</sup> Francis Sparshott, “Aesthetics of Music: Limits and Grounds,” in *What is Music? An Introduction to the Philosophy of Music*, ed. Philip Alperson (University Park, Penn. : The Pennsylvania State University Press, 1987), 44.

<sup>26</sup> Kathleen Higgins for instance, demonstrates that much philosophical reflection on music has been skewed by a failure to acknowledge practices such as improvisation—unusual in the Classical music tradition, but a central feature of many other types of music. Kathleen Marie Higgins, *The Music of Our Lives* (Philadelphia: Temple University Press, 1991).

*garde* works which explicitly set out to challenge our concept of music. However, the difficulty of defining music analytically should not lead us to conclude that we cannot make *any* meaningful generalizations about what music is. Such a conclusion embraces a version of the Black or White Fallacy: if we cannot define music exhaustively, comprehensively and incontestably, then we cannot speak generally about music at all. This simply is not so.

While we may not be able to achieve a comprehensive description of music, I also recognize the value of having some sort of working definition for the purpose of our study. The following definition of music has been taken from Jerrold Levinson and I wish to adopt it, with one minor amendment:

*Music* = sounds temporally organized by a person or group of persons for the purpose of enriching or intensifying experience through active engagement (e.g., listening, dancing, performing) with the sounds regarded primarily, or in significant measure, as sounds.<sup>28</sup>

Throughout this study, when I speak of “music,” I will be referring to those sounds and activities which meet this definition.

One of the virtues of this definition is that it is “adequate not only to Beethoven symphonies and Bob Dylan songs, but to whatever ethnomusicologists, say, would agree is music in cultures other than our own.”<sup>29</sup> It is restrictive enough to limit our study to the activity we are interested in (unlike definitions such as “organized sound” which are too broad to be of any use at all). Yet as far as I can tell—without turning this thesis into a

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<sup>27</sup> Peter Hacker, “Family Resemblance,” in *The Oxford Companion to Philosophy*, ed. Ted Honderich (Oxford, New York: Oxford University Press, 1995), 269.

<sup>28</sup> Jerrold Levinson, *Music, Art, and Metaphysics. Essays in Philosophical Aesthetics* (Ithaca, N. Y. , London: Cornell University Press, 1990), 273. I have inserted “or persons” where Levinson’s definition simply reads “sounds temporally organized by a person.” This is to more explicitly extend the definition to those many forms of music which are fundamentally social and improvisatory in character.

<sup>29</sup> *Ibid.* , 268.

survey of ethnomusicology—we may limit our study to music so defined and still retain the claim that it is a universal feature of human culture.

In saying this, I am not claiming that every culture in the history of humanity has had music as defined here. Rather, I am claiming that music so defined is a pervasive feature of human culture; that its absence is exceptional, and that its occurrence is not merely a local and particular phenomenon. “Universality” here means that in every era of recorded human history, in every part of the world, we find human beings engaging in music of this sort. Often, critics of musical universals produce one or two examples of indigenous music which cannot be fit into any pre-existing category (the most frequently encountered example is the “Throat Game Music” of the Inuit). However, our claim for universality is not defeated by such examples. Rather, the very exceptional character of these instances underlines the fact that in most cases we can intuitively and unproblematically identify music as music.

### **Music and theology—strategies and resources**

I have argued that it is philosophically and anthropologically acceptable to speak of “music,” and I have also defended the validity of an inter-disciplinary dialogue between music and theology. But how should such a conversation be conducted? What should be the rules of interaction, and what role should each party play? Before describing the approach I will take, it may be helpful to consider some of the ways in which other theologians have carried out such a discussion.

## Failed dialogues: Theology and not-music

Not every attempted conversation has been successful. With surprising regularity one encounters works which claim to be theological studies of music, but are not. One example is Max Stackhouse's essay "Ethical Vision and Musical Imagination."<sup>30</sup> Stackhouse argues that music is essential to Christian ethics, since it is so often bound up with fundamental issues such as life, death, love, and loss. To illustrate this, he considers a number of different pieces, ranging from Ricky Van Shelton's "Simple Man," to Bernstein's "There's a Time for Us," to Faure's *Requiem*. Stackhouse's reflections are insightful, and so it might be easy to miss the fact that he ends up interacting with *texts*, rather than pieces of music—in the course of the essay there is only the barest mention of the music accompanying the words. An essay by Frank Burch Brown (presented at the same conference) commits the identical error.<sup>31</sup> Of course, there is nothing wrong with theologians giving their attention to poetry; it is simply that such studies are not reflections on theology and *music*. Westermeyer observes that "the substitution of text for music . . . gives the impression of discussing one thing, while discussing another, rather like discussing hymn texts as if they were tunes (which is also done all the time). Music is simply avoided in this process, though the impression is given that it has been discussed."<sup>32</sup>

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<sup>30</sup> Max L. Stackhouse, "Ethical Vision and Musical Imagination" in *Theological Education* 31, no. 1 (1984): 149-63.

<sup>31</sup> Edward Farley points out this substitution of texts for music in his response to these papers. Edward Farley, "Music and Human Existence: A Response," in *Theological Education* 31, no. 1 (1994): 175-81.

<sup>32</sup> Paul Westermeyer, "Reflections on Music and Theology" in *Theological Education* 31, no. 1 (1994): 184.

## Musical theology: Practical, biblical and historical

Among those works where there is a real encounter between music and theology there are a number of valuable studies which are a type of practical or applied theology. These contributions—which represent the most common type of dialogue between music and theology—generally bring theological insights to bear upon the practical concerns of church music ministry. Questions such as the appropriate style of music for a worship service, the proper role of music ministries within the life of a congregation, and the standards for participation in a church music program are evaluated in the light of theology, history and scripture. Several fine scholars have produced studies of this sort, notably, Eric Routley,<sup>33</sup> Robert Webber,<sup>34</sup> and Paul Westermeyer.<sup>35</sup>

Another group of publications are devoted to developing a biblical theology of music for worship. The first volume of Webber's seven volume work addresses this task.<sup>36</sup> Richard Alan Seel has written *A Theology of Music for Worship Derived from the Book of Revelation*,<sup>37</sup> and Eaton has contributed a helpful article on musical worship in the Psalms.<sup>38</sup> There are also several very good studies on the history of Church music. In addition to works by the three scholars just mentioned, there is a monograph on the

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<sup>33</sup> *Church Music and the Christian Faith* (Agape, 1978); *Singing Church* (Hope Publishing Company, 1993); *Christian Hymns Observed: When in Our Music God Is Glorified* (Prestige, 1982); *Twentieth Century Church Music* (Hope, 1984).

<sup>34</sup> *The Biblical Foundations of Christian Worship*, 7 vols. (Hendrickson Publishers, 1995), esp. *Music and the Arts in Christian Worship: Book One*, Vol. 4 (Hendrickson, 1997); *Blended Worship: Achieving Substance and Relevance in Worship* (Hendrickson, 1996); *Worship Old and New: A Biblical, Historical, and Practical Introduction* Rev. ed (Grand Rapids: Zondervan, 1994).

<sup>35</sup> *The Church Musician*, rev. ed. (Minneapolis, Minn. : Augsburg Fortress, 1997); *Te Deum: The Church and Music: A Textbook, a Reference, a History, an Essay* (Minneapolis, Minn. : Augsburg Fortress, 1998); *Let Justice Sing: Hymnody and Justice* (The Liturgical Press, June 1998).

<sup>36</sup> *The Biblical Foundations of Christian Worship*, Vol. 1.

<sup>37</sup> Richard Allan Seel, *A Theology of Music for Worship Derived from the Book of Revelation* (Metuchen, N. J. : The Scarecrow Press, 1995).

<sup>38</sup> J. H. Eaton, "Music's Place in Worship: A Contribution from the Psalms" in *Prophets, Worship and Theodicy. Oudtestamentische Studiën 23* (Leiden: E. J. Brill, 1984), 85-107.

development of Christian thought about music,<sup>39</sup> and a very helpful survey by Andrew Wilson-Dickson.<sup>40</sup> In these cases then (the practical, biblical and the historical), the conversation between music and theology is a consideration of music as an element within the life of the worshipping Christian community. Such a dialogue is essential; as a former full time church musician, I am grateful for these studies. However, it should be clear that they are concerned with a different set of questions than those I have raised.

### Listening to music

In the first category I mentioned, music was not a part of the dialogue. In the practical studies just described, music is part of the conversation, but it is not an active participant. Theological insights are applied to musical issues, but music does not reciprocate. Other theologians however have enlisted music as a means of informing theological discussions or shedding light on theological issues. I will mention three of the ways they have done so.

### Music as Artifact

Musical styles have been explored by theologians as artifacts of cultures or religious systems. This approach attempts to trace the way in which musicians have embodied their values and convictions in rhythm, melody, and musical form. These are studied as musical “mappings” of ideas and beliefs. Within the academic community, this approach has been championed by Jon Michael Spencer.<sup>41</sup> (Spencer has dubbed his method “Theomusicology,” and has lobbied vigorously for its recognition as a legitimate

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<sup>39</sup> Quentin Faulkner, *Wiser Than Despair: The evolution of ideas in the relationship of music and the Christian church* (Westport, Conn. : Greenwood, 1996).

<sup>40</sup> Wilson-Dickson, *A Brief History of Christian Music*.

academic discipline.) On a popular level, this kind of interaction can be found in *How Should We Then Live?*,<sup>42</sup> a book and series of videotapes by American author and lay theologian Francis Schaeffer. Schaeffer considers not only music, but architecture, literature, and visual arts as indicators of a culture's "world view."

While subject to certain pitfalls,<sup>43</sup> I believe this sort of study can be of tremendous value. Music may enable us to understand (and even participate in) the values and ethos of a given culture, in a way that is far more immediate than any discursive description.

### Music as Metaphor

Theologians have also suggested a number of metaphorical functions for music within theology. These metaphorical uses can be charted along a continuum, the poles of which we may identify as "Illustrative" and "Participative." Christopher Campling's recent *The Food of Love*<sup>44</sup> is a work which tends toward the illustrative pole of this continuum. In Campling's essays music is used to illustrate and illuminate different aspects of the Christian faith. Because music is so familiar and at the same time so unlike other objects and events in the physical world, these sorts of analogies can be very helpful. However, this method of employing music also poses a threat to musical-theological dialogue, if musical analogies are seen as the outer limit of the conversation.

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<sup>41</sup> Cf. *Theological Music*, 1991; *Theomusicology*, 1994.

<sup>42</sup> Francis A. Schaeffer, *How Should We Then Live? The Rise and Decline of Western Thought and Culture* (Westchester, Ill. : Crossway Books, 1976).

<sup>43</sup> For instance, one must remember that an individual creative artist is not *only* a representative of a culture, but also an individual, shaped by a unique perspective and history (although there seem to be some who would dispute this). Secondly, creative agents are influenced by a whole host of forces, events, and ideas—personal, professional, political, inter-personal, etc. A work of art cannot be interpreted then as simply a direct transposition of theological beliefs into artistic form. Finally, in their efforts to embody their beliefs in artistic forms, creators may meet with varying degrees of success. Some "mappings" of theological convictions may be very poor indeed; some—through lack of thought, lack of skill or whatever—may even betray the values they set out to express.

<sup>44</sup> Christopher R. Campling, *The Food of Love: Reflections on Music and Faith* (London: SCM, 1997).

At the other end of the continuum are participative musical metaphors. In these instances, music is presented as participating in the dynamic it metaphorically represents. (These usages also tend to draw on a richer understanding of metaphor.) Francis Watson's "Theology and Music" stands toward the "participative" end of the continuum.<sup>45</sup> He describes the potential of music to "become *truly* a parable"<sup>46</sup>—an earthly light which nevertheless derives its own light "indirectly but really, from the one true and eternal light."<sup>47</sup> In this sort of model, music does not merely illustrate an idea or truth, but metaphorically participates in that truth. The music depends upon and enacts the same relational dynamic which is at work in the theological concept being explored, and the connection between these two is recognized through an imaginative metaphorical extension from the concrete to the abstract. In the course of this study I will have more to say about metaphor as a means of relating music to theology. More broadly, I will also consider the ways in which metaphor is central to our perception of and engagement with music.

### Music—An Aspect of the External World

Jeremy Begbie has suggested still another way in which music can contribute to theological reflection, in his work *Theology, Music and Time*.<sup>48</sup> Begbie directs his attention to the temporal dimension of music, arguing that

Music offers us a particular form of participation in the world's temporality. In this way, we contend, it can elicit something of the nature of this temporality and our sharing in it (as well as question some of our

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<sup>45</sup> However, I am not convinced that Watson's essay manages to initiate the sort of interaction he proposes.

<sup>46</sup> Watson, 462.

<sup>47</sup> *Ibid.*, 461.

<sup>48</sup> Jeremy S. Begbie, *Theology, Music and Time* (Cambridge: Cambridge University Press, Forthcoming). I am indebted to Dr. Begbie for allowing me to study a manuscript version of this monograph.

most cherished and potentially misleading assumptions about temporality), and, more fundamentally, it can open up features of a distinctively *Christian* account of this God-given temporality and the way we come to terms with it.<sup>49</sup>

Music-making and hearing, claims Begbie, arise not only from the particularities of social and cultural practices, but also from “an engagement with the physical world in its distinctive configurations.”<sup>50</sup> Because this is so, we can expect music to inform our understanding of the physical realities and processes of our world (such as time). Such an understanding is also theologically significant (as is indicated by the regular interaction between theology and the natural sciences). Our understanding of the status and nature of time (to take Begbie’s topic) will shape the way we interpret of a host of theological themes—anticipation, promise and fulfillment, remembrance, freedom, determinism, and so on. Begbie explores these and other motifs, asking how our musical experience of time may enrich and refine our understanding of them.

Begbie, (unlike Watson), believes that music provides us with an authentic route of cognitive access to the world, and he urges us to “come to terms with” our musical experience.

## Making Sense of Music

A handful of theologians have considered the larger question of what music is and why it exercises such a powerful influence over human beings. Notably, William Edgar (*Taking Note of Music*),<sup>51</sup> and Harold Best (*Music Through the Eyes of Faith*).<sup>52</sup> have each produced a competent and engaging Christian treatment of music, written at a

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<sup>49</sup> Begbie, *Theology, Music and Time*, 2 (mss).

<sup>50</sup> *Ibid.*, 9 (mss).

<sup>51</sup> William Edgar, *Taking Note of Music* (London: Third Way Books, SPCK, 1986).

popular/textbook level. These are valuable contributions; at several points I will draw on Edgar's well-informed discussion. However, neither of these works fill the gap I hope this study will satisfy. First of all, they are popular texts, which means that the authors cannot engage in detail with important contributions in recent musical scholarship. Secondly, their analyses only briefly and indirectly touch on the questions I have raised. Both books serve as a sort of Christian introduction to aesthetics; helping Christians to think through the act of human creation, the value and purpose of art, and how to evaluate music for listening or worship. These discussions often suggest why music is a preferred medium for worship; they often suggest what kind of beings are those beings who make music, and what sort of world is that world in which music is possible. However, the bulk and the focus of these texts are given to other issues.

### **Intentions and qualifications**

The preceding discussion may create the illusion of a vast body of scholarly material on the topic of theology and music (apparently there is enough material out there to generate six different methodological categories!). In fact, the musical-theological conversation I have been outlining has had relatively few participants, and has been marked by long, awkward periods of silence. This is surprising given the importance of music for Christian worship, the long association of the musical with the spiritual, and given theology's growing interest in the other arts. Others with an interest in music and theology have similarly noted this unusual poverty of material.<sup>53</sup> Happily, the

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<sup>52</sup> Harold M. Best, *Music Through the Eyes of Faith* (San Francisco: HarperSanFrancisco, Harper Collins, 1993).

<sup>53</sup> See Jeremy Begbie, "Theology and the Arts: Music," *The Modern Theologians: An Introduction to Christian Theology in the Twentieth Century*, 2<sup>nd</sup> ed., ed. David F. Ford (Oxford: Blackwell, 1997), 686-

disciplinary estrangement between these companions in practice is, across the whole of Christian history, anomalous. (Our own study will be framed by two of the central figures in Christian theology—Schleiermacher and Augustine.)

The thesis is divided into three sections of two chapters each. We will begin with an examination of Schleiermacher's little dialogue, *Christmas Eve*. In their consideration of piety and the nature of the Christmas festival, the characters consider the idea that "it is precisely to religious feeling that music is most closely related."<sup>54</sup> The piece is valuable not only for its own content, but also for the way in which it suggests an entire tradition of reflection on music—one I have dubbed the "Orphean." In the second chapter, we will bring Schleiermacher's position into relief against *A Theology of Music*,<sup>55</sup> a doctoral dissertation by an American composer-theologian named Alfred Pike. Again, Pike's thesis exemplifies a second, very different tradition, which we will call the "Pythagorean." Taken together, these two works offer us two currents of reflection; two ways in which the ubiquity of music, and its affinity with the spiritual have often been explained. Beyond this, they will help us open up some of the fundamental issues to be addressed in our investigation.

We will review the Orphean and Pythagorean explanations not only in terms of their theological implications, but in terms of their consonance with current scholarship in music theory and perception. This will be the task of the second pair of chapters. One of the most important recent developments in this scholarship has been the emergence of a

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87; idem, *Theology, Music and Time*, 1-2 (mss); Thomas Daryl Poole, "Towards An Integration of Music and Theology: Suggestions for the Construction of a Theological Definition of Music" (D. M. A. Dissertation, The Southern Baptist Theological Seminary, 1988), 5-8.

<sup>54</sup> Friedrich Schleiermacher, *Christmas Eve: Dialogue on the Incarnation*, tr. Terrence N. Tice, (Lewiston, N. Y. ; Lampeter, Wales: Edwin Mellen, 1990), 46.

<sup>55</sup> Alfred Pike, *A Theology of Music* (Toledo, Oh. : The Gregorian Institute of America, 1953).

specialized subdiscipline: the cognitive psychology of music. The third chapter of the thesis will consider some of the work being done in this field, and the picture of musical creativity and music perception that is emerging. We will find that this research intersects with the themes raised by Pike and Schleiermacher in a number of surprising ways, while raising new questions and new difficulties.

Philosophy has a long and abiding interest in music, and in the fourth chapter we will consider what this discipline has to contribute to our investigation. In particular, I will evaluate the positions of two leading philosophers of music (Roger Scruton and Diana Raffman). We will also reflect more broadly on what sort of validity a “musical” view of the world might claim.

In the third and final section of the thesis, I will turn to Augustine. His occasional comments on music are well known: his definition of a hymn in the *Enarrationes in Psalmos*; the commendation of music as an aid to interpreting scripture in *De Doctrina Christiana*; the musical analogy deployed in *De Trinitate*; and in particular the intensely personal reflections of the *Confessiones*. However while the brief passages from these and other works enjoy a wide circulation, the one treatise which Augustine devoted specifically to music remains relatively unknown. I will give special attention to Augustine’s unjustly neglected and often misunderstood *De Musica*, and will draw on this work as a principal theological resource. While often identified with the Pythagorean tradition, we will see that Augustine’s account is both distinctive and surprisingly contemporary. Our interaction with Augustine will also provide an opportunity to bring the observations of the second section (chapters 3 and 4) back into conversation with theology.

Our discussion will be wide-ranging then, covering several centuries and a handful of disciplines, but in each chapter, I will make an effort to link the discussion to more explicitly theological themes. At times I will paint in broad strokes, but a larger canvas may reveal connections and themes that a detailed miniature cannot, and as I shall argue, connection—the mediation and harmonization of different aspects of our being—is at the very heart of our musical experience.

Perhaps I should also say a bit about what I do *not* hope to do in this thesis, particularly with regard to the two theologians who stand at either end of it. I do not intend for instance to offer a comprehensive study of “Augustine on Music”—to collate all of his reflections on music into a coherent aesthetic. I will not consider the musical references in the *Confessiones*, *De Ordine*, *De Trinitate* or any other works by Augustine, except where they may shed a bit more light on *De Musica*. Neither will I be attempting to present a study of “Music in Augustine”—exploring the role music plays in Augustine’s thought. Needless to say, I am also not trying to write a thesis on “Schleiermacher on Music,” or “Music in Schleiermacher.” Interesting as any of these studies would be, they would take us too far away from the central questions we have raised—the theological and anthropological significance of (1) the universality of music, (2) the ubiquity of music, and (3) the affinity between music and worship. Our investigation is driven by an *issue* in other words; by a set of questions, rather than by a theological figure or figures. In the two works mentioned, Schleiermacher and Augustine address the same issue we have raised. It will be the validity of the accounts they develop in these works, and how they contribute to our own investigation which will occupy us.

Finally, I should say that while I hope to answer (“respond to”) the questions raised, I do not expect to provide THE answer. Bernstein wrote, “ ‘The most beautiful experience we can have is the mysterious’. Then why do so many of us try to explain the beauty of music, thus apparently depriving it of its mystery?’”<sup>56</sup> Reflection is not necessarily antagonistic to mystery, however. The face of a loved one may grow more remarkable and more mysterious the longer we study it.<sup>57</sup> I want to listen closely to music (and with a theologian’s ear), but I do not intend to *explain* it—still less to explain it away. I hope that at the end of our study we will have far greater cause to wonder than when we began.

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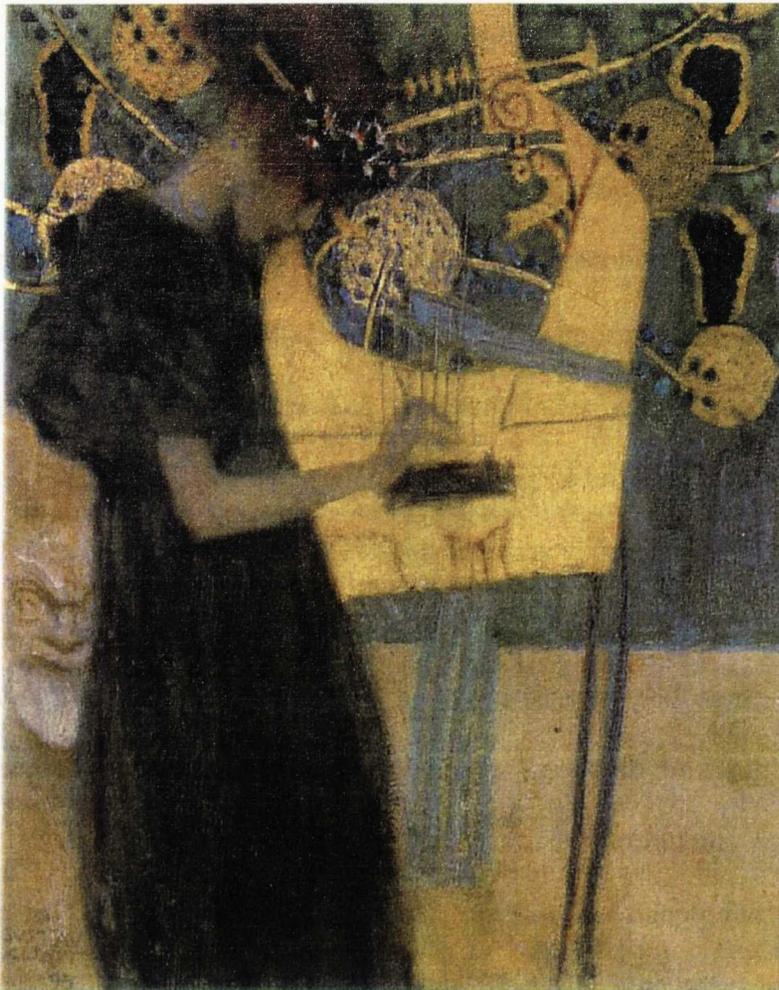
<sup>56</sup> Leonard Bernstein, *The Unanswered Question: Six Talks at Harvard* (Cambridge, Mass. : Harvard University Press, 1976).

<sup>57</sup> I am thinking of Micheal O’Siadhail’s wonderful poem, “Revelation,” in *A Fragile City* (Newcastle upon Tyne: Bloodaxe Books, 1995), 21.

# SECTION I



*The themes are presented*



# The Inarticulate Speech of the Heart

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Schleiermacher's  
*Christmas Eve*  
Dialogue

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## Chapter 1

*Music is something innate  
and internal, which needs  
little nourishment from  
without, and no experience  
drawn from life.*

- Goethe

*The music of the ancients was more moving than ours, not because they were more  
learned, but because they were less.*

- René Descartes,  
*Letter to Mersenne*

Why music? Why should this of all activities accompany our  
worship, our work, and our celebrations? Perhaps the most obvious and  
frequently given answer has to do with the connection between music and the  
emotions. Music touches our hearts; music moves us, stirs us, involves us at the  
level of feeling and passion. Indeed, the power of music to arouse or quiet the  
emotions is proverbial. By his music, Orpheus “drew iron tears down Pluto’s

cheek;”<sup>1</sup> sailors are dashed against the rocks, ensnared by the seductive songs of the Sirens; the worshippers of Bacchus are stirred to an orgiastic frenzy by wild music; Apollo is charmed by Hermes’ lute; David soothes the tormenting spirit which afflicts King Saul. Music, we say, “puts us in the mood,” gives us goose bumps, or brings tears to our eyes. The happy person whistles a tune and has a song in his heart. *Classic FM* overtly appeals to the “David and Saul Effect” of music, advertising its broadcasts as a sort of audible Valium: “Relax . . . and unwind—with smooth and easy classics, on *Classic FM*.”

Surely, we say, *this* must be why music is bound up with worship (and other meaningful events in human culture). While science, philosophy and mathematics are concerned with logic and rationality, music “speaks to the spirit;” and in this respect, it might seem, it most closely resembles religion. Faith and spirituality are not the realm of the test tube and the logical syllogism, but the domain of the deeply felt. Music, like religion, enables us to be whole beings, who not only think, but feel; who not only reason, but experience. Music and religion then, are linked (some would argue), through this deep and essential likeness.

Others might maintain that religious belief *is* completely rational (like science or philosophy), and that the value of music is as a non-rational, non-cognitive emotional “supplement” to reasonable doctrine. When I was in high school I played keyboard for large weekly youth worship service. After twenty or thirty minutes of energetic music, one of the

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<sup>1</sup> “But, O sad Virgin, that thy power  
Might raise Musæus from his bower,  
Or bid the soul of Orpheus sing  
Such notes as warbled to the string,  
Drew Iron tears down Pluto’s cheek,  
And made Hell grant what Love did seek.”  
John Milton, *Il Penseroso*, lines 103-108 [text on-line]; available at The Milton Reading Room:  
[http://www.dartmouth.edu/~milton/reading\\_room/penseroso/index.html](http://www.dartmouth.edu/~milton/reading_room/penseroso/index.html)

large weekly youth worship service. After twenty or thirty minutes of energetic music, one of the adult sponsors would come to the front and begin the transition to the sermon portion of the service. He would often do so by reminding us that true worship is “in spirit and in truth” (John 4:23). “Now we’ve been worshipping in *spirit* for the past half hour, and that’s great” he would say, “but it’s not enough by itself. God calls us to worship in spirit *and* in truth.” Does this explain the pairing of music with worship?—*Music has to do with “spirit,” teaching has to do with truth.* Music, in short, is often commended for its non-rationality or for opening up a different sort of rationality. It is then linked to religion—either because religion is held to be similarly non-rational, or because rational religion requires an emotional complement. While words and ideas speak to the mind, music is held to be (to borrow a line from Van Morrison) the inarticulate speech of the heart.<sup>2</sup>

A helpful way into these issues is through Schleiermacher’s *Die Weihnachtsfeier: Ein Gespräch*.<sup>3</sup> The work was written in 1805, five years after the anonymous *Monologues*, and (aside from some early sermons) is the first published work to which Schleiermacher attached his name.<sup>4</sup> In this short piece, the characters consider the suggestion that “it is precisely to the religious feeling that music is most closely related.”<sup>5</sup>

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<sup>2</sup> Van Morrison, *Inarticulate Speech of the Heart*, Exile 537 543-2, 1983/1998.

<sup>3</sup> There are two English translations of *Weihnachtsfeier*, published a century apart: *Christmas Eve: A Dialogue on the Celebration of Christmas*, tr. W. Hastie (Edinburgh: T & T Clark, 1890); and *Christmas Eve: Dialogue on the Incarnation*, tr. Terrence N. Tice (San Francisco: EM Texts, 1990). There are no major interpretive issues hinging upon the differences between the two translations (which at most points are very close indeed). At different points, however, the prose of one or the other is clearer, and I shall draw on both in my discussion, referring in the footnotes to “tr. Tice” or “tr. Hastie.”

<sup>4</sup> Schleiermacher hoped to make a Christmas present of the dialogue to some of his friends, and delivered the final pages of the manuscript to the publisher on 24 December, 1805. It was published in January of 1806, and Schleiermacher revised the work in 1826. Unless otherwise noted, it is this 1826 revision to which I shall refer. Cf. W. Hastie, Translator’s Preface to *Christmas Eve: A Dialogue on the Celebration of Christmas* (Edinburgh: T & T Clark, 1890), x.

<sup>5</sup> tr. Tice, 46.

*Christmas Eve* also explores some of the main themes of Schleiermacher's theology,<sup>6</sup> and so, gives us the opportunity to consider the relationship between a particular account of music and a particular theological stance.

## **An evening of music and conversation**

The dialogue unfolds in a warm and intimate setting—the home of a European bourgeois family—on the occasion of Christmas Eve. Eduard, Ernestine and their children have gathered with friends to celebrate the holiday. Ernst and his fiancée, Friederike, are among the guests, along with Karoline, Agnes (who is expecting a child), and the lawyer, Leonhardt. The company are also awaiting another guest, who has not yet arrived.

The house is full with gifts and laughter and gentle teasing. The children nibble at sweets and hover around their new possessions, comparing their loot with one another. Sophie however, pauses thoughtfully over the one gift she had left unopened. She is Eduard and Ernestine's daughter, a girl of about ten. Is it a book, maybe? Perhaps some patterns for sewing? "Badly guessed" says Father—"open it and see." Sophie pulls away the covering, and with a gasp of delight recognizes what is beneath. It is a wonderful gift—a book; not one to be read, but rather, played. It is a volume of music. Sophie could not imagine a more wonderful gift. She loves music, and has a marked talent for playing the piano and singing. "She knew how to treat each note aright; her touch and phrasing

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<sup>6</sup> One author refers to the dialogue as "quintessential Schleiermacher in both thought and style . . . and it is perhaps the most pleasant and painless introduction to the fundamental theological shift that he brought about." B. A. Gerrish, *A Prince of the Church: Schleiermacher and the Beginnings of Modern Theology* (London: SCM Press, 1984), 14. Niebuhr contends that "the specific genius of Schleiermacher discloses itself here, both in its virtue and weakness, with an imaginative force that the reader of *The Christian Faith* fain would find in its pages." *Christmas Eve* unfolds many of the distinctive aspects of Schleiermacher's thought "all the more clearly . . . because they are concretely illustrated rather than systematically stated." Richard R. Niebuhr, *Schleiermacher on Christ and Religion* (London: SCM Press, 1964), 68. Dilthey claimed that *Christmas Eve* was the best introduction to Schleiermacher's theology.

made each chord sound forth . . . in its own measured strength until it too, like a holy kiss, gives way to the next.”<sup>7</sup>

Filled with Christmas excitement, Sophie asks for permission to present *her* gift to the others. She is not only musical, but devout, and as her contribution to the celebration she has assembled a little illuminated Christmas scene. It is elaborate; complete with fire and running water, and crowded with Christmas symbols, decorations, and depictions of events from church history—all of which nearly (and significantly) obscure the manger scene and the little Christ child. The guests are justifiably impressed. Sophie kneels before her diorama, and after a few moments senses her mother standing behind her. She turns around to look up at her mother, and still kneeling, exclaims,

Oh, Mother, you might just as well be the happy mother of the divine babe! Are you perhaps sorry that you are not? And is this, do you suppose, why mothers would rather have boys? But think of the holy women who followed Jesus, and of all that you have told me about them. Certainly I will be such a woman some day, will I not, as you are now?<sup>8</sup>

Deeply moved, Ernestine raises the girl and kisses her.

As the others continue to examine her handiwork, Sophie quietly persuades her father, Karoline and Friederike to join her in the music room. Karoline sits at the piano, and together, the four sing “Let us love Him,” “Welcome to the Vale of Sorrow,” and other hymns and chorales.

They soon had the whole company as devout listeners; and when they had finished, as always happens, the religious music produced at first a quiet satisfaction and retirement of soul. There followed a few silent moments, in which, however, they all knew that the heart of each of them was lovingly directed towards the others, and towards something still higher.<sup>9</sup>

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<sup>7</sup> tr. Tice, 31.

<sup>8</sup> *Ibid.*, 33.

<sup>9</sup> tr. Hastie, 10.

After the recital has ended, Sophie continues to practice at the piano. The other children return to their presents, and the adults to the parlor for conversation; a discussion which soon turns to the child's precocious piety and musical ability. After some hesitation, Leonhardt wonders aloud—is it right . . . is it healthy, for a child Sophie's age to be quite *so* devout? That is to say, is it good for a little girl to prefer hymn singing and Bible stories to games and toys? And can it be natural for a little one to have such a serious and mystic demeanor? "See to it my dear friends" he warns, "it is this which, if no check is put to it, will certainly end in something irrational."<sup>10</sup>

Nothing could possibly be more natural than Sophie's piety, or her joy for music, replies Ernestine. There can be "little doubt as to whether such has really emerged from within or has only been acquired from without."<sup>11</sup> These are not eccentricities nor affectations, but the pure expressions of a simple and childlike soul. Eduard likewise is pleased by his daughter's sensitive and spiritual disposition. Looking back over the events of the evening he finds himself

overflowing with the joy of pure serenity, which I think could withstand anything that might happen to me. . . . A full consciousness of this mood, however, and an apt appreciation of it, I feel I owe in part to the fact that our little one has invited us to express it in music. For every fine feeling comes completely to the fore only when we have found the right musical expression for it. Not the spoken word, for this can never be anything but indirect—a plastic element, if I may put it that way—but a real, uncluttered tone. And it is precisely to religious feeling that music is most closely related."<sup>12</sup>

"*What the word has made clear,*" he continues "the tones of music must make alive, or must convey, and fix as à harmony, *into the whole inward nature.*"<sup>13</sup>

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<sup>10</sup> Ibid. , 19-20.

<sup>11</sup> tr. Tice, 38.

<sup>12</sup> Ibid. , 46.

<sup>13</sup> tr. Hastie, 26. My emphasis.

## Women and men, stories and speeches

The evening winds on, and as they wait for their absent guest to arrive, the friends continue to discuss the true nature of piety and the essence of the Christmas celebration. Ernestine, Agnes, and Karoline offer to develop this theme by each presenting a brief story from some Christmas in their past experience. As for Friederike, she promises, "I will take my place at the piano, and follow your narratives with my fantasias upon them. Thus you will also hear something from me, and with your finer and higher ear."<sup>14</sup> And so, with Friederike seated at the piano, Ernestine, Agnes, and Karoline each present a narrative; stories organized around the themes of piety and motherhood.

When the women have all finished their tales, Ernst volunteers, "I think we men owe the ladies something in return."<sup>15</sup> It seems too early to draw the evening to a close, and besides, one of the guests they have been expecting has still not arrived. "However," he continues, "storytelling is not the gift of men."<sup>16</sup> Instead, he suggests that the men engage in a series of discourses.<sup>17</sup> A subject shall be chosen on which each of the men will be invited to essay a brief lecture.

And so each of the men presents his speech; first Leonhardt (as the youngest), then Ernst, and last of all Eduard. Or perhaps it will not be the last, for as he concludes, Eduard notices that "our long-awaited friend has come, and must have his say as well."<sup>18</sup> Josef, the anticipated guest, has entered the room quietly during Eduard's speech, and it is to Josef that Schleiermacher will give the last words of the evening. "By no means," he replies to Eduard's invitation;

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<sup>14</sup> *Ibid.*, 37.

<sup>15</sup> tr. Tice, 69.

<sup>16</sup> *Ibid.*

I have not come to deliver a discourse, but to make myself glad with you; and if I may honestly say it, it appears to me somewhat strange and almost foolish that you should be going on thus, however fine it may in other respects have been. But I already observe that your evil principle is again among you,—this Leonard; the thinking, reflecting, dialectical, over-intellectual man, against whom you have probably been directing your discourse. . . . And the poor ladies have also had to fall in with it perforce. Only think what beautiful melodies they would have sung to you, with all the piety of your discourses dwelling in them far more inwardly; or how charmingly, from hearts full of love and joy, they might have chatted with you, saying what would have otherwise pleased and enlived you in a better way than they can have been by these solemn speeches of yours! For my part, I cannot to-day take up with such things at all. To me all forms have become too stiff, and all discoursing too tedious and cold. The unspeakable subject demands and even produces in me an unspeakable joy; in my gladness I can only exult and shout for joy like a child. To me to-day all men are children and for that very reason they are only the dearer to me. . .

. . . . Come, then, and bring the child [Sophie] above all things, if she is not yet asleep; and let me see your glories; and let us be glad, and sing something pious and joyous.<sup>19</sup>

And with this exhortation to sing, Schleiermacher's little dialogue ends.

### **“Most closely related to the religious feeling”**

The content of the women's stories and the men's discourses are worth considering in their own right, but we have covered enough of the dialogue to assess why it has portrayed music as “most closely related to the religious feeling.” There are several features of music which the dialogue highlights and links to piety; often by way of contrasting it with some other quality.

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<sup>17</sup> Ibid.

<sup>18</sup> Ibid., 85.

<sup>19</sup> tr. Hastie, 73-74.

## The Spontaneous and the Reflective

The first emphasis is evident in the dialogue's depiction of the pious and musically gifted Sophie. It is no accident that she—rather than Leonhardt, the educated and articulate lawyer—brings music to the evening. Her music and her piety are not the product of analytical reflection, but rather, are “expressed in a simple and spontaneous way.”<sup>20</sup> When Leonhardt worries over Sophie's mystic nature, Ernestine reassures him that “her sentiments do come quite naturally,”<sup>21</sup> and have “emerged from within” rather than having been “acquired.”<sup>22</sup>

Leonhardt is unconvinced. When Sophie reappears in the parlor, he asks about the solemn music she has been playing. Would she not prefer to be happy, rather than sad? “Oh, that's hard to say,” she replies. “I do not particularly favor one or the other. I always just like to be whatever I am at the moment.”<sup>23</sup> But the lawyer presses the issue, frustrating little Sophie. Her mother finally breaks in: “I don't think you will get much further with her, Leonhardt. She isn't at all accustomed to sorting out her experiences.”<sup>24</sup> This indifference toward analytical reflection is no deficiency. Rather, the richness of Sophie's music and her devotion can be traced directly to her spontaneous receptivity to feeling and experience:

“Well, this she has clearly shown us,” uttered Karoline only half aloud: “what that childlike attitude is without which one cannot enter into the kingdom of God. It is simply to accept each mood and feeling for itself and to desire only to have them pure and whole.”<sup>25</sup>

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<sup>20</sup> tr. Tice, 36.

<sup>21</sup> *Ibid.*, 39.

<sup>22</sup> *Ibid.*, 38.

<sup>23</sup> *Ibid.*, 52.

<sup>24</sup> *Ibid.*

<sup>25</sup> *Ibid.*, 53.

(This characterization of piety reappears in Josef's concluding speech. "Today," he declares, "all men are children to me, and are all the dearer on that account. . . . To my good fortune, I too have become just like a child again."<sup>26</sup>) Sophie represents piety in the dialogue, because "she speaks directly from her experience, without changing its terms, interpreting it, or otherwise analyzing it."<sup>27</sup> For Schleiermacher, piety emerges at the "prereflective plane of consciousness"<sup>28</sup>

This tension between the spontaneous and the reflective is also drawn out as Josef contrasts women, who sing beautiful melodies, with men, who recite boring speeches. He calls attention to the difference between songs, in which piety dwells inwardly, and discourses, which are tedious and cold; between expressive stories, and stiff, rigid forms of reasoning. Notice—the difference between the men's speeches and the women's stories is not one of theological *content*.<sup>29</sup> Rather, Josef's approval of the women and his rebuke of the men has to do with the different *stances* they have taken toward the Christmas message. The women have responded with a *spontaneous* expression of feeling, while the men have engaged in rational analysis. This is why, Karoline says, Jesus has always been the patron of women: "whereas you men have only contended about him, we have loved and honored him."<sup>30</sup> Eduard agrees that "the contrast between the spontaneous and reflective appears more strongly in us men."<sup>31</sup> Women, on the other hand, as they develop the adult capacity for reflective reasoning, maintain the spontaneous receptivity to

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<sup>26</sup> Ibid. , 85.

<sup>27</sup> Dawn DeVries, "Schleiermacher's *Christmas Eve Dialogue*: Bourgeois Ideology or Feminist Theology?" in *The Journal of Religion* 69 no. 2 (1989): 175.

<sup>28</sup> Stanley J. Grenz and Roger E. Olsen, *20th Century Theology. God and the World in a Transitional Age* (Downers Grove, Ill. : InterVarsity Press, 1992), 44.

<sup>29</sup> "Each of the women's stories makes, in the rhetorical mode of expression, a theological point that corresponds to the theology expressed by each of the men's speeches in descriptively didactic language." DeVries: 172.

experience which characterizes childhood.<sup>32</sup> One scholar concludes that for Schleiermacher, “both musical and religious experience . . . are experiences of direct self-awareness, or perhaps we might better say *pre-descriptive* self-awareness.”<sup>33</sup> The two are alike in being “immediate, involuntary, insistent and intimate.”<sup>34</sup>

## Feeling and Knowing

A second, overlapping tension in the dialogue is that between feeling and knowing.<sup>35</sup> It is “precisely to religious feeling” Eduard says—not theological insight, or religious understanding—that music “is most closely related.”<sup>36</sup> Indeed, one of the central themes of Schleiermacher’s theology is the “ascription of religion to the realm of feeling”<sup>37</sup> (*Gefühl*). In the Second Speech on Religion, Schleiermacher famously

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<sup>32</sup> Women, the dialogue suggests, possess “a unique advantage over men in the capacity to penetrate *intuitively* to the heart of things,” and “this put women on the side of religion as [Schleiermacher] understood it.” Gerrish, 16. My emphasis.

<sup>33</sup> Albert L. Blackwell, “The Role of Music in Schleiermacher’s Writings,” in *Internationaler Schleiermacher Kongress, Berlin, 1984*, vol. 1 (Berlin: de Gruyter, 1985), 443. My emphasis.

<sup>34</sup> Albert L. Blackwell, “Schleiermacher on Musical Experience and Religious Experience,” in *Friedrich Schleiermacher and the Founding of the University of Berlin* (Lewiston, N. Y.: Edwin Mellen, 1991), 128.

<sup>35</sup> I would like to make several points about this second tension. First of all, I have chosen to characterize it as “Feeling/Knowing” rather than (as one might more naturally expect) “Emotion/Reason.” (I also considered Experience/Knowledge and Subjective/Objective, and will say more about these below.) This is to reflect something of Schleiermacher’s own usage. Just as I have taken the Spontaneous/Reflective tension from the dialogue itself (e.g. Eduard’s discussion of the “contrast between the spontaneous and the reflective”, 55), so I have taken chosen “feeling,” (*Gefühl*) because it is a central category in all of Schleiermacher’s writings (see for example the discussion in *Friedrich Schleiermacher: Pioneer of Modern Theology*, ed. Keith W. Clements (Minneapolis: Fortress Press, 1991), 36–40), and because the feeling/knowing distinction is one Schleiermacher himself draws in his Second Speech.

Secondly, the two tensions (spontaneous/reflective and feeling/reason) are obviously very closely related. The distinction I am drawing is between *the way in which a response arises* (i.e. its immediacy, the degree of conscious reflection involved) and its *orientation* (i.e. whether it is primarily affective or intellectual, primarily one of subjective experience or of discursive reason).

Third, it is important to recognize that in emphasizing feeling, Schleiermacher is *not* advocating an anti-intellectual, non-thinking or irrational Christianity. He is simply identifying feeling rather than knowing as the essence, the “distinctive province” (see footnote 36, below), of religion.

Fourth, Clements uses the terms “experience” and “subjectivity” in his explanation of Schleiermacher’s *Gefühl* (Clements, 36). Likewise, I will use these words as synonyms for “feeling” in my treatment of Schleiermacher. The reader should be aware that these terms do not represent a different category of discussion.

<sup>36</sup> tr. Tice, 46.

<sup>37</sup> Clements, 36.

distinguished religion from both *knowledge* on the one hand and *morality* on the other.<sup>38</sup>

Instead,

To seek and to find [the] infinite and eternal factor that lives and moves, in all growth and change, in all action and passion, and to have and to know life itself only in immediate feeling—that is religion. . . . Knowledge and knowing, however, it is not, either of the world or of God; it only acknowledges these things without being either.<sup>39</sup>

The tension of feeling and knowledge can again be seen in the contrast between Leonhardt and Sophie. While Leonhardt is identified as “the evil principle . . . among you”<sup>40</sup> Sophie embodies the way of the kingdom,<sup>41</sup> While Leonhardt represents learning, Sophie’s piety is marked by a “deep underlying intelligence of feeling.”<sup>42</sup> Not only Sophie, but Agnes also freely admits that Leonhardt can reason and speak “better and finer than I,”<sup>43</sup> but this does not seem to cause her any great distress. This is not the heartbeat of faith.

For I do not know how to describe with words how deeply and ardently I [have] felt that all radiant, serene joy is religion; that love, pleasure, and devotion are tones making up a perfect harmony, tones which fit in with each other in any phrasing and in full chord.<sup>44</sup>

If religion is indeed joy, love and devotion, then Agnes’ relative inability is no great deficit in the religious sphere, nor is Leonhardt’s logical facility any great advantage. Leonhardt recognizes this too: “You have yourself stated how you would have [the truth] expressed,” he says, “namely, not by words, but in music.”<sup>45</sup>

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<sup>38</sup> “At the very outset, religion waives all claims to anything belonging to the two domains of science and morality. . . . I hope that in this way you can be shown what the original and distinctive province of religion is.” Friedrich Schleiermacher, *On Religion: Addresses in Response to its Cultured Critics*, tr. Terrence N. Tice (Richmond, Va. : John Knox Press, 1969), 77.

<sup>39</sup> *Ibid.* , 79.

<sup>40</sup> tr. Hastie, 73. (Cf. tr. Tice, 85).

<sup>41</sup> *Ibid.* , 32. (Cf. tr. Tice, 53).

<sup>42</sup> *Ibid.* , 12. (Cf. tr. Tice, 36).

<sup>43</sup> *Ibid.* , 63.

<sup>44</sup> *Ibid.*

<sup>45</sup> *Ibid.*

Both music and religion, the dialogue suggests, primarily reside in the domain of experience and feeling, rather than that of ideas and knowledge.<sup>46</sup> That is why, Eduard says,

we can well dispense with particular words in church music but not with the singing itself. A Miserere, a Gloria, or a Requiem: what special words are required of these? Their very character conveys plenty of meaning and suffers no essential change even though accompanying words may be replaced with others, so long as they fit the timing of the music; and this is true no matter what the language. Indeed, no one would say that anything of gross importance was lost even if one didn't get the words at all.<sup>47</sup>

The issue is not primarily one of ineffability. Music *speaks*: its “character conveys plenty of meaning.” Later in the evening Friedericke accompanies the other women’s stories, and her piano playing proves marvelously articulate. “She was able to fill the space with harmonies expressing the inner peace, the delight, with which she was stirred and wished to represent.”<sup>48</sup> While music speaks, it does not however speak of ideas, and conceptual knowledge. Barth reflects on the message of the dialogue: “*Exactly because of its lack of concepts*, music is the true and legitimate bearer of the message of Christmas, the adequate expression for the highest and final dialectical level, a level attainable by singing, by playing on flute and piano.”<sup>49</sup>

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<sup>46</sup> Cf. Schleiermacher, *On Religion*: “All concepts and principles are alien to religion, in every respect. . . . That is, if concepts and principles are to be anything at all, they must belong to the category of knowledge; but whatever is subsumed under the category of knowledge lies in a domain of life altogether different from that of religion.” (90); “I certainly don’t think it justifiable for me to hold the notions and doctrines of God and immortality, as they are usually understood, to be the chief elements of religion. Only what is feeling and immediate consciousness in either one of them can belong to religion. But as they are presented in such doctrines, God and immortality are simply concepts. . . . As mere concepts, therefore, these can have no greater value in religion than any of the other concepts I have indicated here.” (146)

<sup>47</sup> tr. Tice, 47. Cf. Schleiermacher, *On Religion* (tr. Tice): “There is . . . a kind of music among the saints which speaks, as it were, without words though it is offering the most definite and understandable expression of what lies deep within.” (212). This statement also underlines that for Schleiermacher, the likeness between music and religion is not so much one of *ineffability*, as it is their inward, *feeling-orientation*.

<sup>48</sup> Schleiermacher, *Christmas Eve*, tr. Tice, 65.

<sup>49</sup> Karl Barth, *Theology and Church. Shorter Writings 1920-1928*, tr. Louise Pettibone Smith (London: SCM Press, 1962), 157. My emphasis.

The dialogue also explores the feeling/knowing tension in the language of “inner” and “outer.”<sup>50</sup> This usage adds another facet and dimension to the tension we have been considering. Music, the dialogue suggests, speaks “to the whole inner being of its hearers.”<sup>51</sup> Indeed, its “true content is the great chords of our inner nature.”<sup>52</sup> As for Sophie, Eduard believes that her pious and musical disposition can only be attributed to “that inner something which takes hold of the child so strikingly [and] has no opportunity to attach itself upon anything merely external.”<sup>53</sup>

In the introduction, I touched on the question: Can music be a source of knowledge? Does music speak to us about the external world? Or does music speak to us only of the “inner world” of feeling and experience? Schleiermacher’s answer is clear, and is one of the chords which bind music and religion.

### The Universal and the Particular

Christmas Eve explains the link between music and religion in terms of a third tension or dichotomy, that of the universal and the particular. Ernst explains, in pieces of sacred music, Christianity gives the music just enough reference to be intelligible, yet “without being associated” with any particular fact.<sup>54</sup> And while Christianity provides some focus, some general object toward which piety may be directed, music edifies Christianity by reminding it that its essence is not in the presentation of particular facts

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<sup>50</sup> Consider also how these terms overlap in one characteristic passage from Schleiermacher’s Third Speech. He argues that the object of the religious attitude “is the inner, not the outer world. . . . Calculating intellect has left the field again to uninhibited perception. The religious man turns his sensitivity inward. He is taken up first of all with contemplation of his own experience. His attention is directed to his own innermost depths. For the time being he leaves all external matters, intellectual and physical alike, to men of reason.” *On Religion*, 191-192.

<sup>51</sup> Schleiermacher, *Christmas Eve*, tr. Tice, 46.

<sup>52</sup> *Ibid.*, 47.

<sup>53</sup> *Ibid.*, 39.

<sup>54</sup> Schleiermacher, tr. Hastie, 26.

or events. Karoline agrees. It is a *singing* piety, she says, which ascends most directly to heaven, because “nothing peculiar or accidental restrains either [music or piety].”<sup>55</sup> She continues, “Never does music weep or laugh over particular circumstances, but always over life itself.”<sup>56</sup> This she suggests is also the attitude of piety. It does not rejoice and mourn over the particular, but the universal. Agnes adds her support to this suggestion:

How much can what is strictly personal or particular. . . give to a soul stirred in the moods of piety, or take from it? As little as the passing notes, leaving only a faint trace behind them, can disturb the harmonious flow of music.<sup>57</sup>

Music is not a matter of “the passing notes” but of deep, inner, harmonious flow.

The dialogue proposes that music and piety are bound together in this way as well. Both enable us to transcend the particular, and to lay hold of that which is deepest and most universal in human experience. In the particular experiences of piety or music, we become aware, as it were, of the universality of the particulars. The essence of religion, as Schleiermacher famously declared, “is only the immediate consciousness *of the universal being of all finite things in and through the infinite*, of all temporal things in and through the eternal.”<sup>58</sup>

## Christmas music

So *Christmas Eve* has presented us with a picture of music, and several reasons for its tie to religion. The experience of both music and piety, it has suggested, is spontaneous, rather than reflective. Both involve us at the level of feeling, rather than knowing. And both music and piety transcend the particular and individual, engaging us in

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<sup>55</sup> Ibid. , 47.

<sup>56</sup> Ibid.

<sup>57</sup> Ibid. , 48.

<sup>58</sup> Schleiermacher, *On Religion*, 79.

the immediate consciousness of their universal essence. What should we make of *Christmas Eve*'s account of music? The issues the dialogue has raised will occupy us for much of the remainder of our study. My preliminary assessment will be brief and anecdotal, but we will return to these questions again, and explore them in greater depth.

## Universality

Each of the three characterizations of music we have encountered has some appeal. Consider the last of the three tensions, which paired music with the universal and against the particular. I have already spoken in the introduction about the universality of music, and the near universality of the pairing between music and worship. It seems plausible to suggest then that the essence of music—its power and central virtue—is not to be found in features of its particular expressions, but in some universal, underlying and transcending all of these.

At the same time, there are aspects of our experience of music which raise questions about this sort of account. Within *Christmas Eve* itself, we find that a given musical performance may or may not be appropriate to the expression of a particular sentiment, theme, or idea. Remember that as the women tell their stories, Friederike accompanies them on the piano. Following Ernestine's story, Schleiermacher writes that "Friederike appeared to have known the story, so aptly did her playing accompany its graceful telling."<sup>59</sup> She likewise interprets Agnes' story, and Karoline's. In recognizing the exact match between Friederike's playing and the other women's stories, however, the narrator implies that music *can* display varying degrees of correspondence to individual

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<sup>59</sup> Schleiermacher, *Christmas Eve*, tr. Tice, 59.

and particular events. Presumably it would have been possible for Leonhardt or someone who didn't know how to play the piano to bang around in a way that did *not* "exactly . . . accompany the graceful story"<sup>60</sup>! Many of us who enjoy music have a similar intuition—that there is something about *this* melody that "fits" *that* event or idea or whatever. We recognize immediately that a John Philip Sousa march is an inappropriate musical accompaniment to a time of prayerful reflection in a worship service; or that John Coltrane's lovely "Naima" would be an inappropriate choice to accompany a heavyweight champion as his entourage parades to the ring for a title bout. This is a question to which we will have to give further attention.<sup>61</sup> For now, we may simply say that we are able to—indeed that we consistently do—make cross-categorical associations: between musical sounds and particular dispositions, concepts, or states of affairs. However universal music may be, it does not seem quite right to contend that "music never weeps or laughs over individual events."

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<sup>60</sup> Ibid. , tr. Hastie, 40.

<sup>61</sup> If we were to present this argument to Karoline or Ernestine, my guess is that they would say the music does not correspond to the *particulars* of the circumstances, as much as to the underlying universal in each case. We hear the universal in the particular. Again, there is some truth to this. As the dialogue points out, music does not specify particulars as language does. We hear a tune as "joyful," not as "the joy that Uncle Bob felt last Saturday when he found out he had won a free Slushy drink at Woolworths." This is an issue we will return to in Chapter 4 (language and music, that is, not Slushy drinks). Still, the larger point I am making stands. The dialogue speaks of Friederike's playing matching the contours of Ernestine's story as if she knew it herself. Many of us will have had the same experience, for instance in listening to a tone poem like Smetana's *Ma Vlast*. The music does not communicate a broad and relatively featureless "JOY" or "SORROW." Rather as Smetana commends his different tone renderings to us—here the river winds past a castle; here it descends into rapids; here it glides through a primeval forest—we sense that the pairing of sound and particular event is apt, even accurate. Likewise, we would probably be able to say that "*this* melody seems an apt expression of Uncle Bob's Slushy joy; whereas *this* melody seems a more apt expression of his joy at his school reunion; and *this* melody seems a more apt expression of his joy at his Cousin Jo's baptism."

It seems problematic, in sum, to state categorically that music attaches to nothing particular, or to make non-particularity one of the essential distinctives of music, when we very naturally make associations between music and particular objects, events, emotions, and when we do so with such a high degree of associational specificity. Again, we will continue to explore the universal-particular dynamic in music in Chapters 2-4. (I am most grateful to Dr. Pat A. Manfredi for his helpful comments on this point.)

## Feeling

The dialogue's pairing of music and feeling (rather than knowing) also resonates with us at a certain level. Clearly, music is able to grip us, excite us, involve us at an emotional level in a way that (say) a lecture on the tax code is not. The lecture almost certainly will provide us with more information and more "knowledge" (on some accounts); but the music speaks to us more powerfully, more inwardly. We may *understand* the discourse, but we *feel* and *experience* the song. The distance between a bare conceptual statement and its expression in music can be appreciated when we look at the *text* of a piece such as the Soul Stirrers' "Does Jesus Care?":

Does Jesus care—  
When I'm oppressed?  
I know, I know my Jesus  
Yes, he sees, sees and he cares.  
Well, does Jesus, does my Jesus care—  
Oh, when I laid on down?  
Well I know, I know my Jesus, Lord, he cares.  
Well, Oh yes. Oh yes.  
Know I know, know my Jesus cares.  
Oh yes, oh Lord. I'm a witness, my Jesus cares.  
Well, now oh, oh Lord. Yes, I know, I know God cares.  
So glad!  
I know my Jesus, Lord, God cares. . . .<sup>62</sup>

It's certainly a pleasant thought—Jesus cares for me!—but as a text, "Does Jesus Care?" hardly amounts to a profound exposition of that idea. If it succeeds, it does not succeed because of the amount and depth of information it provides. As a piece of music however, "Does Jesus Care?" is rich and deeply affecting. When R. H. Harris trills out "Well, oh yes. Oh, yes" it represents more than his intellectual assent to a given state of affairs. We hear it as a personal testimony of joy in sorrow; an impossible alloy of

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<sup>62</sup> Morris, "Does Jesus Care?" R. H. Harris and the Soul Stirrers (orig. recorded 1948), *On Fathers and Sons*, Spirit Feel Records, SF1001.

sobriety and cheerfulness. We hear in the sung notes of his “oh yes” the whole character of a man who has certainly “been oppressed,” and “laid on down,” but remains “a witness—my Jesus cares.” No analysis of the text alone could ever render the emotive strength of Harris’ performance; no parsing of verbs or diagramming of semantic structure will locate the soul of the piece. Without question, music involves *feeling*.

The question is whether the affective component of “Does Jesus Care?” should be denied the status of “knowledge.” My description of Harris’ performance suggests that it is precisely in musically *feeling along with* the singer, that we come to full *understanding*. By entering into the music feeling-ly, we gain not just an (inward) experience, but *insight* into the experience of another. Such acts of imaginative participation possess both a “knowing” and a “feeling” element (using those terms in a narrower sense). Warnock argues that

there is a power in the human mind which is at work in our everyday perception of the world, and is also at work in our thoughts about what is absent; which enables us to see the world, whether present or absent as significant, and also to present this vision to others, for them to share or reject. And this power, though it gives us ‘thought-imbued’ perception . . . *is not only intellectual. Its impetus comes from the emotions as much as from the reason, from the heart as much as from the head.*<sup>63</sup>

Once again, then, we can endorse the description of music we find in *Christmas Eve*, but only with reservations. We may unreservedly affirm that music is bound up with feeling. We have reason however to hesitate before agreeing that music simply *is* feeling—or even, as the dialogue suggests at points—that music is *feeling-not-knowing*.<sup>64</sup>

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<sup>63</sup> Mary Warnock, *Imagination* (196), as cited in Trevor A. Hart, “Going Beyond . . . : Imagination, pattern and ‘taking as,’” (lecture notes produced for DI 4/3424, *Theology and Imagination*, St. Mary’s College, Candlemas semester 2000), 11. My emphasis.

<sup>64</sup> Jeremy Begbie (*Voicing Creation’s Praise: Towards a Theology of the Arts* (Edinburgh: T & T Clark, Harpercollins, 1991)), helpfully traces the opposition of feeling and knowing in modern Western philosophy. In Descartes, and later, in the Empiricists, one finds the same “marked tendency to drive a wedge between aesthetic experience and knowledge” (188). Likewise, in Kant, there is

## Spontaneity

What about the spontaneous/reflective dichotomy the dialogue presents? Here, as elsewhere, *Christmas Eve* has identified a significant feature of music. There is an important sense in which music is spontaneous. We are not taught to enjoy musical sounds, nor are we taught to sing; but universally, infants come to do both within the first few years of life. There is also<sup>a</sup> spontaneous quality to our enjoyment of a familiar piece or favorite song. We do not need to reflect and meditate on it like we do when reading a difficult passage in theology or philosophy.

On the other hand, however, there is another sense in which our enjoyment of music is acquired through study, reflection and training. I love Be-bop and post-Bop era jazz, but this has not always been the case. When I first heard a Thelonious Monk recording, I found it absolutely bewildering. I had to learn something of the structure and logic of the music before I could come to enjoy it “spontaneously.” There seems to be, that is, a more complex dialogue between spontaneous and the reflective, between pre-conscious and conscious processes in music than *Christmas Eve* suggests.

The difficulties with the dialogue’s account of music multiply if we combine the dichotomies into two networks of oppositions.<sup>65</sup> In *Christmas Eve*, religion and music derive their power and are linked together by occupying the realm of *feeling-universality-spontaneity*, the realm of Sophie’s child-like simplicity. This domain is set across from that of *knowing-particularity-reflection*; the sphere in which men offer discourses of

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even a further “hardening of the distinction between aesthetic experience and knowledge which he inherited from his predecessors” (195). Begbie offers a critique of the aesthetic-rational division, drawing especially on Polanyi. My own critique will move toward similar conclusions, but will draw on different resources.  
<sup>65</sup> And indeed, in the dialogue, these tensions are not separated out into neat categories, delineated by clearly marked subject headings.

rigorous complexity. In practice however, music does not neatly fall into either camp (we will get to religion shortly).

For instance, we may discover that our most spontaneous musical experiences also display an extraordinary complexity. When I went off to study music at university, I had already played piano and violin for a number of years, and had even had instruction in music theory and composition. Still, I tended to write and to improvise primarily “by ear,” and the workings of music remained for the most part mysterious and opaque to me. As I improvised or composed I knew deeply and profoundly that *this* note should follow that note, but I could not have explained why. Nor could I have described why *this* chord should follow on more naturally than that. I knew from experience then, that music certainly could, and did, emerge intuitively, almost unconsciously, as it seems to emerge from Sophie.

Yet as I began to study music theory, I found that these intuitions represented tendencies and patterns of organization which were astonishingly complex and orderly. In fact, the first year course in music theory involved learning and memorizing dozens of these “rules” or conventions:

In V-I or V-VI in root position, if the leading tone is in the soprano, it must progress upward by half step to the tonic note. . . .<sup>66</sup>

The musical patterns which my ear already knew (spontaneously, pre-consciously) were not necessarily characterized by a “childlike simplicity.” Rather they reflected sufficient structure and order that they could be codified into a system. They reflected sufficient complexity that a year’s worth of lectures and study and memorization could not encompass them all. Once again, it seems true that music appeals

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<sup>66</sup> Walter Piston, *Harmony*, 5<sup>th</sup> ed. , rev. and exp. Mark Devoto (New York: W. W. Norton, 1987), 37.

to us at the level of spontaneity-universality-feeling-simplicity; but not necessarily true that it appeals to us because it is not-reflective-not-particular-not-knowing-not-complex. Music points us toward a more elaborate and heterogeneous relationship between these elements than is implied in *Christmas Eve*.

## Christmas piety

So we may have good reason to be uncomfortable with the vision of music that is presented in *Christmas Eve*, or at least sufficient grounds to warrant a further investigation of it. At the same time, we may ask whether we are happy with how Schleiermacher portrays piety. Before answering that question, I would like to consider the stories and speeches which occupy the bulk of the dialogue. We have seen in the first half of the dialogue how piety, like music, is associated with feeling rather than knowing, and with the spontaneous rather than the reflective. The content of the women's stories and the men's speeches centers around the third dichotomy. Piety is bound up, they suggest, not with the particular, but with the universal.

### Three stories

In the first story of the evening, Ernestine recalls a Christmas Eve service she attended as a young girl. The church was dim and gray, and "still less could the quavering tones of the minister entice me to enter in."<sup>67</sup> She had nearly decided to leave, when she "suddenly came upon the sanctuary, the holy place, I had been seeking so long in vain."<sup>68</sup> There, in the chapel, Ernestine saw a beautiful young mother, lost in an attitude of devotion, holding a small child. Ernestine felt herself irresistibly drawn to the pair, for in

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<sup>67</sup> Schleiermacher, *Christmas Eve*, tr. Tice, 58.

<sup>68</sup> *Ibid.*

these two she had found, as it were, “an artist’s picture of Mary and child in living exemplar.”<sup>69</sup>

Ernestine finishes her account, and Friederike, who had been accompanying her all along on the piano transitions into a hymn. Recognizing the tune, Sophie runs to join her. Together they sing the text of Novalis, which embodies the central theme of all three stories:

I see thee in a thousand forms,  
O Mary, lovingly expressed . . . .<sup>70</sup>

It is then Agnes’ turn to present her story. Last year at this time, she was staying with her brother, Ferdinand (a minister), and her sister-in-law, Luise. Luise had just given birth to their first child, and Agnes had gone to help out however she could. That Christmas Eve a number of friends had gathered to celebrate with the young couple, and each guest had some small gift to offer the baby. Ferdinand, announced that he too, had a very special gift for the child. He left the room for a moment, and then reappeared, in his full clerical dress. A little basin of water was set out, and Ferdinand indicated that it was his intention to baptize the child that very evening. You have already given the child a number of lovely gifts, Ferdinand said.

Let us, then, appropriate to him the finest gift of all, Christ himself, although in this moment it cannot yet accord him either joy or pleasure. For his sake, the power of the higher life, which cannot yet exist in himself, dwells not alone in his mother or in me but in us all. And as time goes on, this power must stream out to him from us all so that he may take it unto himself. . . .

As we all then laid hands upon the child, according to the fine old custom of that area, it was as if the rays of heavenly love and joy converged upon the head and heart of the child in a new focus.<sup>71</sup>

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<sup>69</sup> Ibid.

<sup>70</sup> Ibid. , 59.

<sup>71</sup> Ibid. , 62-3.

But Leonhardt scoffs at the story: “ ‘We have the same thing [that we had in the first story] . . . only now it is a reversed-negative of a Christ child in which the aureole streams toward him, not outward.’ ”<sup>72</sup> *Exactly!* , says Agnes.

Karoline also has a story from last year’s Christmas celebration—though the mood on that occasion was anything but celebratory. Karoline was staying with her friend Charlotte, and for several weeks Charlotte’s youngest child had been very ill. Now, on Christmas Eve, it appeared that the boy would soon die. After a deep struggle, the mother has accepted that her dear son must die, and in her heart, has surrendered him to his heavenly Father. Having kept vigil with him through many hours of illness, she hands the little boy to Karoline, retires to her room and falls asleep. As she sleeps, the child descends into violent convulsions. But rather than the throes of death, these are the breaking of the storm, and by the time Charlotte awakes, the boy is sleeping peacefully, steadily gaining strength. Charlotte looks at her son, hardly able to believe that the son she had lost is alive again:

On the festival of the rebirth of the world, my precious child is born to a new life. Yes, he will live; there is no doubt of it. . . . purified by the pain as though he had passed triumphant through death, and had been consecrated to a higher life.<sup>73</sup>

Leonhardt listens with interest, and Ernst makes sure Leonhardt doesn’t miss the obvious connection being made. “Don’t you find the same thing here as before—an inverted Mary, as it were, who begins with the most profound maternal suffering, the *Stabat Mater*, and ends with rejoicing over the divine Child?”<sup>74</sup>

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<sup>72</sup> *Ibid.* , 63.

<sup>73</sup> *Ibid.* , 67.

<sup>74</sup> *Ibid.*

### Three Speeches

Having played the antagonist throughout the women's speeches, Leonhardt is the first to offer a discourse as the men volunteered. (The ladies suggest that the discourses should be on the same topic as their own stories—the meaning of the Christmas festival.) Noting that all of his listeners will no doubt attend church the next day, Leonhardt promises to keep “as far as possible” from the sort of discourse they will hear from the pulpit the following morning.<sup>75</sup>

There can be no doubt, Leonhardt begins, that the Christmas festival is great, important, and admirable. The excellence of the Christmas festival can be discerned by observing how effectively it has served its purpose. The connection that can be confidently drawn between the actual historical figure of Jesus, and the gospel accounts of his life, is shockingly small, Leonhardt argues. “Only think of how little of [Christianity's] doctrine or of its institutions can be traced back to Christ himself. By far most of it is of some later origin.”<sup>76</sup> The particular and historical life of Christ “receded far into the background of early proclamation,” he claims, and seems to have only been rescued “from the rubbish heap and to have retained importance *by our festival*.”<sup>77</sup> The Christmas Festival then is indeed worthy of our respect and admiration, for it does not result from, *but is responsible for* our beliefs about the birth of Christ. “In short,” he concludes,

since what might be experienced and historically valid regarding the personal existence of Christ, has become so precarious because of the diversity of views and doctrines, therefore if our festival is primarily to be seen as the basis of a continuing common faith in Christ, it is thereby all the more to be extolled. Moreover, a power is demonstrated within it which borders on what I have already mentioned, namely, that sometimes only through such traditions does history itself come to be made.<sup>78</sup>

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<sup>75</sup> *Ibid.*, 70.

<sup>76</sup> *Ibid.*, 73

<sup>77</sup> *Ibid.* My emphasis.

<sup>78</sup> *Ibid.*, 74. Barth aptly characterizes Leonhardt's position as “Feuerbachianism.” Karl Barth, *The Theology of Schleiermacher: Lectures at Gottingen, Winter Semester of 1923/24*, ed. Dietrich Ritschl, tr. Geoffrey W. Bromiley (Grand Rapids: Eerdmans, 1982), 70.

In response, Friederike half facetiously recommends that Leonhardt be given over to condign punishment, “the unbelieving rascal.”<sup>79</sup> Well, I should like to congratulate him, chirps in Ernestine, “for so honorably keeping his promise to stay away, as much as possible, from what we might hear in places of worship tomorrow.”<sup>80</sup> Karoline suggests that if it is not possible to bring the rogue to trial just now, perhaps instead we should invite the next speaker to refute him and to preserve honor of our theme!<sup>81</sup>

Ernst replies that he fully intends to save the honor of the theme, but he has no interest at all in attempting to refute Leonhardt, at least not directly. Ernst agrees that the Christmas festival is important, but argues that such a celebration cannot be a mere invention or fabrication. There is a great and universal feeling of joy which Christians experience at Christmas,

And what is so universal cannot for that very reason be considered to have been arbitrarily devised or externally agreed upon, but must have a common internal principle or reason. . . . This internal principle, however, can be no other than this, that the appearance of the Redeemer is the source of all other joy in the Christian world; and for this reason there is nothing else can deserve to be so celebrated.<sup>82</sup>

This Redeemer is the one through whom “we become conscious of the inmost ground and of the inexhaustible power of a new untroubled life,” and is himself “the fairest blossom” and “highest perfection” of this new life.<sup>83</sup> Ernst agrees with Leonhardt that “the historical traces of his [Jesus’] life” are unsatisfactory “when one examines it critically.”<sup>84</sup> Yet this does not trouble him, because “the festival does not depend on this. It rests on the necessity of a Redeemer, and hence upon the experience of a heightened existence which can be derived from no other beginning than him.”<sup>85</sup>

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<sup>79</sup> *Ibid.*, 75.

<sup>80</sup> *Ibid.*, 76.

<sup>81</sup> *Ibid.*

<sup>82</sup> *Ibid.*, tr. Hastie, 64.

<sup>83</sup> *Ibid.*, 66.

<sup>84</sup> *Ibid.*, tr. Tice, 79-80.

<sup>85</sup> *Ibid.*, 80.

Last of all, it is Eduard's turn to speak on the theme of the Christmas festival. While Leonhardt has explored what may or may not be historical in the gospel accounts of Christ's life, ("the more external biographers"<sup>86</sup>) Eduard prefers to reflect on

the more mystical among the four evangelists, whose account offers very little in the way of particular events. The Gospel according to John hasn't any Christmas even, recounted as an external event. But in his heart prevails an everlasting childlike Christmas joy.<sup>87</sup>

John's gospel, says Eduard, begins by telling us that the Word became flesh.

The flesh, however, is, as we know, nothing other than our finite, limited, sensible nature, while the Word is thinking or coming to know [Hastie: "is the thought or consciousness"]; and the Word's becoming flesh is therefore the appearing of this original and divine wisdom in that form. Accordingly, what we celebrate is nothing other than ourselves as whole beings—that is, human nature, or whatever else you want to call it, viewed and known from the perspective of the divine.<sup>88</sup>

Through Christ we become conscious of our true and higher humanity. This self-consciousness of which Eduard speaks may involve rational awareness, but he does not seem to mean a primarily rational or analytic "consciousness". He mentions that there are those within the church

who own that higher self-consciousness in immediate experience, if not in conceptual awareness as well [Hastie: "in the form of feeling, although not also in cognition"]. This is exactly the case with women, and likewise provides the reason why they are so much more fervently and unreservedly attached to the church.<sup>89</sup>

Christ is the revealer of our true humanity, and therefore "each one of us beholds in the birth of Christ his own higher birth whereby nothing lives in him but devotion and love; and in him too the eternal Son of God appears."<sup>90</sup> At about this point however, Eduard cuts his speech short, for he sees that Josef has arrived, and invites him to offer

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<sup>86</sup> Ibid. , 81.

<sup>87</sup> Ibid. , 81-2.

<sup>88</sup> Ibid. 82.

<sup>89</sup> Ibid. 83.

<sup>90</sup> Ibid. , 84.

the last discourse of the evening. We have already looked at the brief rebuke and exhortation which Josef then offers.

## **Historical traces and universal truths**

While each of the stories and speeches offers something distinctive, they all share this in common: the meaning of Christmas is located in the universal rather than in the particular (and, to draw on another one of our oppositions, in the internal, rather than the external). In the women's stories, the miracle of the nativity is revealed in the beatific vision of a devout mother and beautiful child. Yet in each case the mother and child are found, not in a Palestinian stable, nor in the gospel narratives, but in a German church; in the shining face of Luise's newly baptized son; in the suffering and joy of a mother who has lost and regained her son. Every mother finds Mary within herself, and in her child, the Holy Infant. The soundtrack to these stories is provided by Friederike and Sophie, singing the words of Novalis: "I see thee in a thousand forms, O Mary lovingly express'd." In each story we encounter particularity, but we are directed to the *universality* of the particulars. What we celebrate at Christmas, the women tell us, is not a particular, external, historical event, but the universal principles of maternal love, birth and new life.

The same theme runs through the men's discourses. Leonhardt argues that the particular events of Jesus' history and nativity are opaque to us. We have no access to the historical events we celebrate at the Christmas Festival, but only to our celebrations. Ernst, on the other hand, does root the celebration of Christmas in the birth of the Redeemer. But even here, it is not the historical particularities of Jesus' birth which we celebrate, nor does our celebration depend upon knowing these. Rather Ernst projects

“the existence of an historical founder of Christianity from present religious experience.”<sup>91</sup>

So while Ernst asserts an historical origin of the Christmas festival and the Christian faith, that historical and particular origin is inferred from the inward and universal—an experience of a heightened sense of existence, and an awareness of our need for a Redeemer. Strauss comments, “As Kant called the existence of God a postulate of practical reason: so the dogma of Christ can be called by Schleiermacher a postulate of Christian experience.”<sup>92</sup>

Finally, in Eduard we encounter the same emphasis upon inwardness and the same relative indifference to historical particularity. He indicates that he prefers to regard the object of our Christmas celebrations, “not as a mere child fashioned and appearing so and so, and born from this woman or that, or here or there,”<sup>93</sup> but as the revelation to our immediate self-consciousness of our higher humanity.

*Christmas Eve* makes this third link between music and piety, because like music, piety—indeed the Christian message itself—has to do with the universal rather the particular.<sup>94</sup>

## **The significance of experience**

And so, we return to our earlier question: are we content with Christmas Eve’s portrayal of piety? As with the characters’ discussion of music, their thoughts on Christian faith offer several valuable insights we will want to carry forward in our study.

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<sup>91</sup> Niebuhr, 62.

<sup>92</sup> Quoted in Niebuhr, 64.

<sup>93</sup> Schleiermacher, 69.

<sup>94</sup> However it is very important to note that for Schleiermacher “emerges from within” does not mean “emerges from within the lone individual.” Rather, it is as we participate in the community of the Church that we come to self-consciousness of our higher humanity. It is a collective “within” from which this awareness emerges.

First of all, as we have just seen, *the dialogue recognizes human experience as theologically significant*. The work mentions at least three ways in which this is so.

### Experience of self and knowledge of God

First of all, (as Ernst and Eduard suggest in particular) our immediate consciousness of self and our consciousness of God are bound together. The transcendent joy, the “heightened sense of existence,” and the desire for unity of being that we experience—all of these “can be referred to no other beginning” than that which they have in Christ. In arguing in this manner, Schleiermacher stands well within the mainstream of the Christian tradition. For Augustine, “self-knowledge is an essential moment in the ascent to knowledge of God.”<sup>95</sup> Calvin likewise begins the *Institutes* with a chapter subtitled: “The Knowledge of God and That of Ourselves Are Connected. How They are Interrelated,” and an opening paragraph headed: “Without knowledge of self there is no knowledge of God.”<sup>96</sup> He goes on to explain:

From the feeling of our own ignorance, vanity, poverty, infirmity, and—what is more—depravity and corruption, we recognize that the true light of wisdom, sound virtue, full abundance of every good, and purity of righteousness rest in the Lord alone. . . . Accordingly, the knowledge of ourselves not only arouses us to seek God, but also, as it were, leads us by the hand to find him<sup>97</sup>

What Calvin states negatively, Ernst and Eduard state positively. As we experience our own failings and sinfulness, Calvin argues, we recognize that we ourselves cannot be the source of wisdom and goodness. As we experience the fullness and depth of

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<sup>95</sup> Robert Crouse, “Knowledge,” in *Augustine Through the Ages: An Encyclopedia*, ed. Allan D. Fitzgerald (Grand Rapids: Eerdmans, 1999), 486.

<sup>96</sup> Calvin. *Institutes of the Christian Religion. In Two Volumes*, vol. 1, Book I. 1, ed. John T. McNeill, tr. Ford Lewis Battles, *The Library of Christian Classics*, vol. XX (Philadelphia: The Westminster Press, 1960), p. 35.

<sup>97</sup> *Ibid.*, 36-37.

Christmas joy, *Christmas Eve* argues, we likewise recognize that its source cannot have been “arbitrarily devised or agreed upon.”<sup>98</sup>

### Owning the truth

Additionally, “feeling” is theologically significant, because as the dialogue makes clear, “theological reflection, however necessary, makes sense only if it is framed within a life of spontaneous piety.”<sup>99</sup> Schleiermacher’s emphasis on feeling grew out of his conviction that “quantity of knowledge is not quantity of piety.”<sup>100</sup> His readers would have been well acquainted with theological systems, but this he insists, is not the same as a true religious experience.

What are these doctrinal structures, viewed in themselves, if not the artifice of calculating intellect? . . . Here everything elapses into callous argumentation. Here even the sublimest subjects are made pawns of controversy between competing schools of thought. . . . Surely this is not the character of religion!

If, therefore, you have paid attention only to these religious dogmas and opinions, you do not yet know religion itself at all, and religion is not what you are objecting to. Why haven’t you gone deeper to find the kernel lying inside these outer layers?<sup>101</sup>

Here again, Schleiermacher stands in good company. Augustine, Anselm, Aquinas, Luther, Calvin, and scores of others have insisted that theology, if it is truly theology, cannot be mere detached, disinterested, metaphysical rumination. Barth insists that theology must be taken up with “*living truth*.”

Not a light to wonder at and to observe, not a light to kindle all manner of fireworks at—not even the profoundest philosophical speculations—but

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<sup>98</sup> Schleiermacher, 78.

<sup>99</sup> Gerrish, 18.

<sup>100</sup> Clements, 36.

<sup>101</sup> *On Religion*, 55.

the light on our road which may stand above our action and above our talk.<sup>102</sup>

Experience is theologically significant, because this is where God meets humanity.

The divine-human encounter yields not only, perhaps not even primarily, rational understanding and discursive knowledge. God's chosen people are descended from the one who wrestled with God, and ever after, walked differently.<sup>103</sup>

### Addressing the human

Finally, feeling cannot be displaced from Christian reflection, because it cannot be displaced from our humanity. Music indeed appeals to our emotions, and the prominence of music in worship testifies that we are affective beings. Such passions are part of "our nature and frame": "No other reason can be assigned why we should express ourselves to God in verse, rather than in prose, and do it with music but only, that such is our nature and frame, that these things have a tendency to move our affections."<sup>104</sup>

Experience, subjectivity, personal commitment are bound up with every act of human knowing. Experience is theologically significant, therefore, inasmuch as the topic of theology is not simply *theologia in se*, but *theologia nostra*; not simply God as he is in himself, but God as he relates to us. Theology differs from philosophy of religion in its interest in God as he has revealed himself to humanity. And the humanity to which God has revealed himself not only reasons, but feels and experiences. The arts, and in particular music, demonstrate that the human cannot be contained within the narrow categories of Leonhardt's rationalism.

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<sup>102</sup> Karl Barth, *Dogmatics in Outline*, tr. G. T. Thomson. (New York: Philosophical Library, 1949), 25.

<sup>103</sup> Genesis 32:22-32

It is appropriate then that we begin our investigation of music with *Christmas Eve*, because both projects are interested in human experience and intuition. Like Schleiermacher, we have suggested that human experience—in particular, the experience of music—is theologically significant.

### Personal Knowledge

In acknowledging the felt and subjective component of piety, we must be careful however, not to define “feeling” as “feeling-not-knowing”. This is the opposition which Christmas Eve suggests at times, and it is dangerous and misleading. We cannot maintain that feeling and experience are bound up with all human knowing, without likewise acknowledging that knowing is bound up with feeling and experience. Within the Judeo-Christian tradition itself, we find over and over again that the subjective experience of devotion is united with knowledge. The eschatological promise includes not only the experience of God’s presence, but knowledge of him as well:

“This is the covenant I will make with the house of Israel after that time,” declares the LORD. “I will put my law in their hearts. I will be their God, and they will be my people. No longer will a man teach his neighbor, or a man his brother, saying, ‘Know the LORD,’ because they will all know me, from the least of them to the greatest,” declares the LORD. (Jeremiah 31:33-34)

Likewise, the goal of the Apostle Paul was not simply a felt experience of God, but an intimacy of communion, in which experience and knowledge are intricately interwoven.

I want to know Christ and the power of his resurrection and the fellowship of sharing in his sufferings, becoming like him in his death, and so, somehow, to attain to the resurrection from the dead. (Philippians 3:10-11)

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<sup>104</sup> Jonathan Edwards, *A Treatise Concerning Religious Affections: In Three Parts*, [text on-line], scanned and ed. Harry Plantinga (Worcester ed. : 1851); available from Christian Classics Ethereal Library: [http://www.ccel.org/e/edwards/religious\\_affections/religious\\_affections1.0.txt](http://www.ccel.org/e/edwards/religious_affections/religious_affections1.0.txt)

This is not, of course, the detached, rationalism of Leonhardt, but the knowledge of relationship. It is *human* knowledge, or to borrow Polanyi's terminology, personal knowledge. This interplay between feeling and knowing is one we will continue to draw out—one which music will sound out for us—as we continue our study. The dynamic relationship which I have proposed here suggests an important point; one which cuts two ways: feeling includes knowledge, and knowledge, feeling. If such a model is valid, we cannot locate the distinctiveness of music (or piety) in the fact that they appeal to feeling, *rather than* the understanding. Music is neither an emotional supplement, nor an experiential alternative to rationality.

## **God in history**

There are other problems with the dialogue's account of Christian belief. Experience and feeling, the dialogue proposes, are the ground of our knowledge of Christ. This subjective orientation can only take us so far—to the idea of a Redeemer, but not to the knowledge of an historical Jesus of Nazareth. As we have already seen, the dialogue suggests that such a limit is no obstacle to genuine piety. At Christmas, we do not celebrate the particularities of an individual human life but the universal principle of Christmas.

### **The mighty deeds of the LORD**

However, such an account of the Incarnation seems strangely out of step with the God of the Christian scriptures, who is manifestly the God who acts in human history. The songs of Israel's worship are not in praise of a universal principle, but rather, Asaph sings, "I will remember the deeds of the LORD; yes, I will remember your miracles of long

ago. I will meditate on all your works and consider all your mighty deeds.” (Psalm 77:11-12) Israel’s testimony was of the God who had intervened in their particular history: “we will tell the next generation the praiseworthy deeds of the LORD, his power, and the wonders he has done. He decreed statutes for Jacob and established the law in Israel.” (78:5-6); It is to him “who struck down the firstborn of Egypt . . . and brought Israel out from among them . . . to him who divided the Red Sea asunder . . . and brought Israel through it;” it is to the one who struck down “Sihon king of the Amorites . . . and Og king of Bashan;” it is to the God who is bound up with all the particular, peculiar, and local events of his people that we sing our thanks: “His love endures forever.” (Psalm 136:10-14, 19-20, 26). The same declaration of God’s involvement in time and history is indelibly stamped on the New Testament—not least upon the prologue to John, which Eduard prefers for its supposedly non-particular character. Barth writes, “that the Word became flesh also means that it became temporal, historical.”

God was not ashamed to exist in this accidental state. To the factors which determined our human time and human history belongs . . . the life and Passion of Jesus as well. We are not left alone in this frightful world. Into this alien land God has come to us.<sup>105</sup>

### The universality of particularity

Such an affirmation of the *particularity* of the incarnation is all the more vital in our postmodern *milieu*. Ironically, it is only this particularity which can underwrite the universal relevance of Jesus Christ. Presenting the gospel as a universal principle paradoxically condemns it to parochial irrelevance. Can the “universal feeling of joy”

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<sup>105</sup> Barth, *Dogmatics in Outline*, 109. Even Clements, in arguing against the charge that Schleiermacher disdains the historicity of Jesus acknowledges that “in the *Christmas Eve* dialogue . . . he seems prepared to allow the view that the present religious consciousness is of itself a sufficient pointer to an historical

which characterizes the celebration of this German bourgeois family also enfold the experience of the child of the Eastern European orphanage? The woman of Taliban-era Afghanistan? The Asian immigrant living in inner-city Detroit?

Such attempts at a universal paraphrase of the Incarnation—to provide the inward, “spiritual” meaning of Christ—are inevitably exposed as limited and provincial. However, in Jesus Christ, as a particular person in space and time, God meets *us*, as individuals. He meets us, not as a vague and featureless universal principle of redemption, which we must then somehow to apply to our situation. He meets us as only an *individual* can, with all the particularity of relationship.<sup>106</sup> De Vries commends the Christology of *Christmas Eve*, because she believes it offers us a Christ of universal relevance. Here we find a Christ who is not necessarily a 1st century Palestinian male, but one whom we may see “in a thousand forms expressed.”<sup>107</sup> However if Christ is some nebulous universal quantity, there is no particular dynamic to my relationship with him. He becomes a “one-size-fits-all” Savior. Moreover, if Jesus really is “in a thousand forms expressed” (and surely a thousand is not enough!), then the veil of any independent reality for this Christ begins to dissolve. We are left alone in our own particularities. It is as a unique historical individual that Christ encounters us, and it is this very particularity which allows him to meet *us* as unique and particular individuals.

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originator of such emotions, regardless of the degree of certainty of ‘hard’ historical evidence.” Clements, 54.

<sup>106</sup> Cf. Richard Bauckham, “Christology Today,” in *Scriptura* 27 (1988): 27.

<sup>107</sup> DeVries: 180-82.

## Light in the darkness

If we are left alone in our particularity, we are also left alone in our sin and fallenness. The meeting of relationship also opens up the possibility of correction and redirection. Eduard says that at Christmas we celebrate “just what we are in ourselves as a whole. . . contemplated and known from the divine principle.”<sup>108</sup> It is questionable however whether this side of Rwanda, Cambodia, Tiananmen Square, and Auschwitz we still feel any cause for celebration as we contemplate human nature.<sup>109</sup> Again and again in the biblical accounts we see God breaking into the lives of individuals, saving them *from* “just what we are in ourselves.” Into the life of King David, the adulterer and murderer; into the life of a woman with five husbands; into the life of Zaccheus the tax collector; into the life of Saul of Tarsus the persecutor of Christians—God steps in from the outside and offers the hope of moving beyond one’s sinful self.

In entering ruined lives, he provides not simply a principle for reform, but also new eyes, a new mind, a new heart. Kierkegaard drew attention to this difference, by contrasting a Socratic model of education and improvement with God’s self revelation to humanity in Jesus Christ. The Socratic seeks to draw out of the student that truth which is already within. But in the case of Christianity, “if the learner is to acquire the Truth, the Teacher must bring it to him; and not only so, but *he must also give him the condition necessary for understanding it*. For if the learner were in his own person the condition for understanding the Truth, he need only recall it.”<sup>110</sup> Once again, the gospel prologue to which Eduard appeals underlines the point. “*No one has ever seen God,*” John writes,

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<sup>108</sup> Schleiermacher, *Christmas Eve*, tr. Hastie, 69.

<sup>109</sup> Cf. Barth, *The Theology of Schleiermacher*, 70.

“but God the One and Only, who is at the Father's side, has made him known.” (John 1:18). God became man, not to call attention to what we already possess, but as the light that shines in the darkness (John 1:4).

## The particularity of dialogue

The very medium Schleiermacher has chosen also seems to undercut the dialogue's emphasis upon inwardness and its rejection of the particular. *Christmas Eve* does not present its reflection on the Incarnation as a set of abstract universal pronouncements, but as the words and ideas of a particular group of people in a particular setting. It is this concrete and particular quality of the dialogue which makes it so effective.<sup>111</sup>

Schleiermacher clearly recognizes the power of story-telling, as we have already seen. The women's stories are praised by Josef as a far more valuable means of reflecting upon the incarnation than are the dry theological speculations of the men. But what is the appeal and power of these stories but their very particularity? The women do not offer us transcendent abstractions, but details and histories—of Karoline's visit with Charlotte and her dying son, of Agnes at the Christmas Eve baptism of her infant nephew, and so on. It is not just that these details make for a *good* story; they are what make the narratives stories at all. But as for Eduard, he is less interested in the Synoptic gospels with their emphasis on the historical; instead he prefers “the more universal, spiritual account of John—as Schleiermacher did both then and later.”<sup>112</sup> Nor is this his preference alone. As we have already seen, earlier in the dialogue it is Karoline and Agnes who tie the

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<sup>110</sup> S. Kierkegaard, *Philosophical Fragments or A Fragment of Philosophy*, tr. David F. Swenson, rev. tr. Howard V. Hong (Princeton, N. J. : Princeton University Press, 1936), 17. My emphasis.

<sup>111</sup> Cf. Niebuhr, 68.

power of music and piety to their non-particularity. And after each story, the women's reflections suggest that the substance and appeal of the Nativity narratives lies in their universality, rather than their particularity. The effectiveness of their own stories however, discredits this conclusion. Stories and music alike affect us deeply, not by abstracting us from the particulars of time, space, and physical substance, but by involving us in them more deeply.

### **A bid for harmony**

Still, *Christmas Eve* is a good place for us to begin this investigation.

Schleiermacher is correct to recognize that there is something spontaneous, felt and "inward" at the heart of music. What this "inwardness" is, is something we will have to unpack. I have already contended (and will argue more fully later), that it cannot simply mean "not-knowing" or "non-reflective."

Schleiermacher himself guess us to find a way to bring these categories into a more intimate dialogue. This is another way in which *Christmas Eve* provides a genuine resource for our study. The spontaneous-feeling of the feminine is not rejected in favor of the masculine, nor the masculine in favor of the feminine, but Schleiermacher seems to have in mind a fuller, unified humanity, in which the distinctive gifts of male and female complement one another. Inasmuch as Schleiermacher equates redemption with the unfolding of our highest humanity, this emotional-rational unity represents our salvation.

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<sup>112</sup> Terrence N. Tice, "Schleiermacher's Interpretation of Christmas: "Christmas Eve," "The Christian Faith," and the Christmas Sermons," *The Journal of Religion* 47, no. 2 (1967): 109.

In *Christmas Eve*, the real virtue of the feminine is not that it falls short of rationality, but that it goes beyond it; adding to rationality, feeling and pre-reflective intuition. Eduard proposes that

men and women have their different ways—to the end that here too they may become one by sharing knowledge of each other. It may well be true, and it seems clearly so to me, that the contrast between the spontaneous and the reflective emerges more strongly in us men. . . . But within the clam, graceful nature of women comes to light the continuity and inner unity of the two, the spontaneous and the reflective.<sup>113</sup>

Ernst also suggests that it is this healing of oppositions which Christ came to exemplify and model for us. “We ourselves begin with discord and division,” he says “and we only attain to harmony by redemption, which is really nothing but the removal of those oppositions; and for this very reason redemption can only proceed from one in the case of whom they did not require to be removed.”<sup>114</sup> Here Schleiermacher offers us a clue which we shall pursue in Augustine’s *De Musica*: that the fundamental note of music is not its occupation of this or that side of these oppositions, but rather, that of harmony—the mediation and healing of oppositions.<sup>115</sup>

Unfortunately, Schleiermacher’s own harmonization is not entirely successful. Ultimately, he depicts feeling and thinking, the spontaneous and the reflective as two very different—and often opposed—ways of being in the world, which should, somehow or other, be held together. Music and piety are essential to a full humanity and a full Christianity, not because they *contribute* to our rational engagement with the world, but

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<sup>113</sup> Schleiermacher, *Christmas Eve*, tr. Tice, 55.

<sup>114</sup> *Ibid.*, tr. Hastie, 65.

<sup>115</sup> “The intimate relation between the muse of harmony and religion has long been known and interpreted, though recognized only by a few. From of old that muse has laid upon the altars of religion the most glorious and consummate works of her most devoted students. In sacred hymns and chorales, to which the words of poets are only loosely and airily appended, there are breathed such things as precise speech is powerless to grasp. In such instances the tones of thought and sense intermingle and support each other

because they balance, or even counteract, our rational engagement with the world. And, he adds, if one of the two sides of the equation must go, then let it be the dialectical—

“Come,” the dialogue concludes, “let us be glad, and sing something pious and joyous.”<sup>116</sup>

The unity Schleiermacher offers is one of two opposite halves, held together. It is a unity we will find, which does not provide an adequate account of music, of knowing or of feeling. It is an uncomfortable unity which leads inevitably to a tension between Word and Experience; the same supposed “Spirit and Truth” dichotomy I alluded to earlier, in which emotion and rational reflection operate in an uneasy partnership. The Christian tradition however give us hope of a richer unity than this. The same Psalm which praises the “statutes,” “commands,” “precepts” and “ordinances” of the Lord, was also intended “For the director of music.” (Psalm 19) And these two poles are brought cheek to cheek by the Apostle Paul: “Let the word of Christ dwell in you richly as you teach and admonish one another with all wisdom, and as you sing psalms, hymns and spiritual songs with gratitude in your hearts to God.” (Colossians 3:16).

### **Standing St. Augustine on his head**

As we move ahead we shall see that in a fascinating way, Schleiermacher’s dialogue precisely inverts an earlier tradition of Christian speculation about music

Saint Augustine writes that

the powers belonging to numbers in all kinds of movements are most easily studied as they are presented in sounds, and this study furnishes a way of rising to the higher secrets of truth, by paths gradually ascending, so to

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until all is full of the holy, full of the infinite, and can be filled no more.” Schleiermacher, *On Religion*, 212-13.

<sup>116</sup> Ibid. , 74.

speaking, in which Wisdom pleasantly reveals herself, and in every step of providence meets those who love her.<sup>117</sup>

Sometime later Boethius would declare that “the soul of the universe is united by a musical concord.”<sup>118</sup> Not only is the universe ordered musically, but “there is no greater path whereby instruction comes to the mind than through the ear.”<sup>119</sup>

In this tradition, music is not the inarticulate speech of the heart, but the rational principle of the universe. It is not the ineffable feeling which streams from us, but the lucid voice through which the knowledge of a perfectly ordered cosmos is presented to us. The order of perfect rationality is for Augustine and Boethius music’s chief virtue, and for Schleiermacher, that from which music frees us.

There is a second way in which Schleiermacher inverts the tradition of Augustine and Boethius. This can be seen in a passage from St. Augustine’s *Confessions*—probably the best known of Augustine’s reflections on music.

When I remember the tears which I poured out at the time when I was first recovering my faith, and that now I am moved not by the chant but by the words being sung, when they are sung with a clear voice and entirely appropriate modulation, then again I recognize the great utility of music in worship. Thus I fluctuate between the danger of pleasure and the experience of the beneficent effect, and I am more led to put forward the opinion (not as an irrevocable view) that the custom of singing in Church is to be approved, so that through the delights of the ear the weaker mind may rise up towards the devotion of worship. Yet when it happens to me that the music moves me more than the subject of the song, I confess myself to commit a sin deserving punishment, and then I would prefer not to have heard the singer.<sup>120</sup>

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<sup>117</sup> Augustine, “Letter CI,” *The Letters of Saint Augustine*, tr. J. G. Cunningham, vol. 1, Nicene and Post-Nicene Fathers of the Christian Church, ed. Philip Schaff [text on-line] (Edinburgh: T & T Clark; Grand Rapids: Eerdmans), available from Christian Classics Ethereal Library: <http://www.ccel.org>

<sup>118</sup> Boethius, *De institutione musica* I.1, in “Boethius’ The Principles of Music, An Introduction, Translation and Commentary”, tr. Calvin M. Bower (Ph. D. diss. George Peabody College for Teachers, 1966), 33.

<sup>119</sup> *Ibid.*, I, 1, tr. 34.

<sup>120</sup> Augustine, *Confessions*, X, xxxiii, 50. tr. Henry Chadwick (Oxford: Oxford University Press, 1991), 208.

Augustine, like Schleiermacher, knows the power of music to move the emotions, and recognizes this as a valuable part of worship. There is an important difference however. Schleiermacher believes the ability of music to engage us at the level of feeling without engaging the reason is its great value. Augustine on the other hand recognizes the ability of music to engage our emotions without engaging our rationality, and finds there its great danger.

These generalizations oversimplify things a bit—Augustine’s study of music has subtleties and nuances that will demand further attention. So to avoid glossing over important complexities, it may be helpful to begin by examining, not Augustine’s own theological reflection on music, but a study authored by one claiming to stand in the tradition of *De Musica*.



# The Blessed Vision's Fleeting Form

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Alfred Pike—  
*A Theology  
of Music*

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## Chapter 2

*Music, tentative form  
of the Beatific Vision  
Intuition  
Of the Eternal Norm*

- Justine Ward  
Gregorian Chant V. II

What if the power of music derives not from an absence, but an abundance of rationality? What if in music we encounter not the world of the heart, but the heart of the world? What if in music we move, not deeper within, but further outside of ourselves than is possible in any other medium? What if in music our fragile hearing bumps up against the mind of God? This is the proposal advanced by Alfred Pike in his doctoral dissertation, *A Theology of Music*, although of course, he was not the first to suggest such a thesis. In fact, it is an ancient tradition in which Pike stands.

We have noted that in nearly every culture, music is associated with the sacred. We should not be surprised then that some would propose that this sacred art must have a divine origin. More than that, it has often been suggested that there is a deep link between cosmic and musical origins—that both music and the universe emerged from the same act of Divine Creation. Music, it is proposed, is not simply an artist's self-expression, but participates in the supreme rationality which orders all things. The poet suggests that music is the very means by which the world was given its shape.

From harmony, from Heav'nly harmony  
    This universal frame began.  
When Nature underneath a heap  
    Of jarring atoms lay,  
And could not heave her head,  
    The tuneful voice was heard from high,  
Arise ye more than dead.  
    Then cold, and hot, and moist, and dry  
In order to their stations leap,  
    And music's pow'r obey.  
From harmony, from Heav'nly harmony  
    This universal frame began:  
From harmony to harmony  
    Through all the compass of the notes it ran,  
The diapason closing full in man.<sup>1</sup>

There is, the lines tell us, a fundamental order and harmony undergirding all of reality, and this universal rationality is a musical rationality. A systematic expression of these ideas first emerged in the philosophical tradition associated with Pythagoras, and extended through Plato. According to Platonic-Pythagorean thought, music is woven deep into the numerical fabric of reality and the ordered movements of the

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<sup>1</sup> John Dryden, "A Song for St. Cecilia's Day," Stanza 1, [text on-line], *John Dryden, Poetry, Prose, and Plays*, ed. Douglas Grant (Reynard Library edition: Hart-Davis, 1952), available at University of Toronto English Library: <http://www.library.utoronto.ca/utel/rp/poems/dryden7.html>

cosmos. There is a profound correspondence between the harmonic ratios which please the ear and the fundamental mathematical ratios which give structure to all of reality.

It should be immediately apparent that this is a radically different explanation of music than Schleiermacher's. It is, as I suggested in the last chapter, the very inversion of Schleiermacher. Here, music comes to us from outside ourselves rather than from within, reflecting not the depths of inward feeling, but the highest rationality of pure mathematics and geometry. And yet, as we shall see in our study of Pike, there are also striking similarities between these two models.

## **A theology of music**

Pike's work was produced "In partial fulfilment of the requirements for the degree of Doctor of Music."<sup>2</sup> He was apparently training to be a composer, not a theologian—his studies at the Philadelphia Conservatory of Music were directed by the well-known composer, Vincent Persichetti. Nevertheless, his thesis competently engages with a wide range of theological and philosophical literature. Similarly, his arguments and conclusions are first of all theological.

In addition to Augustine, Pike draws on certain Scholastic philosophers (Aquinas, Duns Scotus, Ockham and others), and there are also obvious affinities with Neo-Thomists such as Jacques Maritain. Scholasticism, Pike argues, is the only system of philosophy which offers "a unifying principle, presenting a true

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<sup>2</sup> Pike, title page.

perspective of man as a composite of spirit and body.”<sup>3</sup> Pike’s goal is to apply this unified vision of humanity to music, and to arrive at an account of musical experience which recognizes both physical and spiritual components. He writes, “this thesis was prompted by the many contemporary writings which place all emphasis on the material aspects of music.”<sup>4</sup> Music, he insists, is not simply the vibrations of string or air; nor is it simply our physiological/psychological response to those sounds (i. e., William James’ description of music as “a mere incidental peculiarity of the nervous system with no teleological significance”<sup>5</sup>).

Pike complains that human musical experience tends to be explained solely in terms of physical effects, or personal and cultural associations. While most cultures have associated music with spirit, modern discussions of music, he protests, have been quite literally, uninspired. Against these materialist and associationist accounts, Pike hopes to present a *theological* explanation of music—one that identifies God as its First Cause and Final End, and one which acknowledges the *spiritual* humanity of musicians, composers and listeners. I will offer a brief overview of Pike’s study before evaluating its argument more closely.

## **Music in the mind**

We saw that in *Christmas Eve* music emerges spontaneously, at the pre-reflective plan of consciousness. Its locus within our human capacities is in the realm of feeling and experience. For Pike on the other hand, God is the ultimate source of

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<sup>3</sup> Ibid. , vii.

<sup>4</sup> Ibid. , 76.

<sup>5</sup> Cited in Pike, 8.

music; its "First Cause." At the level of the human, however, the source of music (its Secondary Cause) is the mind.<sup>6</sup>

'Mind' refers to the human consciousness compounded <sup>from</sup> the impressions received by the senses, and the ideas, and conclusions reached by thought and reason, and which constitutes, along with the will, the sum of our earthly intelligence. 'Mind' is synonymous with 'intellect' and is the highest faculty of the soul. Mind is . . . a unit faculty embracing all faculties which in their operations dispense with matter, and material conditions.<sup>7</sup>

He also emphasises that "Mind" is a spiritual faculty:

[T]hese physical collections of cells [of the human body] are only the material organs through which the mind manifests itself. Only in spiritual transcendence can we comprehend the greatness of mind.<sup>8</sup>

The spiritual faculty of mind then, comprises intellectual processes and is also the center of receptivity to spiritual influences.

The hierarchy of cognition

Within the operations of the mind Pike sets out a classification of "intellectual and abstractive processes." This is a sort of hierarchy of perception and cognition, consisting of five levels: Intuitive Cognition; First, Second and Third Orders of Abstraction; and the Supraconscious Mind. The first level, "Intuitive Cognition," is the level of immediate perception, "prior to the formation of any concepts by the active intellect."<sup>9</sup> This intuition represents a direct and accurate perception of reality,

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<sup>6</sup> "Music is the product and the object of the mind." Ibid. , 19.

<sup>7</sup> Ibid.

<sup>8</sup> Ibid. , 20.

<sup>9</sup> Ibid. , 22. The concept of "Intuitive Cognition" is drawn from Franciscan Psychology in the tradition of Duns Scotus. This philosophy assumes that the supreme reality of the universe is intellectual-spiritual. Matter itself is merely the "manifestation of the spiritual in time" (23). The fundamental element generating and binding together all of Reality is the pure intellectual force of the Supreme Intellect. Because Reality is fundamentally spiritual and intellectual, there is no obstacle impeding our intellectual apprehension of the material world. Moreover, because our own souls are made in the likeness and image of the Supreme Intellect, our intellect-spirit is fitted to the world around us, and can perceive it as it truly is. "When Intuitive Cognition is posited on a preconceptual

though without analysis or categorization. It may consist of the perception of external material reality, or it may be introspective, revealing subjective soul states. "As a non-discursive faculty it is the first contact of the soul with Reality."<sup>10</sup>

The three subsequent levels of cognition represent the progressive conceptualization and abstraction of this initial intuitive experience. The First Order of Abstraction is that level at which "the active intellect takes hold of the immaterial form of the object in conceptualization."<sup>11</sup> At the level of the Second Order of Abstraction, the intellect is no longer directly concerned with material reality, but with the forms and structures derived from reflection on material reality. The Third Order of Abstraction is still further removed from materiality. This is the level "of metaphysical contemplation whereby the mind can withdraw wholly from matter."<sup>12</sup> Finally, the highest level of mind is described as the Supraconscious Mind. This is a state of "total awareness," and receptivity to "all superior, and lofty moral influence." It is a "pure experience of a transcendental order," and is achieved only "during great moments in mysticism, religion, art and philosophy."<sup>13</sup>

These levels of cognition Pike maintains, can be correlated to the process of composing music. Musical composition takes place as the composer moves beyond the basic sensation of sound or subjective mood, and beyond the identification and categorization of these sensations, (to use Pike's terminology, beyond Intuitive Cognition and the First Order of Abstraction). Musical creation takes place at the level of the Second Order of Abstraction. At this level, the composer is no longer concerned with the physical properties of sound, but rather with the abstract structures and temporal patterns of the musical work.<sup>14</sup> The composer who remains at

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level a firm basis is established for the continuity of intellection by eliminating any hiatus between intellect and matter" (25).

<sup>10</sup> Ibid. , 24.

<sup>11</sup> Ibid. , 25.

<sup>12</sup> Ibid. , 26.

<sup>13</sup> Ibid. , 28-9.

<sup>14</sup> "This type of autonomous auditory thinking is . . . the silent thinking of a melody, not the actual hearing. . . . The ear may assist later, but only as an auxiliary. In this inner kinesthetic thinking the

the Second Order of Abstraction however, is “a mere manipulator of notes.” Works of real depth are those whose composers move on to the Third Order of Abstraction; beyond consideration of structure and pattern, on to pure immaterial metaphysical reflection.<sup>15</sup>

These levels of cognition also function in musical listening. Those who listen to music at the First Order of Abstraction are concerned only with its sensual and material qualities. This level of listening Pike maintains, “is the least important.”<sup>16</sup> More than this, listening to music at this level is dangerous, as it inevitably leads to irrationality, sensual indulgence, and immorality. The Second Order of Abstraction then, is a higher level of musical appreciation, at which the listener considers the logic and formal structure of a piece of music. Not surprisingly, Pike writes,

The highest type of aesthetic pleasure which the listener can achieve comes under the Third Order of Abstraction. Here as it were the music in its materiality is only a refraction of super-sensible reality, and gives analogical knowledge of certain transcendental truths.<sup>17</sup>

According to Pike’s analysis, the mind is responsive to physical and psychological input, and has true and direct knowledge of these stimuli. Nevertheless, the mind consists of more than physical and psychological input. It is a spiritual faculty set apart from these stimuli and acts upon them, shaping and interpreting.

There are two other interesting points to note: First of all, of these levels of perception, the one which most nearly corresponds to Schleiermacher’s “pre-reflective plane of consciousness” is Pike’s “First Order of Abstraction.” In *Christmas Eve*, this mode of perception is likened to piety and the way of the Kingdom. In *A Theology of Music*, it represents the lowest and most dubious level of musical experience. Second, Pike’s model leads to a curious paradox. In both musical

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composer does not actually hear his music, but the music is represented by the presence of archetypal images . . .” Pike, 32.

<sup>15</sup> As for works of the highest order, these are the product of the Supraconscious Mind, but we will consider this class of composition separately, because of the many different issues it raises.

<sup>16</sup> Ibid. , 63.

<sup>17</sup> Ibid. , 62.

composition and listening, the highest order of musical experience is that which is least concerned with melodies, sonorities, rhythms and timbres—the actual “stuff” of music. I will return to this paradox a little later.

## **The matter of music**

The Primary Cause of music, then, is God; and its Secondary Cause (or “efficient cause”) is Mind. As for the physical qualities of sound (the actual vibration of air or string), this, says Pike, is the music’s “Material Cause.” According to Pike, the spiritual world is distinct from the material world, but not opposed to it. “We cannot consider matter as something alien in the universe,” he argues, “but as a manifestation of the spiritual in time.”<sup>18</sup>

The physical world is not the ultimate reality, but it can disclose spiritual reality and serve as a vehicle for spiritual enlightenment. Therefore, humanity can neither afford to neglect the sensible world, nor to dwell entirely within its boundaries. God’s intention is that in reflecting upon the sensible world we might transcend it—that we would move beyond the surface appearance of things to the deeper spiritual reality beyond them.

As knowledge springs from the senses man attains to intellectual knowledge through this basic source. Divine inspiration is not hidden by sensible imagery, but merely veiled so as to lift the mind above material likeness to intelligible truth.<sup>19</sup>

This is neither a rejection of the physical world as evil, nor an unqualified embrace of materiality. Matter is good in its proper place, and its proper place is to facilitate our transcendence of it; rising to the loftier and purer regions of spiritual and intellectual truth.<sup>20</sup>

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<sup>18</sup> Ibid. , 23.

<sup>19</sup> Ibid. , 86.

<sup>20</sup> Pike cites Richard of St. Victor in *De Grat Contempl.* i. 6: “from the consideration of the visible we rise to the invisible.” (Pike, 108, footnote 8).

Again, Pike applies this understanding of reality to his theology of music. The real value of music is not to be found in its physical and sensible aspects. Rather, music serves its highest purpose when (by means of its sensible qualities) it transports individuals beyond the sensible and material. The early church Fathers were suspicious of the sensual appeal of music, Pike observes, and for good reason.<sup>21</sup> To focus our enjoyment and delight upon the material qualities of music is to encourage sensuality, and more serious still, to engage in a type of idolatry. We are not to worship the created world, Pike warns, but instead, the created world exists to direct our minds to God. Pike explains,

The material or sensible element in music only has claim to value in as much as it exists for the mind of man, not by virtue of its own materiality. These natural sounds are sensuously presented to man, but he realized a spiritual significance behind them which is above nature.<sup>22</sup>

Inasmuch as the purpose of the material is to move us beyond the material, music is to be given a special place of honor among the arts, says Pike. Music, he argues, (when compared with painting, sculpture, drama or dance for instance), is the least material of all the arts, and therefore most easily to enable our transcendence of materiality.<sup>23</sup>

## Inspiration

Pike describes this artistic act of creative transcendence in terms of “inspiration.” A psychological account of music might contend that the raw material of musical composition is the accumulated bits and pieces of past musical experience, stored in the memory. These old ideas are presented to the conscious mind by the

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<sup>21</sup> Ibid. , 69. This was indeed a concern of many early Christian writers when it came to music. A helpful source of passages on music from Christian literature to 450 A. D. , is James McKinnon’s, *Music in Early Christian Literature*. Cambridge Readings in the Literature of Music (Cambridge: Cambridge University Press, 1987).

<sup>22</sup> Ibid. , 53.

subconscious and are rearranged and manipulated in order to form a new composition. Pike rejects this picture of artistic creation. How can it account, he asks, for the continual stream of new ideas and progress across musical history? If composition is simply the recombination of familiar musical components, how can we explain the bold originality and fresh artistic vision that we encounter in works of genius? Such works Pike argues, remain a mystery to a “closed system” of internal processes only. The “Eureka” of sudden discovery implies an *external* source of inspiration, which is encountered by the composer, artist or philosopher. This inspiration is “the spark from the Light of Creation” which ignites and illuminates the great works of genius. It is at the fifth and highest level of cognition—the Supraconscious Mind—that this animating vision occurs. Important as the lower abstractive processes are, they cannot by themselves create the masterpiece.

Pike explains the process of inspiration using a borrowed analogy. It is, he says, like a person in a dark room, which is from time to time is illuminated by a brief, brilliant spark of light. The person in the room must wait for the moment of illumination, and must find ways to communicate the vision to others. The analogy is an important one, because as Pike notes, it suggests that all the elements of the idea—the “room”—are already in place. The business of the one inspired is simply to absorb as much as can be taken in with each successive “flash.” At another point, Pike elaborates,

This visible work of art receives its spiritual substance from another invisible universe from which all principle springs. . . . All absolute knowledge, wisdom, all the principles of all arts known and unknown

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<sup>23</sup> Ibid. , 54, 55.

exist there. The human mind only catches glimpses of this Principle when it (the mind), becomes attenuated, or purified in the *supraconscious* state. During these rare moments some fortunate men have caught glimpses of principle which they have outlined in a material way, and re-expressed by some symbol in the form of revelation, commandment, prayer, mathematics, mechanics, philosophy and art. Such outlines have been the substance of which they are really but the shadow. The principle is incomprehensible to the senses, and is only directly contacted through the immaterial faculty of the supraconsciousness . . .<sup>24</sup>

Inspiration occurs when the Supraconscious mind apprehends these eternal exemplars. The contribution of the composer is deciding whether or not to accept this inspiration, and how to develop and shape it. It is the work of the artist to translate the transcendental vision into a material form. In so doing, writes Pike, all the tools and technical skills of the artistic craft are brought into play.<sup>25</sup>

### **A teleological understanding of music**

If it is important that we understand the origin of music, it is no less vital that we grasp its ultimate purpose—the end to which it is directed. Pike’s account of inspiration establishes God as the First Cause of music; his teleology insists that God is also the Final End of music. This teleological emphasis emerges at two levels: (1) One of the ends of the material world is to produce music. (2) The end of music is the worship and honor of God. In support of the former point Pike writes,

to the theologian—matter itself declares itself of spiritual origin and intent. Thus the musical possibilities of wood, metal, gut and air were intrinsic in these elemental substances from the beginning. Similarly, man cannot create any conceivable harmony which is not subject to the laws of sound, which he did not establish.<sup>26</sup>

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<sup>24</sup> Ibid. , 81.

<sup>25</sup> Pike also briefly acknowledges the possibility of inspiration yielding something evil and not good. Without elaboration he states that indeed, the external source of inspiration may be good or evil, and that in each case the artist must discern the character of the idea.

<sup>26</sup> Ibid. , 48.

This is a kind of “anthropic principle” applied to music. The air around us has been created not only for us to breathe, but also with a structure that conducts the vibrations of tone and rhythm to the human ear. The possibility of music was one of God’s purposes in creating the cosmos, and accordingly the production of music is one of the functions for which the cosmos exists. This gift also implies certain limits. While musical creation is an act of the human will, it is an act that can only take place within the limits established by God. The musical scales that we possess Pike argues, are one example of this human apprehension of divine pattern and limitation. These have evolved as the human ear and reason have recognized and responded to the structures that God has built into creation. In fact (as the Pythagorean tradition acknowledges), the very acoustical and harmonic foundations of music reflect principles of mathematical proportion and balance—principles expressed in every aspect of the universe, animate and inanimate.

While one of the purposes of the cosmos is the creation of music, the ultimate purpose of all things, including music, is the glory of God. It is this common *telos* which unifies creation and invests every act and object with purpose and meaning. All things are good and significant, because they all may contribute to the Highest Good. Additionally, there is unity to the cosmos, because all things have been created for one purpose and end. Therefore, says Pike, when music is directed toward this end (by composer or listener), it is good; when it is enjoyed for its own sake, for the sensual pleasure it affords or any other lower purpose, it is corrupt. The motto of the aesthete: “Art for Art’s sake,” is not merely bad aesthetic theory, it is idolatry. Rather, says Pike, we should proclaim “Art for God’s Sake.”<sup>27</sup>

One implication of this position is that once the Final End has been attained—the beatific vision received, eternal fellowship with God obtained—the *means* to the end (i.e. , music) become superfluous. Pike implies this, writing that the work of the

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<sup>27</sup> Ibid. , 92.

composer, being as it is “a material work . . . will cease to exist on the last day of the world.”<sup>28</sup> I will return to this implication later for further consideration.

## Music and morality

While the ultimate purpose of music in Pike’s thesis is this transcendent knowledge of God, one of its secondary purposes (and part of its function this side of the New Creation) is the reformation of human nature. “A moral relationship is always present in music of all types,”<sup>29</sup> Pike contends. We should therefore endeavor to make music “one of the means towards the perfection of man—not his degradation,”<sup>30</sup> by embracing the right sorts of music, and rejecting those types which are corrupt. Another interesting feature of Pike’s study, then, is that he assigns a moral value to music. Again, this emphasis runs completely contrary to the prevailing aesthetic thought of his day. The amoral stance of modern aesthetics was expressed famously by Oscar Wilde:

There is no such thing as a moral or an immoral book. Books are well written or badly written. That is all. . . . No artist has ethical sympathies. An ethical sympathy in an artist is an unpardonable mannerism of style. . . . Vice and virtue are to the artist materials for an art.<sup>31</sup>

Pike’s position is the polar opposite of such a view. While he admits that the value of a composition does not directly depend on the moral virtue of the composer, nonetheless, he makes the (astonishing) claim that “due to the inherent qualities of music, most great composers have been moral men.”<sup>32</sup>

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<sup>28</sup> Ibid. , 91.

<sup>29</sup> Ibid. , 69.

<sup>30</sup> Ibid.

<sup>31</sup> *The Picture of Dorian Gray* (London: Penguin, 1985), 3.

<sup>32</sup> Pike, 70.

The moral aspect of music touches listener as well as composer. Virtuous music ennobles, while base music corrupts. Therefore, whether he wishes it or not, the composer bears a moral responsibility. He composes not only for himself, but for all those who listen, recognizing that his music will affect and shape them.

This does not restrict him to the execution of purely religious works, or to convey a moral truth, but it does ask that his work be done with a consideration of its ultimate effect on himself as a man, and his fellowmen.<sup>33</sup>

## Universal appeal

Finally, as we conclude this evaluative portion of our study of Pike, it is interesting to note that another dichotomy explored in *Christmas Eve* emerges in *A Theology of Music*. We have seen that Pike gives careful attention to the contours of music perception—the extent to which it is spontaneous or reflective. He also addresses the role of feeling and knowing in music. Likewise the third dichotomy, between the universal and the particular, also features prominently in Pike's *Theology of Music*. Pike writes,

The eternal and universal character of music should be the dominating aspect rather than the egotistical nationalism of a particular style, or the chauvinistic pretensions of any one school. Does not a great work appeal to all people, and consequently possess some element which brings men closer together in a bond of mutual understanding? . . . . At times a great nationalistic composer may transcend this local confinement and we can recognize the direct, and universal appeal of his music.<sup>34</sup>

For Pike, the “essence” of music is eternal and universal, while the particularities of local style are secondary, or even distractions. Cultural and local

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<sup>33</sup> Ibid. , 71.

distinctives are to be “transcended.” This conviction of course, is closely tied to the fact that Pike identifies the mind of God as the source of musical inspiration. If great music is a reflection of eternal exemplars in the mind of God, then real, substantial diversity as a positive feature of music is excluded. If the power of great music derives from its conformity to Eternal Forms, then it follows that the appeal of music should be bound up with its participation in these Universals, rather than with its distinctive and particular qualities. Again, we will consider the implications of this argument in the next section.

### **Better than Christmas? Music as knowledge in Pike**

We have seen that at a number of points, Pike’s account of music differs sharply from that in *Christmas Eve*. Whereas Schleiermacher suggests that music—indeed, Christian belief—can provide us with very little access to the particularities of the outside world, Pike claims that music potentially gives us access to the very mind of God. For Schleiermacher, music flows from within, and is denied any connection to the external world. For Pike, however, music comes to us from outside, offering us glimpses of reality in brief, brilliant, bursts of illumination. Once again, *Christmas Eve* locates music almost entirely at the level of the spontaneous and the experiential; whereas for Pike, true musical listening involves a conscious, rational process of abstraction. In fact, Schleiermacher and Pike explain the affinity between music and religion in almost opposite terms. For one, it is the spontaneous experience of feeling; for the other, it is the deliberate knowledge of abstract truth. We have already identified several difficulties with *Christmas Eve*. Does Pike’s thesis offers us a more attractive theological engagement with music?

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<sup>34</sup> Pike, 15.

As we move from description to evaluation, I would like to return to the dichotomies set out in our discussion of *Christmas Eve*. We saw that a number of problems arise by identifying music as “spontaneous” (not reflective) and “feeling” (not knowing). Pike, on the other hand, categorically locates music on the “reflective” and “knowing” end of these dichotomies. Yet, several problems arise here as well.

### A Theology of *which* music?

One difficulty presents itself on the very first page of Pike’s introduction, where he states,

It must be taken for granted that the music discussed [in this dissertation] is ‘good’ in every sense of the word, and that the composer has worked under inspired conditions. In fact, very little music can meet the criteria set forth here. It is only in a few isolated works that we can fully realize the ultimate power of this great art.<sup>35</sup>

This is puzzling. On the first page of his *Theology of Music*, Pike informs us that his discussion will apply to very little of what is normally referred to as “music.” The reason for this limitation is clear: for Pike, the purpose of music is not the simple, spontaneous enjoyment of sounds. Rather, music allows us to *contemplate* complex, orderly, abstract structures, which *teach us truths* about the universe, and ultimately, the mind of God. Music has to do with reflection and knowledge. And Pike, not unlike Schleiermacher, defines reflection and the spontaneous, knowledge and feeling, exclusively. In describing a valid musical experience, he sets analytical *reflection* against *spontaneous* receptivity: “the strictly sensual pleasure of vice . . . . is experienced when the listener *refrains from all intellectual analysis* and listens *without restraint* as the music *absorbs him completely carrying him along*.”<sup>36</sup> Knowledge and feeling are likewise sharply contrasted: “the content of music which has been symbolized for the listener invites insight *instead of* emotional response.”<sup>37</sup>

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<sup>35</sup> Ibid. , v.

<sup>36</sup> Ibid. , 63. My emphasis.

<sup>37</sup> Ibid. , 60. My emphasis.

Knowledge, in other words, does not arise from immediate experience, but only through reflection and analysis. Pike describes this process of analysis:

The mind unites and compares units into a balance [sic] whole, and takes delight in this orderly arrangements of material . . . . In music, order must not only be present in the smaller units of rhythm and melodic fragments (motives), but in the broader outlines of phrases, sections and movements. These are all rational aspects. The mind does not passively submit to sense impressions as to bring on the aesthetic experience, but contemplates the aspects of truth which are presented by and in the object.<sup>38</sup>

For Pike, musical knowledge is yielded by contemplating *structural* complexity. And one does not encounter the kind of structural complexity Pike has in mind in the nursery song, the folk tune, or the pop ballad. It is only in the dizzyingly coherent intricacy of (say) Bach's *Goldberg Variations*, or Mozart's *Jupiter Symphony* that we hear something of the mind of God. It is only before such extraordinary structures of grace and genius that we stand in hushed and reverential awe; that we feel something like an attitude of worship overtake us.

Because of this analytic and structural orientation, Pike's model is constructed entirely around the greatest masterpieces of the canon of Western music. Aside from a mention of the Psalms and one or two acknowledgements of Gregorian chant, no music earlier than Bach is considered. No non-western composer is mentioned, and folk and popular musics are referred to only disparagingly. Improvised music is likewise excluded by the criteria of structural complexity. The reader begins to wonder how inclusively one may construe the word "music" in Pike's title.

For several pages Pike cites words in praise of music's transcendent power; statements uttered by musicians, philosophers and theologians. He contends that "music has the power to move the soul as does no other art."<sup>39</sup> Yet, plainly, this power of music to "move the soul" does not manifest itself only in "a few isolated

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<sup>38</sup> Ibid. , 66.

<sup>39</sup> Ibid. , 8.

works” of the greatest genius. We may experience the power of music in the worship songs of a simple country church, at a pop concert, around a living room piano, or in the full throated singing at a football match. Pike’s identification of the virtue of music with *knowing-not-feeling* has created a theological aesthetic which really only fits—5%? 1%? Surely 1% is too high!—of the music ever produced and enjoyed by human beings.

For tens of centuries human beings in all cultures have recognized and responded to the power of music, and have linked it to religion. Pike recognizes and attempts to explain this power of music, but he does so by attributing the power of music to “knowing.” Knowing in turn is defined as analysis (and as *not-experiencing/feeling*). The resulting account of music excludes all but the work of a few modern Western prodigies.

### **Inner and outer music**

In the last chapter we saw that Schleiermacher also speaks of the feeling-knowing tension in terms of “inward” and “outward.” In *Christmas Eve*, music is a matter of inward, subjective experience. *A Theology of Music* however, proposes that music puts us in touch with external realities. Once again, music is not a matter of experience, but of knowledge—knowledge about the shape of the cosmos, about the Ideal Form of beauty, about the mind of God. Music, on this account, directs us outward, not inward. It connects us not to our own feelings, but to external facts.

Music, on this account, is *discovered* by humanity, not invented.<sup>40</sup> The way in which Pike connects music with external reality, however, raises further difficulties—both musical and theological.

### Discoverism and the Christian story of music

Like *A Theology of Music*, much ancient reflection on music is also strongly “discoverist” in character. Certainly, in the Platonic-Pythagorean tradition mentioned earlier, musical profundity is received from outside, not created from within, humanity. The orbits of the planets, the organization of our own body and soul, even the properly functioning society all move according to a fundamental mathematical ratio, and these primal harmonies are ones we discover rather than invent. Not only for the Pythagoreans, but among many ancient mythologies, music often features as either the instrument or the by-product of the divine act of creation.<sup>41</sup> It is the gift of the gods; a bit of heaven fallen to earth.

There may be little else in common between Alfred Pike’s doctoral dissertation, Babylonian cosmogonies, the creation myths of Native American tribes, and the mathematical speculations of Pythagorean philosophers; however all of these agree about this much: *Music has a non-human origin*—whether that origin be eternal exemplars in the mind of God, the mathematical superstructure of reality, or the

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<sup>40</sup> See the discussion of “discoverism” and “creationism” in Kathleen Higgins, *The Music of Our Lives*, (Philadelphia: Temple University Press, 1991) PG----. ALSO the discussion of “discoverism” and “inventionism” in John Barrow, in *The Artful Universe*.

<sup>41</sup> Quentin Faulkner, *Wiser Than Despair: The Evolution of Ideas in the Relationship of Music and the Christian Church*, Contributions to the Study of Music and Dance, Number 40 (Westport, Conn.: Greenwood Press, 1996), 12-15; Andrew Wilson-Dickson, *A Brief History of Christian Music. From Biblical Times to the Present* (Oxford: Lion, 1997), 12-13.

incantations of creator deities. One would be hard-pressed to find a more emphatic statement of a discoverist position than that found in Pike's declaration:

Nothing *new* is ever invented in art. One discovers, with application of inherent talent and intelligence, that which exists potentially (or with the help of inspiration) and makes use of the material thus received. In other words man actually creates nothing, but only expresses pre-existent material in a personal style.<sup>42</sup>

It is striking to note, therefore, that the Judeo-Christian tradition has a very different story to tell about the origins of music. William Edgar underlines the profound significance of the account found in Genesis 4:19-21; especially when read against the backdrop of other ancient traditions.<sup>43</sup>

Lamech married two women, one named Adah and the other Zilah. Adah gave birth to Jubal; he was the father of those who live in tents and raise livestock. His brother's name was Jubal; *he was the father of all who play the harp and flute.*<sup>44</sup>

The Old Testament story of musical beginnings says nothing about celestial harmonies or divine inspiration. Instead, music first appears on the scene as a *human* activity, and a human origin is implied. A man, Jubal, is identified as the "father of all who play the harp and flute." Significantly, the Judeo-Christian story of music does not begin with the eternal voice of the cosmos, nor with a divine impartation of a heavenly commodity. Music is a human activity; one of many skills and vocations developed by societies and individuals.<sup>45</sup> Edgar argues that there is good reason for rejecting the discoverism we encounter in the Pythagorean tradition and elsewhere,

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<sup>42</sup> Pike, 16. Emphasis original.

<sup>43</sup> William Edgar, *Taking Note of Music* (London: SPCK, Third Way Books, 1986), Chapter 2, "Jubal's Bequest." Much of the following discussion is indebted to Edgar's observations in this chapter.

<sup>44</sup> My emphasis.

<sup>45</sup> Edgar points out that not only was Jubal a man, but he was also a descendent of Cain, the first murderer. This does not necessarily cast a shadow of suspicion over music, as some earlier Christians have claimed, but it does further highlight the divergence between the Ancient Hebrew account of music's origins and those of other Ancient Near Eastern cultures.

and for embracing the account of musical origins offered in Genesis 4. The danger of cosmic or divine theories of music, he says, is that they tend to

forget music's creatureliness, and man's crucial role as primary agent in the development of the musical process. Nature does not generate music independently from man, or from human agency (or angelic agency).<sup>46</sup>

Music, Edgar insists, is produced by human beings and human cultures. It does not spring fully formed from eternal principles, nor from physical structures built into the order of the cosmos. In suggesting that music *does* arise in this way, discoverist philosophies of music call into question the reality of the human creative act.

A more complex and dynamic human relationship to God and the created world can be discerned within the Judeo-Christian tradition. In the Genesis narrative, music is a human activity, a human contribution to creation. This human contribution is not an encroachment upon God's prerogative as Creator,<sup>47</sup> but this genuinely creative act is taken up by God and designated an appropriate means of worship: we sing to the Lord a *new* song (Psalm 149:1).

Pike insists that music is given to humanity by God, but in the Psalms that order is often reversed, in a theology of *response*. It is humanity which gives music to God as an offering of praise: "I will praise God's name in song and glorify him with thanksgiving. This will please the LORD more than an ox, more than a bull with its horns and hoofs." (Psalm 69:30-31). Like the ox, like the grain, music is not created by humanity *ex nihilo*. Humanity gives back to God from what it has received—in the physical properties of wood and string and voice; in the cognitive structures operative in music perception; in the harmonic series generated by resonating bodies, and so forth. But humanity also gives back *something more* than simply what has been received. The musical act is a response to the created world, that involves going

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<sup>46</sup> William Edgar, *Taking Note of Music* (London: SPCK, Third Way Books, 1986), 29.

<sup>47</sup> "The will of man deals directly with his music, but he is restricted by the inherent nature or laws of tones themselves, and must pattern or form this music according to the standards of eternal forms of truth and beauty upon which God has the copyright." Pike, 50.

beyond the created world as it is received.<sup>48</sup> It is—like the ox, like the grain—*both* God’s creation and the product of human labor and nurture.

When the final discovery has been made

Pike’s theology of music, however, allows no room for this sort of human contribution. He concludes that music, along with all objects of human material endeavor, will pass away at the end of this age: “As a material work it will cease to exist on the last day of the world.”<sup>49</sup> Music originated with God and will end with him too, he reasons. All the human songs that have been sung in between these two points are poor and ephemeral imitations of God’s perfect song. Once the eternal patterns in the mind of God are fully manifest, these poor mortal copies will be wiped away. By contrast, in the New Testament the “new song” which the saints sing is part of God’s New Creation, featuring prominently in John’s visions of the New Heavens and the New Earth. This fact is all the more remarkable if (as Genesis 4 suggests) music is genuinely a product of human creativity. God does not obliterate the contributions of humanity in favor of his Eternal Exemplars. Rather, he takes the new song of humanity up into his presence, where it is treasured and preserved: “the twenty-four elders . . . were holding golden bowls full of incense, which are the prayers of the saints. And they sang a new song.” (Revelation 5:8-9)

God’s New Creation is not simply a wiping clean of the slate, in which every trace of human activity is erased. Rather, the creative activity of human beings both contributes to the shape of this present creation, and participates with God in re-creation. John records

I saw in heaven . . . those who had been victorious over the beast and his image and over the number of his name. They held harps given them by God *and sang the song of Moses the servant of God and the song of the Lamb.*

Revelation 15:1,2b-3

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<sup>48</sup> We will explore the nature of this “going beyond” in Chpt. 4.

<sup>49</sup> Pike, 91.

Human music, created by a human composer (Moses) is a feature of the New Creation as portrayed by John. The song of Moses, an intellectual-material creation of a human being in time, is depicted as the vehicle of worship for saints and angels. Again, the song they sing is neither an Eternal Divine Melody which springs fully formed from the mind of God, nor is it something created *ex nihilo* by human genius. Rather it is “the song of Moses the servant of God *and* the song of the Lamb.”<sup>50</sup>

The reality of the human creative act

A serious problem then for Pike’s position (and all robustly discoverist accounts of music) would seem to be that it *de-humanizes* music. For Pike, music is the realization in structured sound of eternal exemplars which exist in the mind of God. The greatest achievements of musical creation are not so much created as they are transcribed by their human composers. It is hard to see how on his account the human element in musical creation can be described as more than illusory, or at best, tertiary (added only after the contributions of God and Nature). More globally, this understanding of music hints that the human contribution to reality in general is illusory (“man actually creates nothing”<sup>51</sup>). Whatever may be realized in the universe is “built in to the system” as it were. We may discover these ideals, we may display varying degrees of receptivity to them, but ultimately our lives do not shape or contribute to the cosmos.

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<sup>50</sup> My emphasis.

<sup>51</sup> Pike, 16.

## Musical and moral imperatives

There is another problem related to the particular way Pike develops his emphasis on the external reality of music. Namely, it implies a universal correspondence between music and the moral effect of that music upon its listeners. What emerges from Pike's study is a kind of Natural Law doctrine applied to music. If the principles of music are Universals discovered in the very mind of God, Pike reasons; if we discover in the natural world objective unchanging laws and principles of harmony, melody and rhythm; then music which fails to conform to these patterns may be reasonably be considered "unnatural," corrupt and perverse. The composer, he writes, must conform "to the standards of eternal forms of truth and beauty upon which God has the copyright . . . . Any transgression of these laws . . . results in ephemeral art."<sup>52</sup> This ephemeral art is, at best, worthless. At worst, it may unleash the "primitive and uncontrolled nature of man" and lead to his moral degradation.<sup>53</sup>

The idea that the wrong sort of music makes the wrong sort of person is also an ancient one. It continues to find currency to this day, among academics (for instance in Allan Bloom's *The Closing of the American Mind* and even in Roger Scruton's *The Aesthetics of Music*) as well as among preachers who rail against the seductive and corrosive influence of "the rock beat." Indeed, this idea has a sort of common sense appeal. As I am writing this paragraph—at 10:45 on a Saturday night—a group of teenage boys huddle around a portable stereo on the college lawn outside. The music is loud and jarring, and is punctuated by the boys' own drunken

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<sup>52</sup> Ibid. , 50.

<sup>53</sup> Ibid. , 69.

shouts and the shattering of glass bottles on the pavement. Surely the behavior and the choice of music is not coincidental?

The problem is that such a proposal does not reflect the reality of moral history. Despite Pike's insistence to the contrary, some of the greatest composers have been atrocious human beings (Wagner springs immediately to mind). George Steiner has observed that National Socialism sprung up in one of the most cultured, artistically literate societies in the world.<sup>54</sup> Chairman Mao apparently loved ballroom dance music. The Stalinist regimes likewise maintained an artistic environment of Spartan purity—brutally repressing both high-brow (Atonal music, Serialism) and low-brow (Jazz, Rock & Roll) music that was morally suspect. In 1948 Central Committee of the Communist Party condemned the music of Sergei Prokoviev. One can only feel profound sadness reading his subsequent “confession” to the General Assembly of Soviet Composers.

The Resolution of the Central Committee has separated decayed tissue in our composers' creative production from the healthy part. No matter how painful it may be for many composers, myself included, I welcome the Resolution, which establishes the necessary conditions for the return to health of the whole organism of Soviet music. . . .

. . . . I must admit that I, too, have indulged in atonality, but I also must say that I have felt an attraction toward tonal music for a considerable time, after I clearly realized that the construction of musical work tonally is like erecting a building on a solid foundation, while a construction without tonality is like building on sand. . . .

. . . . In conclusion, I should like to express my gratitude to our Party for the precise directives of the Resolution, which will help me in my

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<sup>54</sup> “Men such as Hans Frank who administered the ‘final solution’ in eastern Europe were avid connoisseurs, and in some instances, performers of Bach and Mozart.” George Steiner, *In Bluebeard's Castle: Some Notes Towards the Re-definition of Culture* (London: Faber and Faber, 1971, 63).

search of a musical language accessible and natural to our people, worthy of our people and of our great country.<sup>55</sup>

Ugly and unnatural music, Pike maintains, corrupts and encourages sensuality, while that of the highest quality ushers humanity into the very presence of God. If Pike is right about all this, we might expect to find one type of music which universally accompanies an attitude of religious devotion, and another which universally accompanies sensuality and debauchery. However, this hardly seems to be the case. Consider the diversity of musical expression within the Christian tradition. If there were a single Universal musical quality of Holiness, we would expect to find an essential consistency in the sound of Christian music across ages and cultures. Instead we find an extraordinary stylistic range. Musically, there is little common ground between the worship songs of an inner city African American church, the traditional hymns of a modern British congregation, and the plainsong of the medieval monastic tradition. And yet all of these serve and have served as the vehicle of Christian worship.

More broadly, ethnomusicological studies suggest that there is a wide range of responses to music across cultures. One such study to which Edgar refers is the seminal work of Gilbert Rouget.<sup>56</sup> Rouget has analyzed the music which accompanies trance and religious ritual in Indian America, various regions of Africa, the Mediterranean world, Indonesia and Asia. He concludes that there is no single musical factor which is consistently linked with religious ritual—no single type of beat, tonality, dynamic intensity, instrumentation or musical style. Edgar's determination (following Rouget), is that the capacity to facilitate a sense of self-transcendence "is not in music's physical qualities. It is not the musical substance which induces the trance."<sup>57</sup>

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<sup>55</sup> Piero Weiss and Richard Taruskin, eds. , *Music in the Western World: A History in Documents*, (New York: Schirmer, 1984), 499-502.

<sup>56</sup> *Music and Trance: A Theory of the Relations between Music and Possession* tr. and rev. Brunhilde Biebuyck and Gilbert Rouget (Chicago: The University of Chicago Press, 1985).

<sup>57</sup> Edgar, *Taking Note*, 88.

Pike's proposal, in which the right or wrong music ennobles or corrupts, in some ways resembles a magical view of the world, in which actions and choices are determined by spells, beats and incantations. Edgar contrasts such a view with the biblical story of Saul and David. On a number of occasions, David's playing eased Saul's spiritual torment and restored peace to his soul. However, at least twice, the treatment apparently did not take, as Saul did his best to pin his musical therapist to the wall with a spear! (1 Samuel 18:11; 19:9) "The power of music therefore can be resisted" Edgar concludes. "Human beings are free agents, even to the point where they can reject the truth itself."<sup>58</sup> Our character and actions are not determined by beats, chants and incantations, but by our own choices in interaction with the Spirit of God. There is, I believe, *some* connection between the behavior of the boys outside my window (a couple of hours later, and they've become louder!) and the music to which they are listening—we will return to this question. It is unlikely, however, that a moral reform would be affected by replacing their *Metallica* CD with a recording of Bach's *B Minor Mass*, or by opening the window and singing *Old Hundredth* at the top of my voice.

Nor would this be the path to moral and personal transformation that we see commended in the New Testament. Critiquing a view similar to Pike's, Francis Watson asks pointedly, "Why bother with Jesus and the Christian gospel [if] we can be instantly transported into the presence of transcendence by the simple action of putting on a CD, in the comfort of our own home?"<sup>59</sup> We might rephrase the question: Why bother with the Ten Commandments, the Sermon on the Mount or the transformation of my mind by the Holy Spirit if my sinful self can be transformed by a few listens through the *Goldberg Variations*? It is true that Paul urges the Philippians to reflect on "whatever is true, whatever is noble, whatever is right, whatever is pure, whatever is lovely, whatever is admirable . . . anything . . . excellent

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<sup>58</sup> Ibid. , 92.

<sup>59</sup> Watson, "Theology and Music," 462.

or praiseworthy” (4:8). However, he also makes clear that human beings are not morally or spiritually transformed simply by eating this or that kind of meat (cf. Romans 15, 1 Corinthians 8, Colossians 2), being present at this or that kind of religious ceremony (again, cf. Romans 15, Colossians 2), nor (to the point) by encountering a particular type of melody or beat.

## Transcending the particular

To this point, we have considered two of the three tensions raised in our discussion of *Christmas Eve*. We have seen that while Schleiermacher locates music in the realm of *spontaneous feeling*, Pike locates it in the realm of *reflective knowing*. We have also explored the related inner-outer tension that arises in Schleiermacher, and have studied the problems arising from the particular way in which Pike links musical meaning to the external world.

We also noted that in addition to these first two tensions, the third dichotomy—the universal and the particular—is important in Pike’s argument. He insists that all truly notable music is marked by the same “eternal and universal character,” and that the great composer is one who can “transcend [the] local confinement” of cultural particularities.<sup>60</sup>

Pike locates the power and appeal of music in its universality rather than its particularity. Cultural and personal distinctives, he claims, can only cloud the transcendent beauty of the music. I pointed out earlier that this ~~belief~~<sup>belief</sup> is linked to Pike’s discoverism. “The artist does not really create,” he writes, “but continues God’s creation by shaping in matter the forms which bring it to its perfection. God lays the outline, so to speak, and the artist fills in.”<sup>61</sup> The eternal and unchanging forms in the mind of God are what brings a work to perfection, Pike maintains. The

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<sup>60</sup> Pike, 15.

<sup>61</sup> Ibid., 87.

universal, divine “outline” is what invests music with power; not the particular means employed in filling it in.

Our own experience of music, however, is likely to be quite different to what Pike describes. We may indeed recognize certain universals in the music we listen to (by virtue of which we identify that aural experience as “music”). Nevertheless, the very things which we find most appealing about a piece or style of music will not likely be its “universal qualities,” but rather those things which are unique, peculiar and idiomatic. The sweet, transparent intricacy of Palestrina; the broad, honest and weather-worn simplicity of Southern shape-note singing; Debussy’s hazy, rounded, water-colored miniatures; the sweat-soaked fuzz of Jimi Hendrix’s guitar tone—these are the things which delight us, and the things which make a musician or style of music like a familiar friend. We know the peculiar sound of his voice, the distinctive shape of her face. The “essence” of a music (*contra* Pike), is not distilled from, but resides in its local distinctives.

### Schleiermacher and particularity

Interestingly, there is a likeness between Schleiermacher and Pike at this point, though they arrive at their positions by separate routes. Schleiermacher’s dialogue on the one hand, denies music any genuine cognitive access to particular reality. For Eduard, Sophie, and company, music is not an exploration of wood and brass and string and how they resonate. Neither is it an expression of the distinctive practices, institutions and values of a particular culture. Neither does music express particular events or attitudes. Instead music gives voice to the deepest and most universal feelings of the human heart. The Universal quality of Joy; The Universal quality Sorrow; The Universal quality of Longing—this, suggests *Christmas Eve*, is what music communicates to us. In music, says Agnes, we find that the “passing notes” leave “only a faint trace behind them” and do not “disturb the harmonious flow of the

music.”<sup>62</sup> Instead, “its true content is the great chords of our inner nature.”<sup>63</sup> Even if we *wished* to hear the particulars, on the account in *Christmas Eve*, music could not communicate them to us. For music, we are told, directs us inward; and since it cannot delineate like language, it cannot communicate the particular shape of the external world.

Pike, on the other hand, affirms the power of music to bear knowledge of the external world. Nevertheless, he, no less than Schleiermacher, minimizes or denies altogether the importance of the particular in music, and instead urges us to attend to the universal structural principles behind the particulars. Listening to the particulars—the clipped throatiness of Miles Davis’ trumpet, or Hendrix’s guitar tone—is the lowest form of musical listening; in fact it is even morally dangerous.<sup>64</sup> He maintains that if we focus on the “material associations” of music (the particular sounds of instrument or voice), “we are not having an authentic experience.”<sup>65</sup> Despite their differences, both Schleiermacher’s account and Pike’s fail to accommodate our experience and appreciation of the particular in music.

## Music and materiality

I would like to introduce a fourth dichotomy to our discussion of Pike, which I shall call “sounds/other-than-sounds.”<sup>66</sup> Earlier, I remarked that Pike’s account of mental processes in music generates a curious paradox. It would seem that according to Pike, the less occupied the listener is with the “music” of music—tunes, rhythms,

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<sup>62</sup> Schleiermacher, 48.

<sup>63</sup> *Ibid.*, 47.

<sup>64</sup> Pike, 63.

<sup>65</sup> *Ibid.*, 61.

<sup>66</sup> I am deeply indebted to Pat Manfredi for helping me to think through the formal boundaries of these various dichotomies, and, in particular, for suggesting the “sounds/other-than-sounds” designation.

timbres, sonorities—the deeper and more profound is that listener’s understanding of the work. The power and virtue of music in *A Theology of Music*, comes not from *sounds*, but from *other-than-sounds*. Similarly, according to Pike, what separates the true composer from the hack is that one is concerned with abstract structures and metaphysical speculation while the other merely noodles around with melodies and rhythms. We might say that the truly musical person is one who isn’t distracted by the music.

### Musical difficulties

Does this vision of music make sense? Surely the first thing any listener notices and appreciates about a piece of music is how it *sounds*. This is the case not only for the casual listener, but also for the conservatory-bred musician, trained to listen for the musical structures Pike emphasizes. What distinguishes *musical* structure from mathematical, logical or architectural structures, or the structure of a Morse code signal (which would meet Pike’s definition of music: temporal structure expressed in sound)? It is not *structural* qualities which separate music from these other abstract forms, but rather it is its musical—we might even say its physical—qualities. One may study a score to appreciate the structure of a piece, but we do not say that the music on that score has been experienced until it has been realized in time and sound.<sup>67</sup>

In further support of this point, Pike claims that the composer does not think in terms of sound, but only in terms of structures. (“In this inner kinesthetic thinking the composer does not actually hear his music, but the music is represented by the presence of archetypal images.”<sup>68</sup>) Perhaps this is typical of Pike’s compositional technique, but it is foreign to my experience, and that of most composers I know. In

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<sup>67</sup> There is a tendency in musical aesthetics to elevate the importance of the score above that of the performed work. Cf. the critique of this tendency in Kathleen Higgins, *The Music of Our Lives* (Philadelphia: Temple University Press, 1991), 3 and passim.

<sup>68</sup> Ibid. , 32.

1952 (the year before Pike's thesis was published) Aaron Copland delivered the Charles Elliot Norton Lectures at Harvard University, on the topic of the imaginative thought process of the composer. In a lecture entitled "The Sonorous Image" he maintains that

One of the prime concerns in the making of music either as creator or as interpreter, is the question how it will sound. On any level . . . it has got to "sound." The worst reproach you can make against a composer is to tell him that what he has written is "paper music." On the other hand, one of the quickest ways to recognize talent in the youthful composer is to note the natural effectiveness as sound of even the most casual combination of different tone colors. It is a sure sign of inborn musicality. . . . Yes, the sonorous image is a preoccupying concern of all musicians.<sup>69</sup>

If this concern with sound is characteristic of Western "Classical" composition, it may in some ways be even more so of other types of music. To return to a point made earlier, much music—the music of other cultures, some folk music, blues and jazz, to name a few instances—is improvisatory in character. Though improvisatory music has structure, the central feature of such music is not the development of large-scale architectural forms, but rather, performance. It represents a far more direct engagement with sound than Pike's description can account for.

This opposition arises in part from a narrow and overly restrictive understanding of rationality; one in which rationality is expressed through the process of abstraction. As we saw earlier, Pike maintains that the mind knows through both intuitive and abstractive cognition (while the senses are only capable of intuitive cognition).<sup>70</sup> Intuitive cognition is the immediate and passive reception of sensation or internal states, prior to the formation of any concepts. Abstractive cognition takes place as we apply the active intellect to these initial sensations. For Pike, any move toward "rationality" is a move away from the senses—away from the material and

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<sup>69</sup> Aaron Copland, *Music and Imagination. The Charles Elliot Norton Lectures, 1951-52* (Cambridge, Mass. : Harvard University Press, 1980, 1952), 21-2.

<sup>70</sup> Pike, 22.

particular and ever toward the immaterial and universal. For Pike, musical creation and enjoyment are only fully rational as they move away from the sensual and material.<sup>71</sup>

### Theological difficulties

Pike's bias against materiality is not only musically untenable, but strains against any view of reality which seeks roots in a biblical Christian tradition. In this tradition we encounter a more holistic and unified view of existence; one in which material and immaterial are not set against each other, and in fact, overlap and interpenetrate.

Pike acknowledges a relationship between the material and non-material world; one of analogy and veiling.

Holy Scripture has always explained spiritual truths by analogy with material things. . . . Divine inspiration is not hidden by sensible imagery, but merely veiled so as to lift the mind above material likeness to intelligible truth.<sup>72</sup>

Here, both a positive and negative relationship between material and immaterial realities is outlined. On the one hand, material reality reveals spiritual reality (using Pike's terms here) through analogy. On the other hand, material reality veils spiritual reality, encouraging us to push back the veil, and seek meaning beyond the merely physical. There is certainly some truth to this sort of relationship between material and spiritual reality—the *locus classicus* is Romans 1: "Since the creation of the world God's invisible qualities—his eternal power and divine nature—have been

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<sup>71</sup> There is for Pike also a type of intuition which takes place at the Third Level of Abstraction; an intuition which Pike identifies with Jacques Maritain's "Metaphysical Intuition." This intuition is nevertheless a "spiritual" intuition and is not focused on the material qualities of the object of perception.

<sup>72</sup> Pike, 86.

clearly seen, being understood from what has been made.” (Rom. 1:20) However, there are two problems with the way Pike develops this relationship.<sup>73</sup>

First of all, Pike assumes a direct correlation between the “immaterial” and the “spiritual.” Such a usage is common, but it is difficult to sustain from the Christian scriptures. In both Old and New Testaments “flesh” and “spirit” do not refer to the distinction between the material and the immaterial, but to that between the created and the uncreated; that which is mortal and that which is immortal. So, Peter writes (citing Isaiah 40:6):

You have been born again, not of seed which is perishable, but imperishable, *that is*, through the living and abiding word of God. For, “All flesh (sarx) is like grass and all its glory like the flower of grass. The grass withers, and the flower falls off, but the Word of the Lord abides forever.” (1 Peter 1:23-25, NASB)

God is the creator, the Nicene Creed tells us, “of all things *visible and invisible*.” Both material and immaterial aspects of the created order are finite, mortal and contingent. That which is non-material, is not simply by virtue of its immateriality, “spiritual”—in the sense of being non-contingent, lasting, incorruptible or naturally oriented toward God. Or, to take the other side of it, while it is true that God is Spirit, it is also true that the Word became Flesh. While it is true that God transcends the physical world, it is equally true that God is imminent *in* the physical and material world. To suggest, as Pike does, that approaching God means turning away from material reality implies that God is absent from the physical world, or at least less present in it.

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<sup>73</sup> For the first of these points I am indebted to T. A. Hart.

Secondly, the way Pike has presented the spiritual value of material reality suggests that we should move beyond the material world as quickly as possible, attending to its features only as much as they serve to direct us beyond themselves. “In music,” he writes, “our entire being . . . transcends the object (music) in undivided unity.”<sup>74</sup> Once we have transcended the object however, it no longer serves any purpose—we are best served at this point to go through life like St. Bernard through the Alps, hands over our eyes to shield us from the distraction of material beauty. For Pike music is “a *means* of penetration to the reality behind all appearance.”<sup>75</sup>

The material world however is not merely God’s *means* of directing our attention to the non-material world. It is also that which over which he has declared “it is good.” The physical material world delights God: he boasts of its wonders (“Look at the behemoth, which I made along with you!” Job 40:15), and its care continues to fascinate him (“Who cuts a channel for the torrents of rain, and a path for the thunderstorm?” Job 38:25).

Not only does God delight in his creation, but he has equipped humanity to delight in it as well. Calvin—often accused of a harsh anti-sensuality—recognized this, writing,

Has the Lord clothed the flowers with the great beauty that greets our eyes, the sweetness of smell that is wafted upon our nostrils, and yet will it be unlawful for our eyes to be affected by that beauty, or our sense of smell by the sweetness of that odor? What? Did he not so distinguish colors as to make some more lovely than others? What? Did he not endow gold and silver, ivory and marble, with a loveliness that renders them more precious than other metals or stones? Did he

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<sup>74</sup> *Ibid.* , 61.

<sup>75</sup> *Ibid.* , x. My emphasis.

not, in short, render many things attractive to us, apart from their necessary use? . . . .

Away then, with that inhuman philosophy which, while conceding only a necessary use of creatures, not only malignantly deprives us of the lawful fruit of God's beneficence but cannot be practiced unless it robs a man of all his senses and degrades him to a block.<sup>76</sup>

Likewise, in the Old Testament Psalms we find a form of meditation on the material world which refuses to "rob a man of all his senses." The psalmist indeed transcends the material world in some sense, as he reflects on God's creation. However this meditation is no cursory examination of physical objects. It is not the incidental and dispensable means of divining some spiritual "lesson" from the sensible. Rather the language of such psalms reflects a *sustained* and *appreciative* engagement with the material world

How many are your works, O Lord!  
In wisdom you made them all;  
the earth is full of your creatures.  
There is the sea, vast and spacious,  
teeming with creatures beyond number—living things both large and  
small. There the ships go to and fro,  
and the leviathan, which you formed to frolic there.

Psalm 104:24-26

Above all, Pike's suspicion of the material pulls against the physical and material revelation of God in the Incarnation. God has revealed himself supremely, not in the first instance by directing our attention *away* from the material, but by directing it toward the Word made Flesh.

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<sup>76</sup> Calvin, *Institutes*, Book III. X. 3., ed. John T. McNeill, tr. Ford Lewis Battles. The Library of Christian Classics, vol. 20 (Philadelphia: The Westminster Press, 1960), 771.

The Word became flesh and made his dwelling among us. We have seen his glory, the glory of the One and Only . . . . No one has ever seen God, but God the One and Only, who is at the Father's side, has made him known.

John 1:14, 18

Here too, of course, there is both revealing and veiling. As the characters in Schleiermacher's dialogue recognize, those who proclaim "Jesus is Lord" must also "move beyond" a mere physical or historical apprehension of Jesus of Nazareth. However this moving beyond is "in-addition-to" rather than "in-place-of" the particular and material revelation of God in Christ. For Pike, understanding of spiritual and theological truth necessitates progressive turning away from the material—"from the sensible level . . . upward to a higher reality."<sup>77</sup> The Christian Church by contrast has at the center of its liturgy a week in, week out *physical* symbolization of the body and blood of Jesus Christ. Here reflection on the immaterial completes and embraces, rather than excludes, reflection on the material. The two stand alongside one another in a continuing dialogue. This same dialectical relationship between physical and spiritual perception is evident in the New Testament reflections on Jesus Christ:

That which was from the beginning, which we have heard, which we have seen with our eyes, which we have looked at and our hands have touched—this we proclaim concerning the Word of life. The life appeared; we have seen it and testify to it and we proclaim to you the eternal life which was with the Father and has appeared to us.

1 John 1:1-2

### A misunderstanding of "sensuality"

Pike is also uneasy about the material aspect of music because of the moral danger it poses. A purely physical, sensory engagement with music, he warns, may

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<sup>77</sup> Pike, 27.

very well lead us into further sensuality. This is of course a concern which can be traced back to the earliest centuries of the Christian tradition.<sup>78</sup>

It is interesting in this connection, then, to consider the two New Testament passages in which there are explicit exhortations to sing and make music. In Ephesians 5:19 Paul encourages the Christians: “Speak to one another with psalms, hymns and spiritual songs. Sing and make music in your heart to the Lord.”

It is important to note the context in which this exhortation occurs. Beginning with verse 17 of chapter 4, Paul urges the Ephesians to live lives of purity and virtue that will distinguish them from those living in darkness. This is not simply a condemnation of the behavior of those around the Christians, but is a warning not to accommodate “your former way of life” (22). He writes, “you must *no longer* live as the Gentiles do”<sup>79</sup> (17)—as those who “have given themselves over to *sensuality* (ἀσέλγεια) so as to indulge in every kind of impurity with a continual lust for more”<sup>80</sup> (19).

Accordingly, in the verses that follow, Paul gives a series of ethical instructions intended to steer the Ephesians away from the life of sensuality in which they were once ensnared. In verses 20-24, he reminds them that they were taught to put off the old nature with its “deceitful desires,” and to put on the new self of righteousness and holiness. Chapter 4 verse 25 through chapter 5 verse 2 warns against lying, stealing, malicious talk and bitterness. Chapter 5:3-7 warns against sexual immorality, impurity and greed.

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<sup>78</sup> Cf. McKimmon, *Music in Early Christian Literature*.

<sup>79</sup> My emphasis.

<sup>80</sup> My emphasis.

Paul does not ask the Ephesian Christians simply to avoid being *excessively* sensual. Rather, he says, there “must not be *even a hint* of sexual immorality”<sup>81</sup> (5:3); they are to “have *nothing to do* with the fruitless deeds of darkness.” The ethical injunctions continue to verse 18, where Paul warns against drunkenness and debauchery. None of these sensual excesses should characterize the Christian. *Instead*, he writes, “be filled with the Spirit. Speak to one another with psalms, hymns and spiritual songs. Sing and make music in your heart to the Lord.” (5:18-19)

In other words, to a Christian community surrounded by sensual license and immorality—to a people who were themselves prone to the sensual indulgences of their former way of life; at the conclusion and climax of a passage warning against sensuality and sins of the flesh—Paul urges the Ephesians to sing and make music. If music tended to promote sensuality, would he have given this command in this context? Apparently the command to avoid “even a hint” of sensuality does not exclude music. In fact, it is a practice which is appropriate for those who are being “very careful . . . how [they] live—not as unwise but as wise, making the most of every opportunity, because the days are evil” (5:15-16).<sup>82</sup> Certainly, music engages our senses, but this passage suggests that in its biblical usage, “sensory” is not the same thing as “sensuality.”

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<sup>81</sup> My emphasis.

<sup>82</sup> Interestingly, these verses also respond to one of the other criticisms frequently raised against music making throughout Christian history. That is, that music is a mere diversion or entertainment—a fine enough thing if one has nothing better to do, but hardly the most useful employment of time. “As Calvin puts it, it is only within the confines of true Christian worship that music can be ‘free from vicious attractions, and from that foolish delight by which it seduces men from better employments and occupies them in vanity.’” Francis Watson, “Theology and Music,” *Scottish Journal of Theology* 51, no. 4 (1998): 443.

The other passage where Paul encourages Christians to sing is Colossians 3:16, and like the Ephesians passage, it follows a list of ethical exhortations. However, unlike Ephesus, the immediate danger surrounding the Colossian church is not sensuality. Rather, these Christians have been thrown into confusion by a new teaching in their community. A number of teachers in Colossae have been promoting a spirituality marked by extreme asceticism and an elaborate system of stern restrictions. Paul acknowledges that “such regulations indeed have an appearance of wisdom, with their self-imposed worship, their false humility and their harsh treatment of the body, but they lack any value in restraining sensual indulgence” (“οὐκ ἐν τιμῇ τινι πρὸς πλῆσμοντῆν τῆς σαρκὸς”; NASB: “of no value against fleshly indulgence”) (2:23). Chapter two, then, is a refutation of religious systems which treat the body harshly but fail to provide deliverance from sensuality. By contrast, in chapter 3 Paul provides a true picture of Christian virtue and holiness; one which, significantly, includes music and singing: “Let the word of Christ dwell in you richly as you teach and admonish one another with all wisdom, and as you sing psalms, hymns and spiritual songs.” The false spirituality of the Colossian ascetic treated the body harshly while failing to restrain sensuality. A spirituality which *is* effective in restraining “whatever belongs to your earthly nature” (3:5) however, is one which (at least as portrayed by Paul) includes singing and the making of music.

For Pike (as for many Christian writers before him), music is a risky mix—a wholesome spiritual essence wrapped in a seductively sensual casing. These passages however suggest a different appraisal of music. Music extends the opportunity for a positive and fully Christian engagement with the external world; one which is

completely sense-full without necessarily being sensual. Pike's concerns about music's sensuality may be understandable, but they do not seem to be concerns which Paul shared.

## **Pike and Schleiermacher**

As we conclude our evaluation of Pike, it seems good to look back over the ground we have covered to this point, and draw together some of the themes sounded. In these first two chapters we have encountered two explanations—perhaps the two classic explanations—of the cultural ubiquity of music, its power over the human spirit, and its affinity with religion. What I hope has emerged from our study is the way in which these two opposing answers are really different sides of the same coin; arriving at different conclusions by way of some of the same assumptions.

We have evaluated *A Theology of Music* and *Christmas Eve* in terms of four dichotomies:<sup>83</sup> (1) Spontaneous-Reflective; (2) Feeling-Knowing; (3) Universal-Particular; and (4) Other than Sounds-Sounds. Pike and Schleiermacher are in agreement concerning two of these dichotomies, and disagree over two. Both agree that the power of music derives from its *universal, rather than its particular*, qualities. And, related to this, both attach the virtue of music to *something other than the musical sound itself*. They differ however, over the identity of this essential “other-than-sound.”

Pike finds the value of music in the rational and abstract truths it opens up to us. Music is a kind of knowing, he asserts, and it engages us in rational reflection. For Schleiermacher, on the other hand, the value of music resides in the immediate inward experience of universal feeling it conveys to us. Music bears “the great chords of our inner nature,” *Christmas Eve* claims, and is spontaneous rather than analytical. Pike marries music to religion because both find their ultimate expression in the rational

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<sup>83</sup> The terms in the first two pairs are drawn first of all from Schleiermacher, but the concepts they represent are prominent in both works.

contemplation of divine truths. Schleiermacher, by contrast, brings the two together because both are “experience of direct self-awareness, or perhaps we might better say pre-descriptive self-awareness.”<sup>84</sup>

What becomes clear, however, is that this disagreement rests on another sort of substantial agreement. Namely, both authors embrace the same feeling-knowing dichotomy. They only differ with regard to where along this divide they locate music and spirituality. Both authors define feeling and knowing exclusively, and place subjective experience and objective knowledge at opposite poles of the epistemological-cognitive spectrum. We have found however (at least initially), that music does not fall easily into either side of this opposition. Likewise, we have discovered that placing “religion” on either the “feeling-not-knowing” or “knowing-not-feeling” side of the divide opens up serious theological difficulties. (Similar problems emerge with locating the essence of music in the universal, not the particular; or in “other-than-sounds” rather than sounds.)

As we begin to untangle these difficulties, it is also important to remember that these works are representative of two significant traditions of thought—two great themes which have emerged again and again when human beings have reflected on the nature of music. One emphasizes music’s link to the inner life of the emotions, the heart, and immediate experience. The other sees music as somehow tied up with the structure and rationality of the universe as a whole. We might label these the two positions the *Orphean* and the *Pythagorean*.<sup>85</sup> As stated by Schleiermacher and Pike, these two emphases seem mutually exclusive. And yet, each has a venerable history, and each resonates in some way with our experience of music. The very persistence of

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<sup>84</sup> Alber L. Blackwell, “Schleiermacher on Musical Experience and Religious Experience,” in *Friedrich Schleiermacher and the Founding of the University of Berlin*, ed. Herbert Richardson (Lewiston, N.Y. : Edwin Mellen, 1991), 128.

<sup>85</sup> In the pages that follow, I will often speak of these two tendencies, using the terms “Orphean” and “Pythagorean.” I have done so, in order to highlight features of the larger traditions in which Schleiermacher and Pike stand. I have also done so, to avoid slandering Schleiermacher or Pike. Each author’s position (especially that of Schleiermacher) is developed with some subtlety and nuance, and is not always guilty of the excesses of the tradition generally.

these two explanations should give us pause before jettisoning either one, for they represent not only the ideas of two theologians, but also the intuitions of thousands.

In the next two chapters, we will try to determine whether or not these intuitions have any solid basis. To this point, our critique of Pike and Schleiermacher on music has been largely anecdotal. In the chapters to come, I would like to draw upon the insights of other disciplines involved in the study of music. This is important if we are to avoid engaging in pure speculation, draped beneath a thin veil of musical terminology (a hazard I mentioned in the introduction). In reflecting theologically upon music, we want to pursue an authentic dialogue; listening—critically, but attentively—to those from other fields who are involved in studying music.

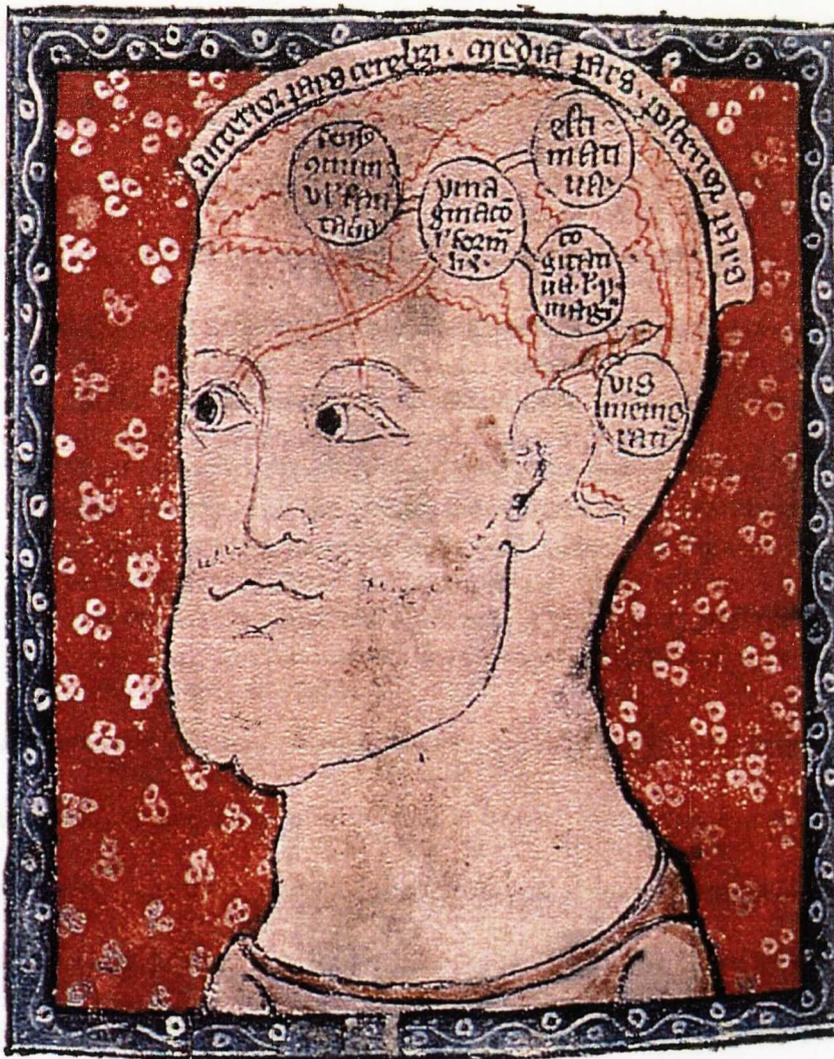
In Chapter 3, we will turn our attention to some of the research being done in the psychology of music. We will find that much of this research has a bearing on the questions which have emerged in Chapters 1 and 2: In what sense, if any, is music “universal”? Is music perception a spontaneous, pre-reflective activity, or deliberate and conscious? Is the substance and essence of music in the *sound*, or in something other than the sound? These same questions will concern us in Chapter 4, as we consider recent emphases in the philosophy of music. In addition, we will return to the question of whether music has primarily to do with feeling (and if so, in what way), or whether music has primarily to do with knowing (and in what way). Does music direct us inward toward our own experience, or does it point us toward truths outside of ourselves?

At the same time, as we consider these other perspectives, we will not be setting Schleiermacher and Pike to one side—as if turning from the anemic reflections of the theologians to the robust facts of modern science and philosophy! Rather, I believe that Schleiermacher and Pike have each recognized *something* vital and important about music. As we move forward, we will not discard either point of view, but shall seek a way to uphold the central intuitions of each.

# SECTION II



*The themes are developed*



# Music and Mind<sup>1</sup>

◆ ◆ ◆  
Intuition,  
Abstraction,  
and the  
Cognitive  
Psychology of  
Music

## Chapter 3

*Rhythm and harmony  
sink more deeply  
into the mind . . .  
and affect it more  
powerfully than anything  
else, and bring grace  
in their train.*

- Plato, *Republic*

To this point, I have organized our discussion of music around four headings; four tensions or continua along which we can map different positions:<sup>2</sup>

**1. Sounds/Other than sounds.** Accounts of music may lay varying degrees of emphasis upon the materiality of music, (by which I mean both the material qualities of the sound and the material (i.e. physical, embodied) way in which we experience it). There is, on the one hand, a very straightforward sense in which music has to do with sounds

<sup>1</sup> The annotation accompanying this image reads, in part: “The systems of five cells, or ventricles, drawn in a Cambridge diagram of the early fourteenth century presents the scheme of brain by the influential Arab philosopher, Avicenna. The five cells are the common sense, the imagination, the judging, the second imagination (composing and combining images) and the memory. Obtained at Web Museum: <http://gallery.euroweb.hu>

<sup>2</sup> I must once again acknowledge a debt to Dr. Pat A. Manfredi. His comments on a draft of this chapter were instrumental in clarifying my thinking concerning the categories of my discussion. He also suggested the terminology, “Sounds/Other-than-sounds.”

and their properties—pitch, loudness or softness, rhythm, the sonorities they create and so on. Yet many accounts of music have contended that these material properties and our physical experience of them are secondary—or even irrelevant—to the experience of *music*. Consider for instance, R. G. Collingwood's assessment:

[A] tune is already complete and perfect when it exists merely as a tune in [the composer's] head, that is, an imaginary tune. Next he may arrange for the tune to be played before an audience. Now there comes into existence a real tune, a collection of noises. But which of these two things is the work of art? Which of them is the music? The answer is implied in what we have already said: the music, the work of art, is not the collection of noises, it is the tune in the composer's head. The noises made by the performers, and heard by the audience, are not the music at all; they are only means by which the audience, if they listen intelligently (not otherwise), can reconstruct for themselves the imaginary tune that existed in the composer's head.<sup>3</sup>

**2. Particular/Universal.** Accounts of music may vary in the degree to which they emphasize the particular or universal in music. Some may insist, for example, that music is primarily the embodiment of the norms and values of a particular culture. Music does not transcend culture, but immerses us in it. (Or, in the same way, it may be argued that it is the particular qualities of a given performance or the distinctive “voice” of a particular composer that we value.) Against such a position, others may maintain that music is prized because of the way in which it transcends individuals and cultures. “Music is the universal language,” we are told, and this is its greatest distinction and asset.

The tension may arise in other ways. We may have the sense that sounds resemble or give musical expression to particular people, events, or states of mind. Others, however—including Pike and Schleiermacher—have believed that music derives its power from the fact that it does not (or even cannot) express the particular event (or person, or whatever). Rather, music gives voice to the *universal* underlying these particulars.

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<sup>3</sup> R. G. Collingwood, *The Principles of Art* (Oxford: Oxford University Press, 1938), 139.

**3. Feeling/Knowing.** We have also encountered different ideas about the kind of activity in which music involves us. Does music have primarily to do with the “inner world” of experience, emotion, and feeling? Or does music bear truths about external reality to our conscious awareness? For much of Western intellectual history, music has indeed been considered a source of knowledge. Boethius would identify music as one of the four mathematical disciplines, all of which are “concerned with the investigation of truth”, (although music, he writes, “is related not only to speculation but to morality as well”).<sup>4</sup> Indeed, he indicates that “there is no greater path whereby instruction comes to the mind than through the ear.”<sup>5</sup>

**4. Spontaneous/Reflective.** The last tension is closely related. Here, the question concerns the way in which musical experience arises. Some have attributed the power of music and its affect upon human beings to the fact that it is spontaneous. Our enjoyment of music is innate, immediate and preconscious, they suggest. Another school of thought however, has contended that we only experience the beauty of music through conscious and deliberate reflection. Recall for instance the previous citation from Collingwood: “the noises. . . are only the means by which the audience, *if they listen intelligently (not otherwise), can reconstruct for themselves the imaginary tune.*”<sup>6</sup> “That person is a musician,” Boethius would conclude, “who, through careful rational contemplation, has gained the knowledge of making music, not through the slavery of labor, but through the sovereignty of reason.”<sup>7</sup>

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<sup>4</sup> Boethius, *De institutione musica* I, i, in “Boethius’ The Principles of Music, An Introduction, Translation and Commentary,” tr. Calvin M. Bower (Ph. D. diss., George Peabody College for Teachers, 1966), 32.

<sup>5</sup> *Ibid.*, 34.

<sup>6</sup> Collingwood, 139. My emphasis.

<sup>7</sup> Boethius, I, xxxiv, tr., 102-103. Let me issue a caution concerning these tensions. First, these are not four airtight categories into which all philosophies of music may be neatly divided. There is some overlap among them and in the actual works we shall consider the issues often blur together. Rather than a definitive categorization of music philosophies, these tensions are intended as an aid in clarifying the issues being discussed. There are other tensions we could consider (e.g. effable/inneffable, individual/corporate,

In the first part of this chapter, I would like to focus our attention on this last tension—the spontaneous/reflective nature of musical experience. In Chapters 1 and 2, we encountered two different accounts of music, and two corresponding traditions of thought—the *Orphean* and the *Pythagorean*. We have seen these characterize music as either *essentially* spontaneous (Orphean), or *essentially* reflective (Pythagorean); as either *essentially* immersing us in immediate, pre-conscious experience (Orphean) or as *essentially* allowing us to abstract ourselves from our immediate experience, and contemplate truth (Pythagorean). What should we make of this mottled reputation of music? It is as if we have encountered a meal which is characterized as both “very spicy” and “incredibly bland;” or a landscape which guidebooks describe as both “barren” and “lush.” What is actually going on when we hear a piece of music? How does it engage us?

### The puzzle of music perception

There is indeed, something mysterious about the way we perceive music. A number of fascinating puzzles have emerged from psychological studies of the spontaneous (or intuitive) nature of musical experience.<sup>8</sup> Let’s consider one of these puzzles through a simple example. Imagine, for instance, that we encounter a melody we have never heard before, such as the one below, (which I will call “Chapter 3”). [See Chapter 3 on page 116-17: “Sample Melodies - 1”]

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invented/discovered, etc.), but I have chosen these because of the way they open up several classic explanations of the ubiquity of music and the association between music and worship.

<sup>8</sup> In an interdisciplinary exploration of this sort, there is always the danger of the incommensurability of terms. I have taken the language of “spontaneous” and “reflective” from Schleiermacher. Many of the psychologists with whom we will be dealing refer to this same pre-reflective and immediate perception as “intuition.” When I refer to “spontaneous” or “intuitive” aspects of experience, I am speaking of those which are immediate and pre-reflective in the sense discussed in Chapters 1 and 2.

# SAMPLE MELODIES - 1

## Chapter 3.

1. 2. 3. 4.  
5. 6. 7. 8.

### Melody 3.1

m. 1-6 7. 8.

### Melody 3.2

m. 1-6 7. 8.

### Melody 3.3

m. 1-6 7. 8. 9.

### Melody 3.4

m. 1-6 7. f f f

SAMPLE MELODIES - 2

Melody 3.5



Regardless of our degree of musical training or level of musical ability, we will most likely immediately accept “Chapter 3” as a coherent (if mundane) musical statement. The melody “makes sense” to us. But why *should* it “make sense”? We have never heard this particular melody before; we have never been taught “how it goes.” The force of the question emerges when we consider the number of ways in which the melody might *not* make sense, or when we try to formalize all of the conditions necessary in order for it to satisfy our musical intuitions.

For instance, if we alter the last phrase of the melody, as in “3.1”, the sense of continuity and coherence abruptly dissolves in measure 7. [See Melody 3.1.]

In reflecting on this we might say that “Chapter 3” makes sense to us, because (with the exception of the D flat in measure 6) it remains entirely within the bounds of the major scale—a collection of tones which we have learned through its prominence in our musical culture. “3.1” violates this learned pattern, and so strikes our ear as strange.

However, remaining within the bounds of a scale is not a sufficient condition for coherence (nor in fact is it a necessary condition, as we see with the D flat in measure 6, but we will leave that to one side for now). For instance, if we conclude the melody as in “3.2”—repeating the scale tone D natural than resolving to E flat—the melody once again strikes us as poorly formed.

Considering our experience with “3.1” and “3.2,” we might then arrive at the following rules for a well-formed melody:<sup>9</sup>

**WFMR 1:** *Melodies tend to sound well formed when they use the tones of a given scale.*

**WFMR 2:** *Melodies tend to sound well formed when they end on one of the stable tones of that scale.*

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<sup>9</sup> This style of stating rules for musical “well-formedness” is taken from Fred Lerdahl and Ray Jackendoff, *A Generative Theory of Tonal Music* (Cambridge, Mass: The MIT Press, 1983).

However, we then encounter melody “3.3”. It ends on the tonic (the most stable tone in the key of E flat, conforming to WFMR 2), but again, it does not sound right. In measure 8, the melody suddenly grinds into “low gear.” The conclusion then spills on for 6 more measures, disrupting any sense of symmetry in the melody. So we might respond by adding:

*WFMR 3: Melodies tend to sound well formed when they maintain the same rhythmic pulse throughout.*

*WFMR 4: Melodies tend to sound well formed when they are composed of subdivisions of roughly equal length.*

And so we create a melody which follows rules 1-4, and come up with “Melody 3.4”—only to find to our great distress that we intuitively recognize this melody as “wrong”. The problem seems to be the skip up from G to D , and the subsequent skip down the concluding E flat. So we resolve,

*WFMR 5: Melodies tend to sound well formed when the leading tone [that is, the seventh degree of the scale—D natural in our example] resolves upward to the tonic by half step.*

*WFMR 6: Melodies tend to sound well formed when they approach the leading tone in a stepwise motion, rather than by large skips.*

*WFMR 7: Melodies tend to sound well formed when they avoid skips of more than an octave.*

Having decided on rules 5-7 however, we are presented with “3.5.” This melody is tonally identical to “Chapter 3,” the only difference being the articulation and placement of the concluding E flat. Still, that is enough to wreck the sense of a satisfying conclusion to the melody. And so, we add to our list the following:

*WFMR 8: Melodies tend to sound well formed when they conclude on a strong beat of the measure, preferably beat 1.*

*WFMR 9: Melodies tend to sound well formed when the final note receives a legato, rather than a staccato, articulation.*

We could go on and on indefinitely, enumerating rules, tendencies, and qualifications of rules for well formed melodies. Really, even in our little example I’ve cheated, including a number of shortcuts like “notes of the scale,” “stable tones” and

“strong beats.” If we were to completely formalize our intuitions we would also have to ask how we come to recognize *which* beats are “strong”, *which* tones are “stable”, and *which* notes are included within a scale. Moreover, there are many other musical variables which we have not even mentioned—dynamics, instrumentation, phrasing, formal structure, and so on. The difficulty of the task of description would then be multiplied exponentially if we were to move beyond a simple 8 bar unaccompanied melody to a lengthy musical work, involving several different instrumental parts. Even within our 8 bar example, we have concentrated only on the last two bars!

Nevertheless, I think that even this simplified illustration draws out an important point. That is, while our responses to music may be to some extent spontaneous and prereflective, they are not random. We do not approve *any* series of notes as an acceptable musical statement. Our example begins to give us some sense of the extent and complexity of our musical intuitions. If, for instance, we were asked to teach a Martian (one without any musical intuitions, that is) how to judge between acceptable and unacceptable Western melodies, or if we were to set out to program a computer to perform this same task, we would be faced with a formidable project.

The task would not be demanding because music is an impenetrable mystery, or because its structure and patterns are inscrutable. As we saw in our sample melody, when a melody “goes wrong” we are often able to easily identify what it is about the melody that violates our intuitions, and set out some sort of generalization about how to correct it. The process of describing our intuitions would be demanding, not because our intuitions are inaccessible to analysis, but because of just how much content, how much information, is embedded within them.

These intuitions—at least the ones which I have spelled out in our sample—are not the special domain of accomplished musicians, but are common to any competent

listener within our culture. A relatively unmusical person will not only recognize “3.2” as a poor melody, but will usually be able to more or less identify the problem—“That last note doesn’t sound right,” or even: “It doesn’t sound like it’s ended. The last note should go up.”

Here, then, we find more data which we can feed into our reflection on Pike and Schleiermacher. Music perception is indeed, as *Christmas Eve* suggests, profoundly spontaneous. The suggestion that we understand music through analytical, conceptual or linguistic awareness, crumbles before the sheer complexity of the musical experience.<sup>10</sup> However, this complexity also pulls against *Christmas Eve*’s characterization of the musical experience as simple and childlike—or at least, calls for a very carefully nuanced understanding of “simple.” It certainly topples the more extreme Orphean suggestion one sometimes encounters—that music is a kind of unrestrained, amorphous gushing of emotion. We seem to have found some sort of hybrid between the musical experience described in *Christmas Eve* and that set out in *A Theology of Music*. Much of our music perception is marked by the kind of spontaneity Schleiermacher describes. Yet this spontaneous engagement also possesses the kind of regularity, order and complexity which Pike identifies with the highest levels of musical experience.

## Music and language

Before exploring this tension any further, we should note that this picture of music perception raises another significant question: how have we come to acquire these complex musical intuitions? It is a puzzle which has a striking parallel in the field of

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<sup>10</sup> There are obvious resonances here and at many points throughout the rest of this chapter with the thought of Michael Polanyi (cf. especially, Chpt. 1 of *The Tacit Dimension* (London: Routledge & Kegan Paul, 1967) ). The parallels between my account and the work of Polanyi will likewise largely remain tacit. Jeremy Begbie (*Voicing Creation’s Praise: Towards a Theology of the Arts* (Edinburgh: T & T Clark, HarperCollins, 1991) ) has effectively demonstrated the potential of Polanyi’s work for a Christian aesthetic, and I have therefore chosen to develop this study using different resources.

linguistics: How is it that during the first few years of life, without formal training or systematic instruction, human beings gain proficiency in linguistic systems which are extraordinarily complex? Linguist Ray Jackendoff refers to this as “the Paradox of Language Acquisition.”

Thousands of linguists throughout the world have been trying for decades to figure out the principles behind the grammatical patterns of various languages, the very same grammatical principles that children acquire unconsciously. But any linguist will tell you that we are nowhere near a complete account of the mental grammar for any language. In other words, an entire community of highly trained professionals, bringing to bear years of conscious attention and sharing of information, has been unable to duplicate the feat that every normal child accomplishes by the age of ten or so, unconsciously and unaided.<sup>11</sup>

Faced with this enigma of language proficiency, Noam Chomsky proposed a radical answer which has since received widespread acceptance: We do not acquire language simply through environmental input and formal training, but by virtue of a genetically determined specialization for language.<sup>12</sup> Chomsky argued that human beings are “biologically predisposed” to proficiency in certain cognitive skills; language being preeminent among these.<sup>13</sup> Humanity, he suggested, is endowed with an innate cognitive capacity for language.

A number of those features of language which support Chomsky’s hypothesis are ones it shares with music. Both music and language are universal, species-specific human capacities.<sup>14</sup> If for instance, music were only a feature of all sub-Saharan African cultures, or were only present in pre-industrial societies, we might have reason to believe that music is strictly a cultural invention—a social practice, like paper currency or representative government, which has flourished in some settings and not in others.

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<sup>11</sup> Ray Jackendoff, *Patterns in the Mind. Language and Human Nature* (New York: Basic Books, HarperCollins, 1994), 26.

<sup>12</sup> Jackendoff, 21-35.

<sup>13</sup> John A. Sloboda, *The Musical Mind: The Cognitive Psychology of Music*. Oxford Psychology Series, No. 5 (Oxford: Clarendon Press, 1985), 195.

However, this is not the case. Wherever we find human societies, we find music, as well as language.

Another relevant similarity between music and language is illustrated by our sample melody. Composers can write melodies which have never been written before, and listeners can comprehend melodies they have never heard before.<sup>15</sup> This is what we saw with “Chapter 3.” The melody made sense to us as a musical statement, though we had never heard it before. Our comprehension of “Chapter 3” cannot be attributed to some formal instruction we were once given: “*an acceptable statement of ‘Chapter 3’ will consist of these 31 tones in this rhythm and in this order.*” Our ability to generate novel sequences of music in this way is seemingly limitless. Jackendoff concludes, “just as our ability to learn language requires innate resources that form the basis of learning, our unconscious ability to construct musical grammars requires some underlying innate resources that go beyond just an ability to ‘soak up’ sequences of sound.”<sup>16</sup>

Another common feature—which we will consider at greater length momentarily—is that children acquire both linguistic and musical competence at an early age, without any formal instruction.

These resemblances between musical and linguistic development and comprehension did not go long unnoticed. In the early 1970’s, Leonard Bernstein stumbled upon the writings of Chomsky. He was captivated by what he read. In 1973, Bernstein presented the Charles Eliot Norton Lectures at Harvard University, enthusiastically proposing the application of Chomskian linguistic theory to music cognition.<sup>17</sup> Bernstein’s excitement was contagious, and in the wake of his lecture a

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<sup>14</sup> Ibid. , 17. W. Jay Dowling and Dane L. Harwood, *Music Cognition* (Orlando, FL :Academic Press, Harcourt Brace Jovanovich, 1986), 239; Jackendoff, 170.

<sup>15</sup> Sloboda, 18. Jackendoff, 166-167.

<sup>16</sup> Jackendoff, 169.

<sup>17</sup> Leonard Bernstein, *The Unanswered Question* (Cambridge, Mass. : Harvard University Press, 1976).

number of musicians, linguists, philosophers and psychologists began to think more carefully about a continuing dialogue between music theory and linguistics.<sup>18</sup> Over the ensuing years a specialized subdiscipline—the cognitive psychology of music—has developed.<sup>19</sup> There are of course diverse opinions and emphases within the cognitive psychology of music (or psychomusicology), nevertheless, we can identify some of the main themes in the discipline.

Cognitivists contend that listening to and creating music involves complex mental processes and strategies.<sup>20</sup> These mental processes cannot be explained in merely behavioristic terms (i.e. “environmental conditioning”), but rather, emerge from a biological specialization for particular tasks.<sup>21</sup> Additionally, these processes are largely preconscious.<sup>22</sup> Cognitivists also argue that a number of these specializations are innate and therefore universal.<sup>23</sup>

Another important emphasis of cognitivism is that music is “a mentally constructed entity.”<sup>24</sup> In other words our experience of music is not an unmediated encounter with sound. Rather, we organize and categorize our aural perceptions into

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<sup>18</sup> Lerdahl and Jackendoff, ix.

<sup>19</sup> The best introduction to the field and the most authoritative is Sloboda’s *The Musical Mind*. Dowling and Harwood’s *Music Cognition* is also helpful. The most significant work of applied theory in the field is Lerdahl and Jackendoff’s *Generative Theory of Tonal Music*. It represents the most thorough attempt to date to formalize musical intuitions into a generative grammar (or “M-grammar”). Other important contributions include Diana Raffman, *Language, Music and Mind* (Cambridge, Mass. : Bradford Books, The MIT Press, 1993); Diana Deutsch, ed. , *The Psychology of Music* (New York: Academic Press, 1982); and, Irène Deliège and John Sloboda, eds. , *Musical Beginnings: Origins and Development of Musical Competence* (Oxford: Oxford University Press, 1996). The journal, *Music Perception*, reflects the state of current research in the field.

<sup>20</sup> Cf. Dowling and Harwood, 3-4; Jackendoff, vii. ; Sloboda, 2.

<sup>21</sup> Cf. Jackendoff, 169; Sloboda, 195.

<sup>22</sup> Cf. Raffman, 3; Lerdahl and Jackendoff, 4.

<sup>23</sup> Cf. Dowling and Harwood, 3-4, 238-239; Lerdahl and Jackendoff, 4, 278-301; Sloboda, 253-259.

<sup>24</sup> Lerdahl and Jackendoff, 2.

abstract mental representations.<sup>25</sup> Lerdahl and Jackendoff explain that in speaking of “music” we refer to an object

for which there is no direct correlate in the score or in the sound waves produced in performance . . . . Insofar as one wishes to ascribe some sort of “reality” to these kinds of structure, one must ultimately treat them as mental products imposed on or inferred from the physical signal.<sup>26</sup>

Raffman offers a helpful summary:

According to the cognitive psychologists, listeners unconsciously abstract and store structural information from the music they hear, thereby establishing longstanding mental representations that shape their subsequent music perception.<sup>27</sup>

We shall encounter each of these emphases in the next section of our study.

## Baby music

Is there any evidence to support the existence of the innate biological specialization for music of which the cognitivists speak? In fact, some of the most compelling evidence comes from a number of remarkable studies exploring how infants perceive and respond to music. These studies, because of the age of their subjects, have enormous potential for illuminating what sorts of listening strategies are innate in human beings. We will look at a few studies relevant to the lines of our investigation.<sup>28</sup> These tests suggest in convincing fashion that human beings do indeed have an innate affinity for music (similar to the biological predisposition for language suggested by Chomsky). Furthermore, they support our earlier proposal: that one’s experience of music is, in some

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<sup>25</sup> Cf. *Ibid.* ; Diana Deutsch, “Music Recognition,” in *Psychological Review* 76:3 (1969) 300-307; Diana Deutsch and John Feroe, “The Internal Representation of Pitch Sequences in Tonal Music,” in *Psychological Review*, 88:6 (1981) 503-522; Raffman, 3; Sloboda, 3.

<sup>26</sup> Lerdahl and Jackendoff, 2.

<sup>27</sup> Raffman, 3.

<sup>28</sup> Unfortunately there is barely space to offer even a representative selection of examples, let alone a comprehensive overview. While the samples I have chosen are from the mainstream of the psychomusicology, there are of course a wide variety of different views within the field itself. In addition, I am not pretending to offer a thorough empirical demonstration of any aspect of music perception. I have chosen a few important studies from the literature which touch on the themes we have raised. I believe that citing a few actual test cases will help us get our hands around the concepts being discussed. Probably even more than any of these other reasons, I simply find these studies fascinating, and I hope that the reader will as well.

significant sense, *spontaneous*; *and yet*, these spontaneous responses are characterized by a considerable internal complexity and orderliness.

## An ear for music

A series of tests by Moog add weight to the idea of an innate responsiveness to musical sound.<sup>29</sup> Tapes of different kinds of sounds were played for over 500 children, aged 6 months to 5 years. The six different sounds on the tapes were (1) Nursery songs being sung; (2) Words spoken rhythmically; (3) Rhythms played on percussion instruments; (4) Instrumental music; (5) Dissonant instrumental music; (6) Non-musical sounds (e.g. traffic noise, appliances). Among six month old infants, “if a subject responded to one series only, that one was always either the nursery songs or the instrumental music; if he responded to two series, then they were these same two. If more than two series of tests attracted the baby’s attention, then songs and instrumental music were, in every case, among the tests to which he responded.”<sup>30</sup> Nearly all the children responded to the song and music recordings with movement.<sup>31</sup> From nine months on, the infants often vocalized (“song babbling”) in response to these tapes. However, in response to the noise and rhythm tapes, “babies over nine months began to make quite clear signs of displeasure . . . turning away, pulling ‘dissatisfied’ faces, even showing signs of fear.”<sup>32</sup> Before age 3, children raised in homes where there is little or not music are just as responsive to music as those raised in homes saturated with music.

Sloboda comments that children “seem to have a natural ability to learn the rules of language and music through exposure to examples”<sup>33</sup> Singing, like speech, emerges spontaneously in children, and at about the same age. We do not provide young children with formal training in musical grammar any more than we provide them with formal training in English grammar; nevertheless, they sing, they speak, they dance to music and

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<sup>29</sup> I am drawing on the discussion of Moog’s findings in Sloboda, 198-209.

<sup>30</sup> Sloboda, 199.

<sup>31</sup> This point will be important for my argument in the next chapter.

<sup>32</sup> *Ibid.*, 201.

<sup>33</sup> *Ibid.*

listen to stories. We do not present them with principles for identifying acceptable and unacceptable melodies, but by the age of 10 or so they are able to make such identifications readily and consistently.<sup>34</sup>

## Identifying pattern

The spontaneity and complexity of early music perception is reflected in another series of fascinating studies. These tests focused on infants' ability to identify and discriminate between different rhythmic and melodic patterns—a fairly sophisticated task. Yet, one recent series of experiments suggests that infants as young as 6 months are able to make these sorts of identifications.<sup>35</sup> Trehub presented infants with two different sets rhythmic patterns: three note anapestic sequences ( ♩ ♩ ♩ ) and three note dactylic sequences ( ♩ ♩ ♩ ). Each pattern was presented at five different speeds. Trehub reports that despite the changes in tempo, the infants consistently identified one anapestic pattern as “the same” as anapests of differing tempo (and dactyls as the same as dactyls of differing tempo).<sup>36</sup> However anapests and dactyls of all tempi were recognized as being different to one another. This ability may seem rather mundane at first, but actually is quite remarkable. The children did not simply note rhythms as “exactly the same” or “(somehow) different,” but they demonstrated the ability to *categorize* their perceptions, identifying rhythmic *patterns*. Surface level and superficial variations did not obstruct their perception of structural resemblances.<sup>37</sup>

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<sup>34</sup> *Ibid.*, 211-15.

<sup>35</sup> Sandra E. Trehub, “Infants’ perception of musical patterns,” in *Perception & Psychophysics* 41 (1987): 635-41. Annabel Cohen, Leigh A. Thorpe, and Sandra E. Trehub, “Infants’ Perception of Musical Relations in Short Transposed Tone Sequences,” *Canadian Journal of Psychology* 41 (1987): 33-47. Barbara A. Morrongiello, Sandra E. Trehub, Leigh A. Thorpe, and Sandra Capodilupo, “Children’s Perception of Melodies: The Role of Contour, Frequency, and Rate of Presentation,” in *Journal of Experimental Child Psychology* 40 (1985): 279-292.

<sup>36</sup> The same results were obtained with four beat sequences. (Trehub, 1987, 639)

<sup>37</sup> One common method for determining this identification involves monitoring infant heart rate: “A sudden slowing of heart rate indicates startle [i.e. recognition of novelty]. In a typical study, an auditory pattern is repeated over and over. On the first presentation, the baby is startled and exhibits heart-rate deceleration. Then as the baby gets used to the pattern, heart rate returns to normal—it adapts. After the baby adapts to the first pattern, the pattern is changed to a new one.” (Dowling and Harwood, *Music Cognition*, 145.) Researchers observe responses to determine what types of change in a musical pattern produce a new startle. This was the method used in Trehub and Chang, 1977.

Other tests involving infant perception of melodies produced similar results, suggesting that infants likewise encode melodies according to contour and structural relationships.<sup>38</sup> In one study, infants were presented with a series of 6 note patterns. These patterns were then transposed or otherwise varied. If a melodic pattern was simply transposed,<sup>39</sup> infants responded as if it were the same as the original. Similarly, if the melodic pattern was transposed and altered, but in such a way that the contour of the original pattern was preserved,<sup>40</sup> infants did not respond to the pattern as novel. However, if the contour of the original pattern was altered, even if only by a single note, infants responded to it as something new.<sup>41</sup>

Again, these results are impressive. Though (for example) “C-E-A-G-E-C” and “F-A-D-C-A-F” contain different sets of notes, infants were able to identify that the relationship between those notes, the contour of the melody, was the same. They organized the percept of six discrete pitches into a single pattern, and demonstrated an ability to abstract this pattern from its particulars and apply it to a new series of aural

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A similar, and perhaps more reliable gauge, is the head-turn method. During a training period, a repeating sound pattern is presented to the infant, and the child is taught to turn toward the sound source. As the pattern is repeated, the baby habituates to the presentation (i.e., the baby no longer turns toward sound sources presenting a pattern which is perceived as “the same”). If however, a pattern is presented which is perceived as novel, the infant will once again turn toward the sound source (Cf. Trehub, 1987, 636). For further description of this methodology see also Cohen, Thorpe, and Trehub, “Infants’ Perception of Musical Relations,” esp. 38-39; and Fassbender, “Infants’ auditory sensitivity,” in Deliège and Sloboda, esp. 58-60. The head turn method was employed in each of the infant studies cited above.

<sup>38</sup> Trehub, 1987, 635-38; Cohen, Thorpe, and Trehub, 1987, 33-47; Morrongiello, Trehub, Thorpe, and Capodilupo, 1985, 279-92.

<sup>39</sup> for instance, if a 3 note ascending-3 note descending pattern covering a major 6<sup>th</sup> were changed, from C-E-A-G-E-C, to, F-A-D-C-A-F

<sup>40</sup> for example, from C-E-A-G-E-C, to, F-Bflat-D-C-A-F

<sup>41</sup> For instance, if the melody was changed from C-E-A-G-E-C, to F-A-C-D-A-F (changed from three ascending intervals followed by three descending intervals, to four ascending intervals followed by two descending intervals), the infants responded to novelty. Trehub, 1987, 636. However, in another set of experiments, (Cohen, Thorpe, and Trehub, 1987), infants aged 7 to 11 months demonstrated an even more refined ability to discriminate pattern. These infants were able to distinguish between 5 note melodic major triads (e. g. C-E-G-E-C), and 5 note melodic minor triads (e.g. C, E-flat, G, E-flat, C), *despite the fact that both patterns have the same melodic contour*. It would seem that with slightly older subjects and a slightly shorter pattern, the ability to “fine tune” the mental representation of the pattern is increased. It is also interesting to note that when other, more unusual or non-diatonic triads (such as a C major augmented triad) were altered by a half tone, infants were less reliably able to identify the change. This study suggests first of all, a perceptual preference for tonally stable structures, such as major and minor triads. Secondly, it indicates the ability in infants to discriminate the semi-tone; the smallest interval commonly used in Western music. It may be that the pattern of a major triad is stable and recognizable enough that it can be encoded as reliably than the more general pattern of melodic contour. (Cohen, Thorpe and Trehub, 1987, 45-6.)

events. Reflecting on her research, Trehub concludes that “infants, under most conditions, encode pitch relations (contour) within a melody independent of specific pitches, [and] so do they encode relational aspects of temporal structure independent of specific durations.”<sup>42</sup> In the case of both rhythm and melody, the studies suggest an innate ability to “create perceptual categories or equivalence classes.”<sup>43</sup>

### Sensitivity to phrasing

A different set of tests focused on the grouping of musical statements; in particular, the sensitivity of 4 ½ month-old infants to musical phrasing.<sup>44</sup> Juscyk and Krumhansl presented the infants with excerpts from Mozart minuets. One excerpt, for instance, was a 16 bar section of a minuet (8 bars, with a repeat). Surveys of adult listeners suggested that the most natural and musical grouping of this melody would be into phrases of two, two, four; two, two and four bars. The object of the experiment was to find if infants would prefer this same phrase grouping—indeed if they would demonstrate any phrasing preference at all.

In the first experiment, infants were presented with two versions of the minuet. In one, the music was segmented according to the phrases indicated above, with a brief pause inserted after the second, fourth, eighth, tenth, twelfth and sixteenth measures. The other version was “unnaturally segmented.” Pauses were introduced at the same intervals, but the piece was begun in bar two, so that the pauses were shifted over one bar (i.e., after measure 3, 5, 9 and so on). Interestingly enough, the infants showed a clear preference for the naturally segmented melodies.<sup>45</sup>

A second experiment tested whether the insertion of pauses had *produced* a segmenting preference that would not have normally arisen. Infants were again presented with two versions of the minuet. In one, the melody proceeded normally, without

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<sup>42</sup> Trehub, 1987, 640.

<sup>43</sup> Ibid.

<sup>44</sup> Peter W. Juscyk and Carol L. Krumhansl, “Pitch and Rhythmic Patterns Affecting Infants’ Sensitivity to Musical Phrase Structure,” in *Journal of Experimental Psychology: Human Perception and Performance* 19, no. 3 (1993): 627-40. Preference was determined using the head turn method mentioned above.

<sup>45</sup> Ibid., 631-33.

interruption. In the second, brief pauses were inserted in the “correct” spots—after 2, 4, 8 and so on. This time, infants showed no clear preference between the two melodies, adding weight to the hypothesis that they had been able to recognize “correct” and “incorrect” phrase divisions in the melody.<sup>46</sup>

The researchers theorized that the infants were picking up on typical cues for phrase endings, such as drops in pitch, increased duration of tones, and a greater proportion of octave equivalencies. But how specific were these cues, and how closely tied to the musical context? “Is it merely the presence of a discontinuity with respect to the pitch height and tone duration variables that is important, or does the direction of the change also matter?”<sup>47</sup> To test this, infants were again offered two versions of the minuet. Both versions paused at the “correct” points, but one was played forward and the other was played backwards. Theoretically, if the cues for phrase endings were “general”—e.g. “phrase endings are marked by a slowing in melodic motion,” “phrase endings are marked by a larger melodic skip,” etc.—then the forward and backwards melodies would be equally acceptable. Instead, the infants strongly preferred the forward melody, with the pauses at phrase endings.<sup>48</sup>

In all of these different versions of the test, the infants displayed a remarkable musical intelligence and sensitivity to context. No one presented these four-month-olds with a series of lectures on music analysis, or the characteristics of the minuet form. As far as we know, none of them had taken a correspondence course on distinctives of the Vienna School: “Particularly evident is the regularity of . . . recurrent phrases and periods.”<sup>49</sup> Nevertheless, they identified the correct division of these recurrent phrases and periods with great facility.

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<sup>46</sup> *Ibid.*, 633.

<sup>47</sup> *Ibid.*, 634.

<sup>48</sup> *Ibid.*, 634-35.

<sup>49</sup> *Schirmer History of Music*, ed. Léonie Rosenstiel (New York: Schirmer, 1982), 540.

## The braid of perception

Once again, we return from these explorations to the question of spontaneity and reflection in music. The Orphean proposes that the power of music can be partly traced to the spontaneity of the musical experience. We do not have to analyze or study music in order to be moved and touched by it. The ability to understand and respond to music arises in us naturally. There is in fact, good reason to embrace this proposal. We possess musical intuitions which are brought to bear on musical sound spontaneously, rather than through formal training or any process of conscious, analytical reflection. Music is, in a very meaningful sense, a part of us.

On the other hand, our study has forced us to refine our definition of spontaneity. “Spontaneous,” when applied to music perception, cannot be paraphrased, “simple,” nor “lacking rational order,” nor “random.”

A second refinement has been suggested. I have often referred to spontaneous responses as “immediate.” However, in the context of music, “immediate” cannot bear its literal sense of “un-mediated.” We have learned music does not simply wash over us, nor spring “straight from the heart,” as it were, by-passing the brain. We are at every point in the musical experience involved in actively, cognitively organizing sound.

Again, this suggests something of a hybrid between the ideas encountered in our first two chapters. Pike argues that the mind is actively concerned with analysis and discerning structure in music, but only at the highest levels of conscious reflection. *Christmas Eve* also puts spontaneity and analysis at opposite ends of the spectrum. Yet we have seen that even in our most intuitive and spontaneous musical experiences the mind is actively involved—engaging in a kind of pre-reflective “analysis” of structural elements (e.g. the infant’s identification of the correct structural divisions of Mozart minuet).

## Return to consciousness

Of course, acknowledging that our perception of music begins in the realm of the pre-reflective does not imply that it remains there. The categorical schemata and grouping mechanisms by which we organize musical sound are indeed largely preconscious and are experienced spontaneously. But in, with, and under this spontaneous apprehension of sound, we enjoy a conscious musical experience on which we may reflect, and which can be rationally analyzed.<sup>50</sup>

In fact, there seems to be a reflexive interaction between explicit knowledge of musical intuitions and growth in musical proficiency. Learning more about music (whether it be through formal instruction, training on a musical instrument, careful listening or whatever), both *brings about* and *depends upon* some degree of systematizing and making explicit of our intuitions. As listeners as well, pieces and styles of music which were at first inscrutable to us become accessible as we gain conscious knowledge of the organizing principles behind the music. Sloboda observes that one of the principal differences between the expert musician and the musically illiterate layperson “may lie in the *degree of awareness*”<sup>51</sup> that the musician has of the events and structures being employed.

Commonly, musical training involves acquiring the vocabulary in terms of which to describe the structure of music. Elements of this vocabulary (e.g. cadential sequence, tonic chord, passing note) often function as means of extending memory capacity. A musician can be consciously looking out for instances of such structures. This does not imply that such structures are not available to untrained people. The evidence suggests, rather, that untrained musicians have implicit knowledge of that which musicians can talk about explicitly.<sup>52</sup>

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<sup>50</sup> Generally speaking, cognitivism places more emphasis on the preconscious aspect of music perception than I think is appropriate. Some cognitivists, however, such as Sloboda, allow for a greater involvement of the conscious mind. I will return to this issue in the next chapter as we consider the debate between (cognitivist) Diana Raffman and (non-cognitivist) Roger Scruton.

<sup>51</sup> Sloboda, 5. My emphasis.

<sup>52</sup> Ibid.

In other words, there is a cognitive foundation of musical understanding which is largely implicit. However, this implicit knowledge can be made explicit; and as this happens our capacity for appreciating and understanding music is extended. The two levels of musical experience contribute to and enable one another, and listening to or playing music, involves us in moving continually back and forth between them.

The more we examine the production and perception of music, the more difficult it becomes to draw a hard and fast line between spontaneous (pre-conscious) and reflective (conscious) processes. On the one hand we encounter theoretical analyses of music such as Lerdahl and Jackendoff's *Generative Theory of Tonal Music*, where abstract reflection is guided by musical intuition. They begin their work: "We take the goal of a theory of music to be *a formal description of the musical intuitions of a listener who is experienced in a musical idiom.*"<sup>53</sup> On the other hand, musicians will often find that after much conscious attention has been given to a particular musical or technical problem, its execution becomes intuitive. I became acutely aware of this when I began giving piano lessons. Things which over time had become second nature and intuitive for me—what fingering to use in a given passage, how to use the sustain pedal effectively—had to be slowly and deliberately learned by my students. Sloboda writes of his own experience with a demanding passage of piano music. He was unable to make any progress with the piece, until he recognized that the troublesome section employed a regular pattern—it consisted of a four chord sequence, repeated four times. The conscious awareness of this regular pattern gave him a foothold on the passage, and enabled him to begin slowly mastering it. However, he continues, "I found that as my fluency improved I no longer had to consciously *think* of the music in groups of four in order for my fingers to do what was required of them."<sup>54</sup> In music, we find our different modes of thought and perception elegantly braided together; here,  
in the musical realm, conscious knowledge, understanding, intuition,  
sense-perception, experience and feeling come together. . . . [A]esthetic

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<sup>53</sup> Lerdahl and Jackendoff, 1. Emphasis original.

<sup>54</sup> Sloboda, 96.

experience is characterized by a convergence of mental “activities” elsewhere held apart.<sup>55</sup>

### A sort of convergence

We had hoped to find a way of affirming some of the central intuitions of both the Orphean and Pythagorean traditions. What we have found—this musical “convergence of mental activities”—should give us reason for some optimism. Here, knowledge, understanding, intuition, experience, feeling, all contribute to a symphonic whole. The power of music is indeed related to its spontaneity. We have an innate predisposition for music, which enables us to spontaneously identify and respond to musical sound. At the same time, these pre-reflective intuitions possess the sort of complexity and order which the Pythagorean attributes to music. The intricate and rational structure allows for—indeed, invites—conscious reflection; and this reflection in turn, enhances and extends our musical experience.

### Organizing sound

To this point we have considered two themes of psychomusicology: (1) musical nativism; and (2) the complexity of cognitive strategies used in music. I would now like to turn to another fundamental tenet of the discipline, the idea that “music is a mentally constructed entity. . . . for which there is no direct correlate in the score or in the sound waves produced in performance”<sup>56</sup> We will briefly explore this suggestion that we actively, cognitively order our musical experience. After this, I will return to some of the other issues raised in the first two chapters.

Some evidence for this active organization of aural experience can be seen in the infant studies cited earlier. The pervasiveness of this activity is also suggested by a

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<sup>55</sup> Raffman, 37.

noteworthy series of experiments on adult subjects.<sup>57</sup> In hearing music, these studies claim, we do not attend to the bare, acoustical qualities of sound, but to patterns and mental representations abstracted from those sounds.

Jordan and Shepard tested two groups of undergraduate students.<sup>58</sup> The students were presented with an ascending one octave scale beginning on middle C. A normal Western scale is made up of intervals of different sizes—from C to D is a whole tone, as is the distance from D to E, while the interval E to F is a semi-tone; roughly half the distance in physical frequency. However, the scale that Shepard and Jordan's students heard had been altered. The 7 intervals of the scale had been adjusted so that they were all equally spaced in terms of log frequency, while the whole scale still spanned exactly one octave.<sup>59</sup> The students were then asked to judge the size of each successive interval.<sup>60</sup> In theory, the students should have recognized each interval as the same size, as they were all identical. Instead, the students perceived the size of the intervals according to their deviation from the Western major scale. The third and seventh intervals (where one would find a semitone in the major scale) were judged to be larger than the others, even though they were the same size.<sup>61</sup> The students it would seem, evaluated the notes, not

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<sup>56</sup> Lerdahl and Jackendoff, 2.

<sup>57</sup> Daniel S. Jordan and Roger N. Shepard, "Tonal schemas: Evidence obtained by probing distorted musical scales," in *Perception & Psychophysics* 41, no. 6 (1987): 489-504; Roger N. Shepard and Daniel S. Jordan, "Auditory Illusions Demonstrating That Tones Are Assimilated to an Internalized Musical Scale," in *Science* 226 (1984): 1333-1334.

<sup>58</sup> Shepard and Jordan, 1984, 1333. The students had just completed a course on perception in which they had studied the physical scale of tone frequencies.

<sup>59</sup> Jordan and Shepard, 1987, 497. Jordan and Shepard obtained similar results with other experiments, employing different kinds of interval and scale distortion.

<sup>60</sup> One group was asked whether each successive interval was larger, smaller, or the same as the others of the scale. The second group was asked whether each interval was larger, smaller, or the same as the one which had immediately preceded it. Shepard and Jordan, 1984, 1333.

<sup>61</sup> Jordan and Shepard write, "For both groups of listeners, the 3<sup>rd</sup> and 7<sup>th</sup> intervals in the equalized scale, which correspond to the two smaller (i.e., semitone) intervals in the normal major scale, were the intervals most frequently rated as larger. Thirty-three percent of listeners in the first version and 59% of listeners in the second version judged the third interval as larger, whereas only 12% and 2% of these listeners, respectively, judged the interval as smaller. An even greater percentage of listeners judged the 7<sup>th</sup> interval as larger, 72% and 63%, in the two versions, respectively, with only 7% in both groups judging the interval as smaller." Jordan and Shepard, 1987, 502.

simply on their physical frequency, but on their conformity to or deviation from an internalized mental representation. The students rated these intervals as larger than the others, even though they had been specifically instructed to rate interval size strictly on the basis of the log frequency of the intervals. Jordan and Shepard conclude,

the musical schema of the diatonic scale tends to influence the actual perception and memory of tones (1) even when those tones are equally spaced in log frequency and, so, do not correspond to a musical scale, and (2) even when the listeners are asked to judge the tones with respect to their physical relationships . . . and not with respect to any musical relationships. . . . We take the results reported here . . . as supporting the idea that the perception and memory of tones is mediated by a tonal schema with . . . template-like properties.<sup>62</sup>

Once again, the study would seem to demonstrate that the perception of music is shaped by and depends upon patterns and schemata abstracted from aural experience.

## Transposition

There is of course a far simpler and more mundane demonstration of the way we abstract pattern from sounds. I can sing the tune to “Amazing Grace” beginning on G ~~(insert)~~ or beginning on A—indeed, beginning on any note of the scale. But in each case, we immediately recognize the melody. If someone tells us they are going to sing “Amazing Grace,” and then begins singing in the key of A flat, we do not object (even if we have perfect pitch): “Hey! What are you doing!? That song goes: ‘D-G-B-G-B!’” In the same way, I could sing the hymn at any number of tempi— from a galloping ♩ = mm 60, to a dirge-like ♩ = mm 60, or even slower—and a listener would still recognize the tune. The simple and commonplace phenomenon of transposition says Sloboda, demonstrates “that people do not remember simple melodies in terms of precise pitches and durations but in terms of patterns and relationships. . . . Musical memory . . . is a [sic] *abstraction* from the physical stimulus.”<sup>63</sup>

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<sup>62</sup> Ibid. The reader should make a mental note of the term “schema.” It will be important for our discussion in the following chapter.

<sup>63</sup> Sloboda, 5. Emphasis original.

A moment's reflection reveals how many aspects of music perception involve an ability to recognize pattern and abstract relations from aural input. Without the ability to recognize tonal and rhythmic patterns and structural relationships, we could not identify key, meter, consonance, dissonance, beat, syncopation, motivic development, compositional structure—in short, we would not be able to hear music as music.

## Hearing abstractions

It would seem that this conclusion would force a revision of my critique of Pike. In the last chapter I complained that Pike's "levels of abstraction" fail to describe our normal experience of music. Pike claims that we know music most truly and most deeply the more we move away from its sensible and material surface—from the sound, the "music" of music. Does the cognitive psychology of music lead us to the same counterintuitive conclusion as Pike's *Theology of Music*? Does this active organization of music force us to, like Pike (and in a different way, like Schleiermacher), identify the essence of music as "other-than-sounds" rather than "sounds"?

We can certainly say that hearing sounds *as music* requires our cognitive participation. We organize these sounds into abstract structures and group them into patterns and gestures. We identify some sounds for musical listening (Louis Armstrong's trumpet screaming out a high B-flat); while other sounds we do not (my neighbor's car alarm screaming out a high B-flat). Not too long ago, a friend's four year old daughter sat listening to a small propeller-driven plane overhead, humming and whining as it turned and climbed. "Listen Papa!" she said, "The airplane is singing a song!" We can in fact listen to an airplane's engine, or a modem's connection dial-up, or the wheels of a train over the tracks, and organize these sounds musically—hear them *as music*; and sometimes we choose to do so.

On the other hand, it seems equally true that a rich experience of music embraces far more than pattern recognition, far more than the application of schemata to aural input. Generally speaking we prefer to hear the singing tone of a voice, a violin, or an oboe, rather than a Cessna. In other words, in listening to music we are interested not just

in structural relationships and abstract schemata, but in the quality of sounds—their physical, sensual character.<sup>64</sup> We can imagine a performance of Chopin's *E Minor Prelude* on tuned car horns; or an all-kazoo rendition of Brahms' *Academic Festival Overture*, but we would find these presentations at the very least, inadequate. Certainly we would not respond to them in the same way as we respond to their canonical performances, even if we were able to abstract all the correct structural representations.

Structure and pattern alone cannot account for our experience of music or its power to move us. Consider our "Amazing Grace" example once again. No doubt, I would recognize "Amazing Grace" as "Amazing Grace" even at the glacial pace of  $\text{♩} = \text{mm } 30$ . But I would also identify it as *wrong*—as unmusical, and almost certainly, unappealing. Similarly, I could perceive the melodic structure if it were played  $3 \frac{1}{2}$  octaves below middle C, but the structural integrity of the performance would not neutralize the disagreeable effect of its extreme register. Categorical perception and abstraction play a key role in identifying forms and structures and components, but our aesthetic appreciation of them, our enjoyment of them, and our understanding of them at an affective level entails aural attention to material, sounding aspects of a performance.

While we indeed organize aural input into abstract structures, then, these abstract structures do not obliterate the sounding particulars from which they are derived. Raffman argues, "conscious perception of a musical performance includes conscious perception not only of its structural features, but also of its fine, and not so fine, within-category nuances."<sup>65</sup> Sloboda compares the work of Chomsky to that of music theorist Heinrich Schenker.<sup>66</sup> Just as Chomsky proposed that there were universal "deep structures" underlying all human language, so Schenker maintained that through analytical reduction, the theorist can uncover the deep structure or *Ursatz* of a musical

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<sup>64</sup> In support of this point is interesting to note the study mentioned earlier, in which children were presented with six different kinds of sounds. Infants preferred singing and instrumental music to all other sounds presented. Sloboda observes, "It seems that babies are here selecting *quality* of sound as the criterion for attention." (Sloboda, 199. Emphasis original.)

<sup>65</sup> Raffman, 72.

<sup>66</sup> Many have recognized the resemblances between the thought of these two figures. Indeed, Lerdahl and Jackendoff's work is a kind of attempted synthesis between Chomskian generative grammar and Schenkerian theory.

work. There is a critical difference however between the function of deep structures in music and in language.

Differentiation between pieces of music *is achieved at the surface level rather than at the level of deep structure*. . . . Much of the 'meaning' of any piece of music is given to it through the actual surface details. In language it is different. The significance of a sentence, in practical discourse, lies almost entirely in its deep structure.<sup>67</sup>

The perceptual categories we apply to our musical experience provide a backdrop or a grid against which we can measure and locate all the details of a particular musical statement. In this way, these categories enhance, rather than subsume our awareness of the music's material and sensual presentation.<sup>68</sup> The abstractions, the deep structures by which we organize our musical experience, provide us with the *syntax* of the music as it were. We encounter *semantics* at the level of the material.

There is some validity to the Pythagorean emphasis upon abstraction and rational structures in music perception. This other-than-sounds component of music, however, acts in concert with sounds; each contributing their distinct voice to the differentiated unity of music perception.

## Universal grammar and particular musics

Our discussion of an innate musical grammar touches on another problem raised earlier; that of universality and particularity in music. Schleiermacher's dialogue argues that "never does music weep or laugh over particular circumstances,"<sup>69</sup> but like the Christmas festival itself, expresses a joy which is universal rather than particular. Pike likewise asserts that "the eternal and universal character of music should be the dominating aspect,"<sup>70</sup> the great composer is one who is able to transcend the distinctives

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<sup>67</sup> Sloboda, 16. My emphasis.

<sup>68</sup> Raffman, 77.

<sup>69</sup> Friedrich Schleiermacher, *Christmas Eve: Dialogue on the Incarnation*, tr. Terrence N. Tice (San Francisco: EM Texts, 1990), 47.

<sup>70</sup> Alfred Pike, *A Theology of Music* (Toledo, Oh. : The Gregorian Institute of America, 1953), 15.

of his own musical culture.<sup>71</sup> I argued that in fact it is often the particular and distinctive qualities of a work which we find most appealing (or appalling, as the case may be). My son Joel shares a number of universal features with other 2 year olds. When the Sunday morning church service ends, and I go to collect him from the Sunday School, these universal features no doubt help me distinguish him from the bookshelves and tables and boxes of toys in the room. However it is all the particular and non-universal distinctives of his person that allow me to say, “Of all the 2 year olds in the room *this* one is my son.” It is all the particular and distinctive qualities of his face which bring a smile to my own, and which I look for specially when I look for Joel. Our engagement with music I argued is very similar to this kind of personal engagement.

Does not, however, the emphasis on a *universal* musical grammar (“M-grammar”) therefore, (like Pike’s account and Schleiermacher’s) undermine the integrity of individual musical styles? Our first encounter with the music of another culture is often bewildering—does not the assertion of an innate universal grammar imply that music should indeed be the “universal language of mankind”?<sup>72</sup> How do we reconcile the manifold voices of the world’s musics with the existence of an innate biological specialization?

We have already worked out part of the answer: the M-Grammar organizes sound at the level of “deep structure.” But against the background of this deep structure (in Schenkerian terms, the *Ursatz*), a myriad of surface elaborations may be played out in their own distinctive and idiosyncratic ways (the Schenkerian “foreground”). The cognitivists maintain that the grid which organizes musical perception is universal. I am suggesting that the gestures and movements which are plotted on that grid are not. It

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<sup>71</sup> Ibid.

<sup>72</sup> Henry Wadsworth Longfellow, *Outre-Mer*, as cited in *The Wordsworth Dictionary of Musical Quotations*, compiled by Derek Watson (Ware, Hertfordshire: Wordsworth Editions, 1991), 7.

seems that the grid itself is somewhat flexible,<sup>73</sup> and exhibits a considerable “openness.” A number of musical parameters are universally specified, but others are apparently not. It seems as if there is a universal “core” of human musicality which is embodied in a diverse range of forms. In terms of our discussion to this point, there are real cognitive constraints operative in music. Jackendoff concludes that “although musical grammar is not *all* innate, it is not all learned either. Rather, there is some innate ‘grain’ to our ability to construct musical grammars.”<sup>74</sup>

We have seen that our structural perception of music does not obliterate our aural and sensual perception. Neither do the reality of musical universals obliterate the distinctive contributions of particular elements. An “innate biological specialization for music” does not mean that I can fully appreciate the music of Australian aborigines—any more than an innate biological specialization for language means I can speak Swahili. At this point in my life it would take training and effort to “become fluent” in either one.

### **Mediated music**

Still it is important to acknowledge the reality of the universal in music. As we have seen to this point, there is compelling evidence for the reality of certain cognitive constraints on music which are innate and universal. A growing number of philosophers and musicians are insisting that the musical cultures of the world are irreducibly particular, and that it is quixotic to search for supposed universals.<sup>75</sup> However, the evidence we have been reviewing seems to suggest that the musical variety we encounter (and it is considerable) is bounded within certain universal constraints. This points to yet another difficulty with both the Orphean and Pythagorean accounts of music. Both fail to

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<sup>73</sup> Jordan and Shepard, 1987, 402.

<sup>74</sup> Jackendoff, 169. *Emphasis original.*

<sup>75</sup> Cf. the discussion in Introduction, 10-12.

acknowledge the ways in which our musical experience is *mediated*. For the Orphean, music bubbles up from the heart like a crystal spring—unmuddied by intellect, particular events or ideas. For the Pythagorean, music is a direct pipeline to the Ideal plane. Music does not arise from culture, from human creativity, or from cognitive operations, but from the very pattern of the cosmos.

What we have discovered however is that music is indeed mediated by the human mind, and that the shape of our mind constrains the shape of music:

For example (to take an extreme case), though idioms differ in metrical and intervallic possibilities, we feel safe in conjecturing that there is no idiom that makes use of metrical regularities 31 beats apart, or for which the most stable melodic interval is the thirteenth. Rather, *given the number of conceivable operations, the differences among idioms fall into a relatively constrained set*. These constraints on variation give an indication of the limitations of human musical cognition.<sup>76</sup>

### The loss of freedom in the loss of constraint

The composer, Arnold Schoenberg, is among those who rejected the idea of universal constraints on music perception. With a characteristically modern confidence, Schoenberg insisted that there were no limits to what human beings could comprehend musically. Schoenberg believed that in time, 12-tone, serial works would become as intuitively recognizable as the tonal music with which we are so familiar:

Tonal is perhaps nothing else than what is understood today and atonal what will be understood in the future. . . .

Experience teaches us that the understanding of the listener is an unstable quantity: it is not permanently fixed . . . . It gradually accommodates itself to the demands made on it by the development of art. . . . .

If we imagine that the perceptive faculties of audiences will advance nearly as far in the near future as in these past years, then we must have faith that we shall achieve a true knowledge of the ideas presented today and an understanding of their beauty.<sup>77</sup>

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<sup>76</sup> Lerdahl and Jackendoff, 282. My emphasis.

<sup>77</sup> Arnold Schoenberg, *Style and Idea. Selected Writings of Arnold Schoenberg*, ed. Leonard Stein, tr. Leo Black (Berkeley, Los Angeles: University of California Press, 1975), 284-285.

Against this vaguely Promethean optimism, Jackendoff observes that even composers who write 12-tone music generally cannot recognize its tonal organization intuitively. Likewise, he writes, children who are raised listening to atonal music (happy children, those) find it just as perceptually demanding as do the general public. "In short," says Jackendoff, "not every conceivable kind of musical pattern is accessible to intuitive learning."<sup>78</sup> Schoenberg maintained that the true composer, like God, creates *ex nihilo*, and many other modern composers have likewise self-consciously rejected any perceived limitation on creativity. In an interesting irony, many of these assertions of freedom have actually limited—at least in one sense—the human creative involvement in music.

According to cognitivism, our musical experience is ~~at least to some degree~~ actively constructed, as the listener abstracts structural patterns and organizations from the musical surface. However, the organizational principles of some modern compositional techniques (such as those used in serial and aleatory music) are apparently not able to be intuitively reconstructed in real time perception. A tonal composition is ~~in~~ ~~some sense~~ *actively recomposed* by the listener, as musical gestures are organized in cognitive schemata. But this sort of active participation in creatively constructing the piece is excluded by serial technique. Such compositional procedures

do not directly engage the listener's ability to organize a musical surface. In each of these cases, the gulf between compositional and perceptual principles is wide and deep: insofar as the listener's abilities are not engaged, he cannot infer a rich organization no matter how a piece has been composed or how densely packed its musical surface is. It is in this sense that an apparently simple Mozart sonata is more complex than many twentieth-century pieces that at first seem highly intricate.<sup>79</sup>

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<sup>78</sup> Jackendoff, 168.

<sup>79</sup> Lerdahl and Jackendoff, 300. I do not mean to imply that atonal music or aleatory music is *immoral*, nor would I deny that there are modern avant-garde works of great genius and beauty. There are any number of ways in which atonal works may be enormously successful. There may be instances (such as in the completely serialized works of Boulez) in which the inaccessibility and inscrutability of the musical surface is the very objective to which the composer aspires. One can imagine contexts in which a composer might wish to present music which is troubling, unsettling, or unattractive. There are also a large number of serial or atonal works which have a great deal of sensual, aural appeal, by virtue of the way in which they explore

Music involves an elaborate interplay of boundedness and contingency; constraint and creativity. It takes its shape according to both the patterns imposed by human creativity, as well as from patterns imposed upon human creativity. This is a different vision of music than those we considered in our first two chapters. For the Pythagorean, the blueprint of music is stamped indelibly upon the structures of the material world. For the stereotypical Orphean, music springs from the human soul, unrestrained by any rule or boundary. However the forms of music which are available to human perception are neither completely open nor entirely circumscribed. Part of what delights us in music is this dialogue between freedom and constraint.<sup>80</sup>

Though my focus has been on the cognitive constraints operating in music perception, there are other sorts of constraints which shape our experience. Two of the most significant are cultural and material constraints, and we could easily give as much time to each of these as we have to discussing cognitive constraints. Since these constraints are perhaps more widely recognized, I will only survey them briefly.

## Cultural constraints

The first is relatively uncontentious. Few would deny that our experience of music is shaped by our culture. Not every conceivable organization of tones is cognitively

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tonal relationships, textures, instrumentation, etc. What must be judged a failure however is the attempt to establish a new way of *hearing* music. We simply do not hear music in terms of permutations of tone row sets, expressed in inversions, retrogrades, retrograde inversions and so forth. When we hear atonal music, we listen to it using the same strategy as when we listen to tonal music—that is, in terms of tonal relationships which we attempt to organize into a structural hierarchy. Cf. Scruton, *The Aesthetics of Music* (Oxford: Clarendon Press, 1997), 281-308. “The ‘grouping’ required by serial organization forbids the experience of musical movement, as we know it. We are to hear the music as *sounds*, rather than tones, exhibiting an acoustical, rather than a musical, order. Yet this is manifestly *not* what we hear, in hearing atonal music. On the contrary, we strive to organize it in the usual way, to hear themes, motifs, tension and release. . . . Even in a piece as uncompromising as Schoenberg’s Violin Concerto [Op. 36] we hear *against* the tonal order.” Scruton, 304. Emphasis original.

<sup>80</sup> Much of this material on freedom and constraint was developed in conversation with my wife, Julie Guthrie, and I am grateful for her keen insights. In September of 1998, we presented a talk and performance to the St. Andrews Christian Supper Club: “Pattern and Passion: A Musical Parable of Freedom and Constraint.” I have also benefited from reading a draft of Jeremy Begbie’s *Theology, Music and Time*

available to us, and not every conceivable musical structure is culturally available.<sup>81</sup> To take one example, a number of scholars have noted the way in which the development of a cultural technology—music notation—opened up possibilities for music which could not have been otherwise imagined.<sup>82</sup> Many of the distinctives which have come to characterize the art music of our culture can be linked in some way to the development of notation. To name just a few: large-scale, architecturally elaborate forms; polyphonic complexity; a large and ever growing repertoire of works; the idea of musical works as discrete entities which exist in a particular form over time; the relative novelty (compared to other cultures) of improvisation—all of these characteristics of our (classical) musical culture are dependent upon or have their genesis in notation.

Notation does not only facilitate certain musical norms. It shapes the very way that musicians, composers and listeners conceive of music; for instance, as a collection of “notes”. Cook observes that “musical sounds do not contain notes in the same way that lemons contain pips: rather, notes are imaginative entities which have a history and a geography of their own.”<sup>83</sup> The earliest Western notational units were not notes, but *neumes*. “One neume” does not equal “one note.” Instead, neumes are graphical representations of musical gestures, usually comprising two or three or more notes.<sup>84</sup>

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(Cambridge: Cambridge University Press, forthcoming); particularly chapters 7 and 8, in which he discusses the issue of contingency and constraint in music.

<sup>81</sup> See for instance, John Blacking, *How Musical Is Man?* (Seattle: University of Washington Press, 1973); Wayne D. Bowman, *Philosophical Perspectives on Music* (New York, Oxford: Oxford University Press), 1998, Chpt. 7 “Music as Social and Political Force” and Chpt. 8 “Contemporary Pluralist Perspectives;” Richard Leppert and Susan McClary, eds., *Music and Society: The politics of composition, performance and reception*, (Cambridge: Cambridge University Press, 1987); John Shepherd, *Music as Social Text* (Cambridge: Polity Press, 1991); Nicholas Wolterstorff, “The Work of Making a Work of Music,” in *What Is Music? An Introduction to the Philosophy of Music*, ed. Philip Alperson (University Park, Penn.: The Pennsylvania State University Press, 1987), 101-29.

<sup>82</sup> Cf. Nicholas Cook, *Music, Imagination, and Culture* (Oxford: Clarendon Press, 1992) 216-223; Sloboda, 242-53; Piero Weiss and Richard Taruskin, eds., *Music in the Western World: A History in Documents* (New York, London: Schirmer, Macmillan, 1984), 54.

<sup>83</sup> Cook, 219.

<sup>84</sup> Cf. *Schirmer History of Music*, 32-33; “Neuma” in *Harvard Dictionary of Music*, 2<sup>nd</sup> ed., ed. Willi Apel (Cambridge, Mass.: Belknap Press of Harvard University Press, 1972), 571; “Neumatic Style” in *Ibid.*, 571-573; “Notation” in *Ibid.*, 578-581.

Identifying the “note” as the fundamental unit of music has significantly shaped the thought and practice of composers and musicians.

Other illustrations of how cultural inventions shape musical thought and practice are not hard to come by. The role of the guitar in popular music was changed dramatically by the advent of electronic amplification; as was that of the bass violin/guitar. A composer writing music for a big band in the 20’s and 30’s had to write with the acoustical limitations of these parts of the rhythm section in mind; they could be easily overpowered by the brass. This sort of idiomatic writing in turn shaped audience expectations and musical tastes.

Examples could be multiplied, but the point is sufficiently clear. The types of activities or sounds we accept as music, the aesthetic criteria we apply to that music, the musical forms and norms available to us as we listen—all of these are profoundly shaped by our culture.

## Material constraints

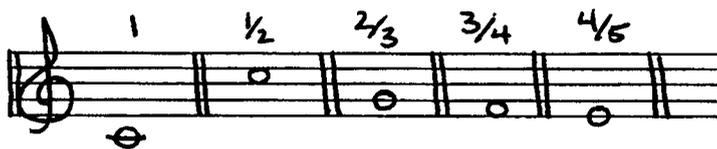
The idea of material constraints in music is far more controversial, although it is a notion with a venerable lineage. Many have suggested that our scales and system of tonality, even the distinctive features of our melodies and rhythms are shaped by the *physical* qualities of sound itself. Just as oxygen and hydrogen combine to make water, just as copper and tin can be alloyed into bronze, so some have argued, certain sounds and notes mix together well, while others do not—simply on the basis of their physical properties. In particular, it has seemed to many that the harmonic series (or overtone series) firmly roots tonality in the material world. Here we find a mathematical/acoustical basis for the most fundamental intervals of tonality: “The simpler intervallic relationships between tones exactly correspond to simple ratios, in small whole numbers, of lengths of

a vibrating string.<sup>85</sup> A vibrating string whose length is halved (1:2) produces a tone an octave higher than the vibration of its full length. The ratio 1:3 produces a tone an octave and a fifth above the fundamental tone. The ratio 1:4 produces a note two octaves above the fundamental, and 1:5 a note a third higher.<sup>86</sup> [See figures 3.6 and 3.7, taken from Piston.]

**Figure 3.6. Harmonic series**



**Figure 3.7. String length ratios and resulting pitches**



According to legend, it was Pythagoras who first discovered the relationship between musical intervals and mathematical ratios.<sup>87</sup> Plato developed these observations as well. In the *Timaeus*, he describes the work of the demiurge, indicating that the various divisions and parts of this world soul produce the numerical sequence: 1, 2, 3, 4, 8, 9, and 27.

[the Creator] took the three elements of the same, the other, and the essence, and mingled them into one form . . . . When he had mingled them with the essence and out of three made one, he again divided this whole into as many portions as was fitting . . . . And he proceeded to divide after this manner:—First of all, he took away one part of the whole [1], and then he separated a second part which was double the first [2], and then he took away a third part which was half as much again as the second and three times as much as the first [3], and then he took a fourth part which was

<sup>85</sup> Walter Piston, *Harmony*, 5<sup>th</sup> ed., rev. and exp., Mark Devoto (New York: W. W. Norton, 1987), 545.

<sup>86</sup> *Ibid.*, 546.

<sup>87</sup> Boethius, I. x-xi, tr. Bower, 59-63. Cf. Nichomachus *Enchiridion harmonices*, tr. Thomas Stanley (1701), in Weiss and Taruskin, 3-5.

twice as much as the second [4], and a fifth part which was three times the third [9], and a sixth part which was eight times the first [8], and a seventh part which was twenty-seven times the first [27]. . . .<sup>88</sup>

Converted to relative string lengths, these numbers generate the musical intervals of octave (1:2), fifth (2:3), fourth (3:4), octave (4:8), whole tone (8:9), and twelfth (i.e., a fifth plus an octave) (9:27).<sup>89</sup> In other words, this series of simple integers, when applied to vibrating bodies produces the fundamental intervals of musical practice: the octave, the fourth and the fifth (as well as the whole tone—the distance between a fourth and a fifth). This Platonic-Pythagorean tradition was mediated to the West in large part through the writings of Boethius. In his *De institutione musica*, Boethius devotes considerable attention to the mathematical and acoustical sources of musical intervals, and his discussion would profoundly shape Western music theory for over a millennia. Even into the 20<sup>th</sup> century, versions of Pythagorean tonal theory have continued to find advocates. Notably, in the second half of the century, composers Paul Hindemith and Leonard Bernstein have each advanced an account of tonality rooted in the harmonic series.

The appeal of the Pythagorean tradition of tonal theory is understandable. It gives music a firm foothold in physical reality—beauty and artistic virtue are determined by the very structure of the universe, rather than by “Top of the Pops.” The very proportions and physical qualities of different tones is what determines consonance and dissonance.

Hindemith writes,

Tonal relations are founded in Nature, in the characteristics of sounding materials and of the ear, as well as in the pure relations of abstract numerical groups. We cannot escape the relationship of tones. . . . Tonality is a natural force, like gravity.<sup>90</sup>

Moreover, the relationship between musical and universal knowledge is potentially reciprocal. Inasmuch as music reflects universal structures, music can yield insight into those structures.

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<sup>88</sup> Plato, *Timaeus*, tr. Benjamin Jowett, [text on-line], available at The Internet Classics Archive: <http://classics.mit.edu/Plato/timaeus.html>

<sup>89</sup> Schirmer *History of Music*, 7.

<sup>90</sup> Paul Hindemith, *The Craft of Musical Composition*, tr. Arthur Mendel (New York: Associated Music Publishers, 1942), 152.

Despite all of these apparent virtues, there are substantial problems with the Pythagorean account. Practically speaking, the most troubling difficulty is a mathematical snarl in the theory itself. While simple ratios do indeed produce octaves, fifths, fourths and so on, the “mathematically pure” versions of these intervals cannot be combined into a single octave series without remainder.<sup>91</sup> Early theorists, including Boethius, were not unaware of this difficulty, and over the centuries a multitude of solutions have been proposed; but however successful these mathematical solutions may be, the fact that a “solution” needs to be found at all compromises the Pythagorean claim. A complete tonal system cannot be derived from pure mathematical and acoustical principles without some measure of tinkering or approximation.

Beyond this, the most prominent voices in aesthetics and music philosophy over the past two centuries have insisted upon locating the musical experience less in the sensible tone (e.g. Pythagoras’ acoustical frequencies), than in our imaginative perception of the same.<sup>92</sup> (Witness Hanslick’s wonderfully colorful dismissal of those who merely respond to the sensual properties of music: “a good cigar, some exquisite dainty, or a warm bath yields them the same enjoyment as a symphony.”<sup>93</sup>) The cognitivists we have been considering would likewise argue that music is primarily ordered by the human

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<sup>91</sup> Roger Scruton, 242.

Imagine for instance, we were setting out to tune a piano. It would seem that we could do so by continuing to move up by perfect fifths, (from C to G, from G to D, etc.), each time applying the ratio  $3/2$ , eventually reaching all 12 notes of the chromatic scale. We could then tune the whole piano by octaves—tuning all the C’s from the first C, all the G’s from the tuned G, all the D’s from the tuned D and so on. The problem is, the tuning system doesn’t work out. If we move up from our starting C twelve times –  $(3/2)^{12}$  — we arrive at a high B sharp (enharmonically C), seven octaves above our starting point. We should be able to derive the same note by applying our 2:1 ratio to the fundamental C seven times—expressed mathematically,  $2^7$ . When we compare these two fractions however, the problem is apparent.  $(3/2)^{12}$  works out to 129.7463378906;  $2^7$  on the other hand works out to 128. The gap between these two numbers—known as a Pythagorean comma—produces a difference in sounding notes that can be easily heard. Similar commas would emerge if we were to tune upwards by thirds, fourths, or any other interval. Cf. Piston, 548-550.

<sup>92</sup> Cook, 10-22.

<sup>93</sup> Hanslick, *The Beautiful in Music*, tr. 1957, 91. Cited in Cook, 15.

mind rather than by the acoustical properties of sound,<sup>94</sup> and we have considered some evidence of this “categorical perception” in music. For these reasons, there are relatively few who have followed Bernstein’s and Hindemith’s attempt to base our system of tonality in the physical properties of sound itself.<sup>95</sup> Storr insists, “Language does not emanate from the Earth, but from the human brain. So does music.”<sup>96</sup> John Barrow argues at length for “the cosmic source of human creativity,” but draws the line at music, writing “Nature does not display musical structure; musical creations are not culturally independent. . . . Music may be generated; it may be invented; but it is surely not discovered.”<sup>97</sup>

Nevertheless—despite the fact that the different “pure” intervals don’t add up to a single musical mode; despite the fact that we apparently order our aural percepts according to Gestalt principles; despite the fact that the structures which contribute to our understanding of music (e.g. Sonata, Fugue) are imaginative constructs rather than acoustical verities—despite all of this, there still remains the correlation between basic frequency relationships and basic intervallic relationships (e.g. doubling a frequency produces an octave, etc.). So while some have dismissed the possibility of *any* acoustical basis for tonality, others have taken a more moderate stance. The issue is a contentious one among psychologists and philosophers—the arguments are complex, and the material demanding. Even where theorists agree on data, the interpretations of that data often vary

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<sup>94</sup> Although of course, the cognitivist account of musical perception differs radically from those of the aforementioned philosophers in a number of ways.

<sup>95</sup> Two other notable figures over the past century who have made this argument are Heinrich Schenker and Deryck Cooke.

<sup>96</sup> Anthony Storr, *Music and the Mind* (New York: Ballantine, 1992), 64.

<sup>97</sup> John D. Barrow, *The Artful Universe: The Cosmic Source of Human Creativity* (Boston: Back Bay Books, 1995), 215.

widely.<sup>98</sup> We certainly cannot attempt any sort of conclusive determination here, but we can offer a brief summary of some widely accepted observations.

To begin with, we can reliably identify the octave as a universal feature of music which also reflects a fundamental acoustical relationship. Discussing constraints on the construction of scales, Dowling and Harwood acknowledge,

[One] constraint is that tones whose fundamental frequencies stand in a 2:1 ratio. . . are treated as very similar to each other. In cultures having labels for the pitches of the scale, tones an octave apart are given the same name. . . . Further, in cultures with functional harmony . . . tones of the same name have the same harmonic functions when combined simultaneously with other tones. The overwhelming majority of cultures in the world make use of the equivalence of tones an octave apart.<sup>99</sup>

Not only human beings, but all mammals—even white rats!<sup>100</sup>—recognize sounds an octave apart as similar.<sup>101</sup> Even Storr concedes,

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<sup>98</sup> See Dowling and Harwood, (95-113), for instance, for several different theories of how musical scales relate to acoustic frequency. They describe psychophysical theories of scale, integer ratio theories of scale, and multidimensional approaches to scale construction, and they propose their own logarithmic theory. Cf. Piston, “The results of many years of research in psychoacoustics have not yielded much that is still not subject to widespread debate.” 553.

<sup>99</sup> The citation continues, “The only exceptions we have found are certain groups of Australian aborigines.” Dowling and Harwood, 93.

<sup>100</sup> Ibid.

<sup>101</sup> Augustine contributes a fascinating discussion of the octave in *De Trinitate*, IV, ii-iv. A portion of chapter 2 reads:

“By joining therefore to us the likeness of His humanity, He took away the unlikeness of our unrighteousness; and by being made partaker of our mortality, He made us partakers of His divinity. For the death of the sinner springing from the necessity of condemnation [sic] is deservedly abolished by the death of the Righteous One springing from the free choice of His compassion, while His single [death and resurrection] answers to our double [death and resurrection]. For this congruity, or suitability, or concord, or consonance, or whatever more appropriate word there may be, whereby one is [united] to two, is of great weight in all compacting, or better, perhaps, co-adaptation, of the creature. For (as it just occurs to me) what I mean is precisely that co-adaptation which the Greeks call *harmonia*. However this is not the place to set forth the power of that consonance of single to double which is found especially in us, and which is naturally so implanted in us (and by whom, except by Him who created us?), that not even the ignorant can fail to perceive it, whether when singing themselves or hearing others. For by this it is that treble and bass voices are in harmony, so that any one who in his note departs from it, offends extremely, not only trained skill, of which the most part of men are devoid, but the very sense of hearing. To demonstrate this, needs no doubt a long discourse; but any one who knows it, may make it plain to the very ear in a rightly ordered monochord.”

*On the Holy Trinity*, trans. Arthur West Haddan, rev. Prof. W. G. T. Shedd, A Select Library of the Nicene and Post-Nicene Fathers of the Christian Church, Series I, Vol. III [text on-line] (Edinburgh: T & T Clark; Grand Rapids: Eerdmans) Book IV, Chpt. 2, available at Christian Classics Ethereal Library: <http://www.ccel.org/s/schaff/ecf/npnf103/htm/TitlePage.htm>

The octave is an acoustic fact, expressible mathematically, which is not created by man. The composition of music requires that the octave be taken as the most basic relationship, 'the same note' referred to above.<sup>102</sup>

Additionally, it seems that the two other pure intervals, the fourth and the fifth, have a near-universal status ("intervals close to our perfect fifth and perfect fourth appear in the polyphony of most cultures"<sup>103</sup>).

The other side of the story is this: in the case of all intervallic relationships, even with the octave, there seems to be some amount of human "adjusting" going on. Cross-culturally, human beings tend to use an octave which is "stretched" slightly larger than a pure 2:1 ratio,<sup>104</sup> and fourths and fifths are similarly approximate.<sup>105</sup> Additionally, within the set "frame" of the octave, the choice of pitches which constitute the scale varies from culture to culture. Even among those who use the same scale, there are differences over which pitches are considered consonant and which are considered dissonant. This can be seen across the history of Western music—the third has for at least six centuries been considered a consonance, but at one time was regarded as a dissonance. Over time, the status of the fourth has shifted back and forth between consonance and dissonance.

Once again it seems that there is an interplay between invention and discovery; between "given-ness" and openness, in which both human and non-human factors contribute something to tonal systems. We cannot justify the complete Western system of tonality from acoustical frequencies, but we can say that Western tonality (along with the other musical systems of the world) has developed *in conversation* with the physical properties of sound. Storr is only willing to grant independent acoustical reality to the

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<sup>102</sup> Storr, 52.

<sup>103</sup> Sloboda, 254. Cf. Lerdahl and Jackendoff, 292, 294; Steven Pinker, *How the Mind Works* (London: Allen Lane, The Penguin Press, 1997), 530-531.

<sup>104</sup> Dowling and Harwood, 101-104. In practice, the actual octave in musical cultures is 2.009:1 rather than 2:1.

<sup>105</sup> Cf. the discussion in Scruton, 242-44. "The solution [to the musical deviations from 'pure' intervals] is granted by the context-dependence of musical perception. The ear will tolerate departures from the perfect

octave, but even if this were the only contribution of the physical world its significance could not be overestimated.<sup>106</sup> The octave provides a frame, a set of boundaries, within which (and across which) a variety of musical systems are developed.<sup>107</sup> This description is not only musically sound, but theologically attractive. We see the world as a place in which there are real boundaries and constraints, and within which there is space for contingency and human creativity.

### A polyphonic perspective

The more closely we examine music, the more we find that it cannot be characterized as a single unaccompanied melodic line. Instead it is a richly dense texture of many voices—cognitive, cultural, material and individual. If any voice is neglected or fails to sound, the counterpoint collapses. We are left with a hollow and disjointed collection of sounds, rather than a vivid and resonant interplay of voices. This is the case if we fail to acknowledge any sort of mediating influences in music. It is also what happens if we emphasize only one sort of constraint while either failing to mention or altogether denying the importance of others. Unfortunately, the musical subdisciplines share with the rest of academia a tendency toward reductionism.

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intervals and will—in context—hear as a fourth or a fifth an interval which is, from the mathematical point of view, only approximate.” (243)

<sup>106</sup> The importance of octave equivalence can be further seen in the way in which it underwrites a number of “universals of strategy” in music. Dowling and Harwood for instance identify the following musical universals: “The octave is divided into stable *discrete pitch levels* . . . . Almost all the world’s scales use *five to seven pitch levels* in the octave . . . . Those pitch levels are organized into a *hierarchical structure* with some more important than others.” 238, emphasis original. All of these universals of organization are based in some way upon the assumption of octave equivalence.

Sloboda considers the way in which psychological constraints of strategy can be matched up with acoustical constraints, and concludes, “The 12-note chromatic scale can be seen as the single system which satisfies both algebraic and acoustic constraints, and to which music therefore in some sense, tends.” 257.

<sup>107</sup> Some months after first writing this section of the chapter (and to my great surprise), I discovered that Schleiermacher makes a very similar proposal in his *Ästhetik*: “Schleiermacher suggests that in music the octave is given by universal nature, while various scales are relative to particular cultures.” Albert L. Blackwell, “Schleiermacher on Musical Experience and Religious Experience,” in *Friedrich Schleiermacher and the Founding of the University of Berlin*, ed. Herbert Richardson (Lewiston, N. Y. : Edwin Mellen, 1991), 137. Cf. *Friedrich Schleiermacher’s Ästhetik*, ed. Rudolph Odebrecht (Berlin: Walter de Gruyter, 1931), 55.

McClary for instance insists upon the central role of society in establishing musical norms, and so she begins one recent article by attempting to debunk the false religion of neo-Pythagoreanism.<sup>108</sup> Those who attach some sort of “universality and extra-human truth”<sup>109</sup> to music are part of a false “priesthood of professionals”<sup>110</sup>—comfortable within the dominant culture, and seeking to reinforce the status quo. They link socially and politically rooted musical norms to “natural or implicitly supernatural,” non-human sources, thereby masking the “implicit social agenda” at the heart of musical practices.<sup>111</sup> Similarly, while McClary does not in any way deny the reality of cognitive constraints in music perception, neither does she in any way acknowledge them. The source of music is identified so completely with politics, gender roles and other cultural norms that any material or perceptual contributions are implicitly excluded. In the same volume, Leppert analyzes different 18<sup>th</sup> century treatises on acoustics and Pythagorean theory, concluding that they present us with “the musical complement of Western cultural hegemony.”<sup>112</sup> Eades notes that just as religious norms have typically been understood as divinely inspired, so musical norms have been viewed “as a manifestation of divine harmony and order . . . since Phytagoras [sic].”<sup>113</sup> In both cases, Eades argues, we now recognize that these are “the product of convention, with no reality outside the minds and shared ideas of the listeners. Conventions arise through repeated consistent interpretation within a group or society.”<sup>114</sup> Those writing on music from a social perspective often complain that

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<sup>108</sup> Susan McClary, “The blasphemy of talking politics during Bach Year,” in *Music and Society: The politics of composition, performance and reception*, eds. Richard Leppert and Susan McClary (Cambridge: Cambridge University Press, 1987), 13-62.

<sup>109</sup> *Ibid.*, 17.

<sup>110</sup> *Ibid.*, 16.

<sup>111</sup> *Ibid.*, 17.

<sup>112</sup> Richard Leppert, “Music, domestic life and cultural chauvinism,” in *Music and Society*, 74.

<sup>113</sup> J. S. Eades, “Dimensions of Meaning: western music and the anthropological study of symbolism” in *Religious Organization and Religious Experience*, ed. J. Davis (London: Academic Press, 1982), 195.

<sup>114</sup> *Ibid.*, 197.

musicology tends to neglect the central role of culture,<sup>115</sup> but in redressing this neglect they too often offer a similarly reductionist account of music.

The same myopia can be observed within the camp of the cognitivists. Steven Pinker describes Lerdahl and Jackendoff's work and describes a psychological theory of "lawful connections between patterns of intervals and patterns of emotion," before concluding simply: "So that is the basic design of music."<sup>116</sup>

In each of these accounts (and many others) we are offered an impoverished description of music. The cognitivists silence the voice of culture; the "culturalists" silence the voice of the material world; the Pythagorean silences the voice of the mind, and the Orphean silences all, in favor of a nameless, place-less, unconscious ecstasy.<sup>117</sup> Such accounts are not merely incomplete, but misleading, for (as I will argue more fully) music *in its essence* incorporates cultural, material, cognitive, emotional and properly musical elements.

It may seem surprising that I have given so much space to "constraint" in a study of music. Does not music have to do with the heart, with the emotions, with self-expression? How, among this structural tangle of cognitive, cultural, and material limits can there be *any room* for artistic expression and freedom? In fact, one of the arresting features of music is that although it is characterized by all sorts of constraints, we experience it as immediate, as free, as expressive. And this is as it should be. In music we find the means to express ourselves and be ourselves—not by throwing off constraints, but by dwelling within them. Knock out the supporting beams, and the building collapses.

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<sup>115</sup> Cf. Rose Rosengard Subotnik, "On Grounding Chopin," in *Music and Society*, 105-31, esp. 105-13; Leppert and McClary, "Introduction" in *Music and Society*, xi-xix.

<sup>116</sup> Pinker, 534. Pinker's elucidation of music is sandwiched between similarly reductionist accounts of humor, philosophy, literature, movies and religion—all packed into one forty-five page chapter, modestly titled "The Meaning of Life."

It is only within the structures of the thing that we find freedom to move. This is a principle that applies to far more than melodies and rhythms, but music teaches us of it perhaps as clearly as any other area of our experience.

## A spontaneous rationality

So has our investment in music perception research yielded any dividends? We began by wondering about the ubiquity of music in human culture and Christian worship, and have considered two hypotheses concerning that ubiquity. Has our survey contributed to a more satisfying account of music than the one outlined in *Christmas Eve* and in Pike's dissertation? What does it offer to the Orphean and Pythagorean traditions in which these works stand?

Looking back over the chapter, it would seem that we have gained a few building blocks with which to begin constructing an answer to our opening question: "*Why music?*"

1. Part of the answer is, *music displays an extraordinary structure, complexity, and order*, a complexity which in some way resembles that of our own being, and which invites rational reflection.
2. Part of the answer again, is *music is innate and spontaneous; it is in a very real way, part of us*. In the jargon of the cognivist, we have "a biological specialization" for music. More poetically, we can say that we have been in some sense *made for* music.
3. In addition to this, I have also suggested that we are drawn to music because of the way in which *it draws together different aspects of thought and perception*. Our musical experience is neither "spontaneous-not-reflective" nor "reflective-not-

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<sup>117</sup> Happily there are exceptions. Sloboda for instance (*The Musical Mind*) is remarkably fair and balanced in his presentation. In his definitive survey of psychomusicology, he also includes discussions of cultural, neurological and physical contributions to music.

spontaneous.” In music, conscious and pre-conscious thought, experience and judgment, all play their part in a symphony of perception.<sup>118</sup>

We have also uncovered several other features which may contribute to understanding the ubiquity of music.

4. To a certain extent our experience of *music is constructed—re-constituted by the listener in categorical perception*. Music draws us in and makes each listener in some sense, co-creator.
5. This construction is constrained; not only by our cognitive processes, but by cultural norms and by the material qualities of sound. On the other hand, the constraints of music are not the rigid boundaries of determinism. I have suggested that *music’s ubiquity can be partly attributed to its contrapuntal interplay of restraint and freedom, given-ness and openness*.

These observations do not entirely satisfy our opening query, but they provide us with some pieces to the puzzle and start us on our way.

## Of short circuits and overflow

*Nature is, above all, profligate.*<sup>119</sup>

—Annie Dillard

One final note: While the research we have considered begins to unravel some puzzles for us, it also creates new ones, not least for the biological disciplines carrying out the research. Music has remained something of a riddle for evolutionary biology, ever since Darwin identified it as such more than a century ago. He wrote,

As neither the enjoyment nor the capacity of producing musical notes are faculties of the least use to man in reference to his daily habits of life, they must be ranked among the most mysterious with which he is endowed.<sup>120</sup>

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<sup>118</sup> Cf. Raffman, 37.

<sup>119</sup> Annie Dillard, *Pilgrim at Tinker Creek* (New York: Quality Paperback Book Club, 1990), 67.

In other words, the evolutionary biologist is faced with the same question we have raised: *Why music?* Sloboda identifies this as “the fundamental question which, in many ways, must motivate all scientific enquiry into music[:] . . . . *why* does music pervade human culture?”<sup>121</sup>

We would not be faced with this conundrum if music merely characterized *some* societies, or if only some percentage of the population spontaneously developed the capacity to hear music with understanding. Nor would music be a mystery if it were simply an elaboration of the same cognitive processes we use in language and environmental hearing<sup>122</sup>—but this does not seem to be the case. Studies of brain localization suggest that music “employs a distinctive configuration of neural resources.”<sup>123</sup> “Initially we might think that music just uses preexisting materials from auditory perception,” writes another author, “But in fact . . . it’s more specialized than that.”<sup>124</sup> Jackendoff goes on to outline the problem pointedly:

The overall picture is that there is a partly specialized Universal Musical Grammar, which, like language, is a species-specific adaptation. An adaptation for what?—That’s not so clear. It’s easy to see what evolutionary advantage is conferred by having language, but it’s hard to imagine how music does any good for our survival as a species. I consider this a real puzzle: Why should there be such a thing as music among our abilities?<sup>125</sup>

In one investigation after another the riddle is acknowledged. Barrow writes,

Musical appreciation is not an attribute that increases our adaptation to the world: it does not enhance our chances of survival. Were it so, then we would find musical abilities to be widespread amongst the other members of the animal world.<sup>126</sup>

Sloboda sounds the same note, observing that

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<sup>120</sup> Charles Darwin, *The Descent of Man, And Selection in Relation to Sex*, vol. 2 (1871 edition, reprint, Princeton, N. J. : Princeton University Press, 1981), 333.

<sup>121</sup> Sloboda, 267. Emphasis original.

<sup>122</sup> As some have suggested, e.g. Barrow, 240.

<sup>123</sup> Sloboda, 265. Cf. Storr, 33-41.

<sup>124</sup> Jackendoff, 170.

<sup>125</sup> Ibid.

<sup>126</sup> Barrow, 240.

in the case of music, it is not at once clear how musical behavior makes for better adapted individuals that are more likely to survive, and this, of course, is a precondition for any mutation to be selected for transmission to future generations. This puts music in a special case apart from language and other 'practical' skills whose survival values are numerous and obvious.<sup>127</sup>

He goes on to warn that as music no longer serves the competitive function that brought it about (whatever that may have been), it may gradually fade from our repertoire of adaptations.<sup>128</sup>

Steven Pinker suggests five possible evolutionary advantages that music may have conferred, but finally concludes that there still must be

Something else. Something that explains how the whole is more than the sum of the parts. Something that explains why watching a slide go in and out of focus or dragging a filing cabinet up a flight of stairs does not hale souls out of men's bodies. Perhaps a resonance in the brain between neurons firing in synchrony with a soundwave and a natural oscillation in the emotion circuits? An unused counterpart in the right hemisphere of the speech areas in the left? Some kind of spandrel or crawl space or short-circuit or coupling that came along as an accident of the way auditory, emotional, language, and motor circuits are packed together in the brain?

This analysis of music is speculative but it nicely complements the discussion of mental faculties in the rest of the book. I chose them because they show the clearest signs of being adaptations. I chose music because it shows the clearest signs of not being one.<sup>129</sup>

Jackendoff is candid enough to finally concede, "Having no coherent answer to these puzzles, I'll go on . . ." <sup>130</sup>

So while cognitive psychology and neuroscience may give us some insight into how we perceive and process music, it does not offer us "the answer" to music. In fact, it is in these disciplines, perhaps more than any others, where the mystery of music is most

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<sup>127</sup> Sloboda, 266.

<sup>128</sup> Ibid., 267-68.

<sup>129</sup> Pinker, 538.

<sup>130</sup> Jackendoff, 170.

apparent. At the end of the day we are left with a speculative “short-circuit . . . that came along as an accident.”<sup>131</sup>

I would not claim that theology can provide definitive answers where these disciplines fail; our account of music will likewise be partial and speculative. Nor would I want to argue that we are drawn to music because of its “uselessness”—music conveys to us advantages of all sorts. However, it is worth noting that naturalistic evolution has *special* difficulties making sense of music. Indeed, if the fundamental logic of the world is that of competition, survival, and efficiency, music remains more or less a mystery. But in a world of grace, music belongs.<sup>132</sup> Music is out of step in a cosmos that has been ordered by the cruel economy of competitive advantage. It makes sense however, in one ordered by a God who chose to set his Name on “the fewest of all peoples” (Deuteronomy 7:7); who invites “whoever is thirsty” to come and “take the free gift of the water of life” (Revelation 22:17); who throws open his royal banquet to “the poor, the crippled, the blind and the lame” (Luke 14:21).

In the ever more efficient, competitively streamlined future of evolutionary biology, the place of music is uncertain (so says Sloboda<sup>133</sup>). The New Testament, by contrast, waits for a New Creation in which we shall hear not only humanity, but “every creature in heaven and on earth and under the earth and on the sea, and all that is in them,

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<sup>131</sup> Probably the most convincing explanation of music in terms of evolutionary biology is advanced by Ellen Dissanayake in *Homo Aestheticus: Where Art Comes From and Why* (Seattle: University of Washington Press, 1995).

<sup>132</sup> I have received some objections to this material when I have presented it in various contexts, so let me be quite clear about what I am saying. I am not claiming that music disproves the theory of evolution. Indeed, I am not the one saying that evolutionary theory has a hard time accounting for music. I am reporting the fact that a number of prominent cognitive psychologists (and scientists in related fields) say that music is a perplexing riddle for evolutionary biology. This is their conclusion. (It was Darwin’s as well.) The reason they say music is a riddle, is because it does not confer any sort of competitive advantage on the species. My point is simply that, for Christian theology, this lack of utility does not present a difficulty. Christianity does not believe that the universe is fundamentally governed by competition, but by grace—gratuity and excess. We should therefore expect the world to be characterized by all sorts of things which are, in some sense, “gratuitous.”

<sup>133</sup> Sloboda, 268.

singing” (Revelation 5:13). For all her prudish reputation, it is the *Church* who looks ahead to a world of needless extravagance.

“The days are coming,” declares the LORD, “when the reaper will be overtaken by the plowman and the planter by the one treading grapes. New wine will drip from the mountains and flow from the hills.” (Amos 9:13)

“In that day the mountains will drip new wine and the hills will flow with milk; all the ravines of Judah will run with water. A fountain will flow out of the LORD’s house and will water the valley of acacias.” (Joel 3:18)

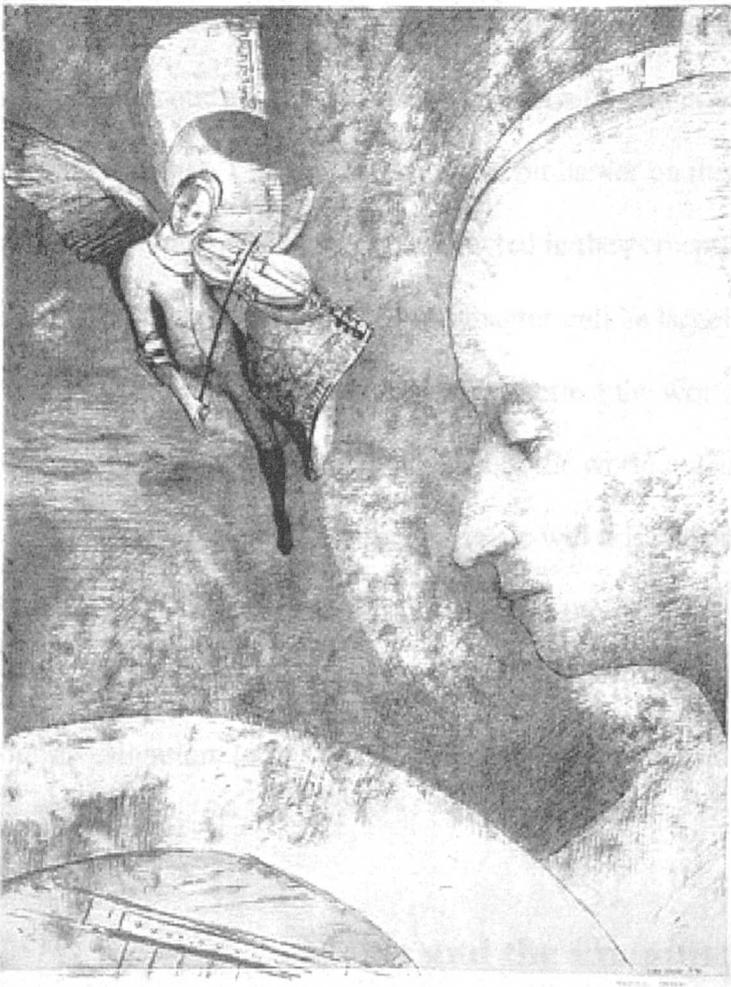
In the meanwhile the earth trembles with echoes, resonances and anticipations of this richness. We live in a universe of gratuity; a sphere of “*irresistible laughter, hiss and giggle of overflow*,”<sup>134</sup> a domain ordered by the lavish and ridiculously florid excesses of God’s grace. We live in the world of music.

*If the landscape reveals one certainty, it is that the extravagant gesture is the very stuff of creation. After the one extravagant gesture of creation in the first place, the universe has continued to deal exclusively in extravagances, flinging intricacies and colossi down aeons of emptiness, heaping profusions on profligacies with ever-fresh vigor. The whole show has been on fire from the word go. I come down to the water to cool my eyes. But everywhere I look I see fire; that which isn’t flint is tinder, and the whole world sparks and flames.*<sup>135</sup>

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<sup>134</sup> Micheal O’Siadhail, “Invitation” in *A Fragile City* (Newcastle upon Tyne: Bloodaxe Books, 1995), 69.

<sup>135</sup> Dillard, 9.



# Naming the Sound



Music and the  
Imagination

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## Chapter 4

*Hail, the spirit able to unite!  
For we truly live our lives in symbol,  
and with tiny paces move our nimble  
clocks beside our real day and night.  
Still we somehow act in true relation,  
we that find ourselves we know not where.  
Distant station feels for distant station -  
what seemed empty space could bear. . .  
purest tension.*

-Rilke, *Sonnets to Orpheus*

In the last chapter we initiated a dialogue with the field of psychomusicology, and devoted our attention (primarily) to the relationship of spontaneous and reflective processes in music perception. We also spent some time considering the place of the universal and the particular in music, and the

contribution of sounds and other-than-sounds. Finally, we considered the cognitivist conviction that our musical experience is actively, cognitively constructed. In the first part of this chapter, I would like to push a bit harder on this idea, and think about the ways in which music is actively constructed in the perception of the listener. Based upon this discussion, the second half of the chapter will be largely devoted to the dichotomy of *feeling* and *knowing*: does music primarily reflect the world of our inner experience; or does it (instead/also) bear knowledge about the world outside ourselves? (The issue of spontaneous and reflective activity in music will arise again as well, as we consider the debate between Diana Raffman and Roger Scruton.)

In the last chapter, we asked if the field of psychology had anything to contribute to our investigation. In this chapter, we will evaluate music from the perspective of philosophy.

## **Music and the imagination**

Based upon our survey of music cognition so far, we have concluded that hearing sounds *as music* involves more than simply allowing acoustical events to wash over us. Hearing *music* demands that (in some way) we go beyond what is given to us in the material presentation of the sound. We saw in the last chapter that at least one of the ways in which we “go beyond,” is by actively constructing our musical perceptions, shaping and organizing what is given to our hearing.<sup>1</sup> To shift modes of discourse, we may think of the cognitive psychologists’ “categorical perception” as an instance of what some philosophical accounts have referred to as the imagination. In some ways, the “categorical

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<sup>1</sup> I have borrowed the phrase, “going beyond” from Trevor Hart’s lectures on imagination. Hart’s influence on my understanding of the imagination generally, has been considerable. I participated in his honours module, *Theology and Imagination*, Candlemas Semester, 1998, and again, Candlemas Semester, 2000, and benefited tremendously from the lecture material and class discussions.

perception” corresponds to Kant’s “reproductive imagination.”<sup>2</sup> The world, Kant suggested, presents our senses with a chaotic bundle of stimuli—a manifold of experience. “There must therefore exist in us an active faculty for the synthesis of this manifold. To this faculty I give the title, imagination.”<sup>3</sup> Mary Warnock paraphrases Kant using a musical example: “We had to hear the pattern *in* the sound. Without imagination, there would have been just sound; imagination makes the sound, as it were, ‘presentable,’ and in so doing experiences the feeling of satisfaction in the discovery of order in chaos.”<sup>4</sup> *We had to hear the pattern in the sound*—this Kantian description of perception could just as easily have been the written conclusion of many of the experiments we considered in the last chapter.

This “reproductive synthesis”<sup>5</sup> is not the only function Kant allows the imagination. <sup>6</sup> For instance, in addition to ordering the chaos of sense impression, Kant argues that the imagination is active in making aesthetic judgments about those impressions. Aesthetic judgments are “imaginative” because, as with our perceptions, they involve *going beyond* what is given. Judgments of taste do not reflect qualities of objects in the physical world, but our subjective response to those objects.<sup>7</sup> This theme is sounded in the first Moment of Kant’s *Critique of Judgement*.

If we wish to discern whether anything is beautiful or not, we do not refer the representation of it to the Object by means of understanding with a

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<sup>2</sup> Immanuel Kant, *Critique of Pure Reason*, A 121, tr. Norman Kemp Smith (New York : St. Martin’s Press, 1965/1929), 144.

<sup>3</sup> *Ibid.* A120, tr. 144.

<sup>4</sup> Mary Warnock, *Imagination* (London: Faber, 1976), 50.

<sup>5</sup> Kant, A 102, tr. 133.

<sup>6</sup> Mark Johnson offers four different functions which Kant assigns to the imagination: the reproductive imagination; the productive imagination; imagination as schematizing function; and creative imagination. (Mark Johnson, *The Body in the Mind. The Bodily Basis of Meaning, Imagination and Reason* (Chicago: University of Chicago Press, 1987), 147-167.) I have decided against using Kantian categories to describe the different functions I mention below. In each case, the activity is “imaginative” in that it involves the active interpretive shaping of sound. In each case we are going beyond what is given to us in the physical presentation of the sound. A little later on I will consider the difference between the different types of imaginative activities I mention.

<sup>7</sup> H. W. Cassirer, *A Commentary on Kant’s Critique of Judgment* (London: Methuen & Co. , 1938), 178-79.

view to cognition, but by means of the imagination (acting perhaps in conjunction with understanding) we refer the representation to the Subject and its feeling of pleasure or displeasure. The judgement of taste, therefore, is not a cognitive judgement, and so not logical, but is aesthetic—which means that it is one whose determining ground *cannot be other than subjective*.<sup>8</sup>

So, the suggestion before us is that our experience of music is actively constructed in our perception; that this active perception involves the exercise of the imagination; and that this imaginative engagement is reflected at more than one level of our musical experience.

In evaluating this claim, I would like to consider several different levels of our musical experience at which we might locate imaginative processes—different points at which hearing music seems to demand that we “go beyond” what is given to us in the sound. I also argued in the last chapter, that if our musical experience is not given to us unmediated by the sound itself, it is nevertheless developed *in conversation* with the physical qualities of sound. In this chapter we will think about the ways in which that claim might be held together with an acknowledgement of our imaginative engagement with sound.

### **The musical *Gestalt***

A number of the examples of “active hearing” which we considered in the last chapter are pre-intentional. We assimilate tones to an internalized musical scale, for instance—hearing sounds not just according to where they lie on a scale of log frequency, but according to how they can be mapped onto an internal schema. We saw ways in which sounds are organized into groups, phrases, and patterns. Here, it would seem, is a very fundamental activity of the imagination in music perception—something like Kant’s

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<sup>8</sup> Immanuel Kant, *The Critique of Judgement*, 204. tr. James Creed Meredith (Oxford: Clarendon Press, 1980/1928), 41-2. Emphasis original in translation.

“discovery of order in chaos.”<sup>9</sup> In musical hearing we group sounds according to *Gestalt* principles analogous to those identified in visual perception.<sup>10</sup>

In 4.1a, below, we are presented with 5 equally spaced shapes. However, the middle shape is perceived as forming a group with the two shapes to the left. In 4.1b, the middle shape is grouped with the two shapes to the right.<sup>11</sup>

4.1



The melodic fragments in 4.2 are a musical analog to this visual *Gestalt*.

4.2 a.



4.2 b.



In the first example we group the first three events together, whereas in the second we perceive a 2+3 grouping. These examples demonstrate the *Gestalt* principle of *similarity*. However, similarity is not the only factor in grouping. In 4.3 and its musical analog in 4.4, the principle of similarity is overridden by that of *proximity*. Both 4.1a, and

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<sup>9</sup> Again, I am citing Warnock's paraphrase.

<sup>10</sup> Fred Lerdahl and Ray Jackendoff, *A Generative Theory of Tonal Music* (Cambridge: Mass. : The MIT Press, 1983), 39-43; John A. Sloboda, *The Musical Mind: The Cognitive Psychology of Music*. Oxford Psychology Series, No. 5 (Oxford: Clarendon Press, 1985), 54-74.

<sup>11</sup> The visual examples and their musical analogs are taken (slightly adapted) from Lerdahl and Jackendoff, 41-2.

4.3a display the same sequence of “square-square-square-circle-circle.” In 4.1a, however, these shapes are grouped perceptually as 3+2, whereas in 4.3a, they are grouped 2+3.

4.3



4.4 a



4.4 b.



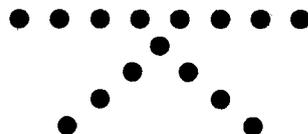
The grouping principle of proximity can likewise be overridden, as in 4.5, where it is overridden by the *Gestalt* principle of *continuity*.

4.5

a.



b.



In 4.5a, based on the principle of proximity, the lower dot is perceived as forming a group with the two dots above it. In 4.5b, however, the dot in the same location is no longer grouped with the upper line. It has been snatched away from the top line by the lower arrow shape, based on the principle of continuity.<sup>12</sup> A striking musical analog to this sort of grouping is found in a well known experiment conducted by Diana Deutsch.<sup>13</sup> Deutsch presented listeners with the following melodic fragments over headphones. The upper line was played through the right headphone and the lower was simultaneously played through the left.

4.6 a



However, rather than two jagged and disjointed patterns, listeners most commonly reported hearing the following melodic fragment in their headphones (again, the upper line represents what listeners reported hearing in the right ear; the lower line what was perceived to be in the left):

<sup>12</sup> The visual example is taken and slightly adapted from Sloboda, 159.

<sup>13</sup> Cited in Sloboda, 156-57.

#### 4.6 b



Listeners *organized* the wild leaps of sound they heard into two regular and even scalar passages. Deutsch's experiment used synthesizer generated tones through headphones. A later set of tests used right and left signals of different timbre, originating from speakers separated in space, and produced similar results.<sup>14</sup>

These examples illustrate “going beyond what is given” at a very basic level of perception. In hearing music, we do not just hear the sounds—5 notes of such-and-such frequency. Our attention is also immediately given to the patterns into which we group those notes. This imaginative grouping may serve different ends. In the first two musical examples (4.2 and 4.4), the role of the imagination was more clearly heuristic—discovering an order that was already there (e.g., the A *really is* more like the other two A's than it is like the D's). In the last musical example however (4.6), the role of the imagination was more constructive. The “literal” presentation of the sound was overridden in favor of a more reasonable, familiar or formally pleasing organization.<sup>15</sup> To take up another one of our tensions, these *Gestalt* principle groupings also reflect a *pre-intentional* (spontaneous) cognitive activity. We do not *determine* to see the lines grouped this way or that. Like the Kantian “unity of the manifold,” this perceptual

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<sup>14</sup> *Ibid.*, 157.

<sup>15</sup> And whether it was chosen because of its reasonableness, its formal qualities, or its familiarity makes a difference to the account of music perception we develop, as we shall see.



This five note pattern however, is not only the opening riff of our imaginary fusion concert; it is also “Alert #2” on the pager I carry in my pocket. When it goes off, I do not think of it nor (more importantly) do I *hear* it, musically. I may attend to both; I may group both sets of notes identically. The two events—the keyboard player’s ostinato and my pager’s beep—may even be acoustically identical; but a conscious musical experience does not automatically emerge from the pager signal. (In fact, when we hear someone’s pager go off, we are more likely to experience irritation, or annoyance, than aesthetic appreciation.) Hearing sounds as music involves attending to those sounds in a particular way—hearing them in musical relation to one another. I can apply my hearing to the pager signal, and succeed in hearing it *as* music. This, however, underlines the point being made. Some elements of the musical experience only arise by hearing sounds under a particular aspect. “Sound” becomes musical “tone” as it is made the “intentional object of the musical perception.”<sup>17</sup>

### Movement in musical space

Roger Scruton’s recent *Aesthetics of Music* draws attention to another level at which the imagination functions in hearing sounds as music. Scruton argues that we cannot hear groups and patterns as *music*, without hearing tension and release, movement, gesture, and relationships between the constituent tones. These relationships and movements, he maintains, are not material qualities of sound. Strictly speaking, nothing in a melody moves. The first note of the left hand melody in Chopin’s *B minor Prelude* does not *physically* move through the sixteenth notes that follow. [See Ex. 4.8] It does not physically *reach up* to D, before gently relenting, *descending through* C sharp to B. We do not have, in the sound, B *moving up to* D, D *to* F sharp, F sharp *to* B,

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<sup>17</sup> Scruton, 20.

and B to D. All we have acoustically, is B, D, F sharp, B, D; a collection of 5 sounding pitches adjacent to one another. But this is not what we hear. What we hear is a *melody*—a temporal *Gestalt* which comprises a single gesture in phenomenal space and possesses a beginning, an ending, motion and direction.

Ex. 4.8

## PRELUDE.

Lento assai. F. CHOPIN. Op 28, N<sup>o</sup> 6.

6.

*p sotto voce*

Victor Zuckerkandl also emphasized this dynamic quality of tones in his work; in particular, drawing attention to the distinction between the acoustical (physical) qualities

of sound, and the dynamic qualities of tone.<sup>18</sup> “Nothing in the physical event corresponds to the tone as a musical event”<sup>19</sup> observes Zuckerkandl. Hearing melodies is not a matter of hearing frequency vibrations, nor even, a matter of hearing pitches—hearing E or G or whatever. Hearing a melody means hearing the distinctive dynamic quality of each tone; hearing where it stands in relation to the other notes of the melody, and the direction in which it points, as it were. It is this, he argues,

this different way of pointing . . . this different gesture, which gives each tone its particular and distinctive dynamic quality, which sounds in it and which we hear in it, when we hear it as a tone in a melody. This and nothing else is the content, the meaning, of its utterance, its musical meaning.<sup>20</sup>

This, then, is another strata of our musical experience which involves “going beyond the immediately given sense datum.”<sup>21</sup> The motion we hear in music “leaves no trace in the physical process. When we hear a melody, we hear things that have no counterpart in physical nature.”<sup>22</sup> It is also (and this is Scruton’s point) an activity which is essential to the enjoyment of music. Hearing the *movement* in the Chopin melody—the way it grounds itself on B and elegantly arcs upward to D, before falling back to B below middle C—this is not some special, “creative” way of hearing music. Instead, hearing sounds *as* in motion, *as* striving, *as* resting and so on, *just is* what it means to hear sounds as music. It is “the dynamic quality, not the pitch, [that] makes the tone a musical fact.”<sup>23</sup>

Scruton agrees,

There lies, in our most basic apprehension of music, a complex system of metaphor, which is the true description of no material fact, not even a fact about sounds, judged as secondary objects. The metaphor cannot be eliminated from the description of music, because it defines the intentional

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<sup>18</sup> Cf. Victor Zuckerkandl, *Sound and Symbol: Music and the External World*, tr. Willard R. Trask (Princeton, N. J. : Princeton University Press, 1956), 11-24; idem, *Man the Musician. Sound and Symbol: Volume Two*, tr. Norbert Guterman (Princeton, N. J. : Princeton University Press, 1973), 89-139.

<sup>19</sup> *Sound and Symbol*, 22.

<sup>20</sup> *Ibid.*, 35.

<sup>21</sup> *Man the Musician*, 92.

<sup>22</sup> *Sound and Symbol*, 23.

<sup>23</sup> *Sound and Symbol*, 91.

object of the musical experience. Take the metaphor away, and you cease to describe the experience of music.<sup>24</sup>

## Metaphorical extension

Let's consider another level at which hearing music involves going beyond what is given in the sound. In listening to music, we do not only hear *rising* and *falling*, *movement* and *repose*. We hear music in terms of affect, character, and emotion. We hear melodies as "agitated," "serene," or "lighthearted," and we make these associations naturally and immediately.

In a very informal "experiment" I played the following three musical excerpts for a class of about 30 honors level undergraduates and postgraduates of various ages and from different backgrounds.<sup>25</sup> I asked them to listen carefully to the excerpts and then choose from the four "emotional attitudes" listed beneath each title, the one which best fit the piece. (These excerpts are on the accompanying CD, tracks 1-3).<sup>26</sup>

### Matching Test 1.

**Palestrina, excerpt from *Missa pro defunctis***<sup>27</sup>

- A. *Animated and spry*
- B. *Morose and sullen*
- C. *Serenely meditative*
- D. *Restlessly striving*

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<sup>24</sup> *Ibid.*, 92.

<sup>25</sup> This took place in a lecture I delivered at St. Mary's College, 10 April 2000; as part of the module DI 4/3424, *Theology and Imagination*, Professor Trevor Hart.

<sup>26</sup> I would like to thank my colleague, Al Lukasiewski for burning these CD's for me. A few notes about the CD's: first, the CD contains the complete work mentioned, whereas in class I only played a 30-45 second excerpt. (The Chopin, in particular, I faded at 25 seconds, after which point the "attitude" of the piece changes somewhat.) My friend, however, did not have the necessary software to record just an excerpt. Second, many CD players on which I tried the disks only recognized the first two tracks. Any computer with a CD drive and CD player software however, should be able to play back all six tracks.

<sup>27</sup> Giovanni Pierluigi da Palestrina, *Missa pro defunctis*, Chanticleer, Teldec 4509-94561-2, 1994.

**Chopin, *Prelude in C minor* (Op. 28, No. 20), m. 1-4<sup>28</sup>**

- A. *Solemn and intense*
- B. *Light hearted and whimsical*
- C. *Soothing*
- D. *Raging wildly*

**Mahler, excerpt from *Symphony No. 1*, fourth movement<sup>29</sup>**

- A. *Stormy and impassioned*
- B. *Hopeful*
- C. *Morose and sullen*
- D. *Solemn and intense*

Interestingly, the students characterized the pieces with remarkable consistency. This was the case, even when the descriptive phrases marked out rather fine-tuned differences of affect. In the Mahler example for instance, one might say that characterizations “Stormy,” “Morose” and “Solemn” are all in the same general region of the affective spectrum. Of the 30 students, all but one characterized the Palestrina as “serenely meditative;” all but one characterized the Chopin as “solemn and intense;” and all but one characterized the Mahler as “stormy and impassioned.”<sup>30</sup> As I have said, this was a very informal test—there was no careful methodology followed, nor were any scientific controls in place. The nature of the test itself will have shaped the responses. (By posing the question as I did, I was directing the students to listen to the music *in terms of its emotional content*). Nevertheless, laboratory experiments employing a variety of testing methods have produced similar results. One text surveys three such sets of experiments by different parties, and concludes that these different studies “show that there is a definite pattern to the way listeners characterize a wide variety of pieces of

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<sup>28</sup> Frederic Chopin, “Prelude Op. 28, No. 20,” Vladimir Ashkenazy, London D102410, 1993.

<sup>29</sup> Gustav Mahler, *Symphony Nr. 1 in D major* (Movement 4, “Stürmich bewegt”), Sir Colin Davis and Symphonie-Orchester des Bayerischen Rundfunks, Novalis 150 033-2, 1988.

<sup>30</sup> The same one student disagreed about the characterization of all three pieces, and indicated skepticism about the experiment itself as I introduced it to the class. I also played these excerpts for a number of people (of varying musical ability) outside the class, and in every case they arrived at the same identification of music and affect.

music in emotional terms, supporting our belief in the effectiveness of emotional representation in music.”<sup>31</sup>

This is another activity of the imagination in music; that of metaphorical extension. It is a different sort of interpretive activity than that of locating a tone within phenomenal space (as in Scruton’s account). “Serene” is not simply another word for “physical relaxation.” It represents a different sort of mapping of musical events onto the extra-musical world—not a spatial mapping but one of situation and attitude. I tried to draw this out in a second “experiment” presented to the same group of students.

The students were presented with three additional musical excerpts—all instrumental, all written about the same time, and in about the same style. (These excerpts are on the accompanying CD, tracks 4-6.) One of the works, written by a young jazz musician in the late 1960’s, is entitled, “Search for Peace”. The composer explains this appellation: “After writing the melody of “Search for Peace,” I chose this title because the song has a tranquil feeling. Tranquil and personal. . . . Insofar as I can verbalize about this piece, it has to do with a man’s submission to God, with the giving over of the self to the universe.”<sup>32</sup>

Another of the three examples is called “On the Corner.” Again, the composer of the work has left us a description of the musical scene he intended: “When I was growing up in Philadelphia, some of the kids I knew liked to hang out on the corner. And this is sort of a musical picture of that scene—youngsters talking, kidding around, jiving.”<sup>33</sup>

Another piece is called “For Debby,” and the song is the musical tribute of a besotted father to his charming little girl.

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<sup>31</sup> W. Jay Dowling and Dane L. Harwood, *Music Cognition* (Orlando, FL :Academic Press, Harcourt Brace Jovanovich, 1986), 210. Cf. Dowling and Harwood, 202-213; Sloboda, 57-65.

<sup>32</sup> From the liner notes of the recording. Complete bibliographic information will be given below.

<sup>33</sup> From the liner notes of the recording. Complete bibliographic information will be given below.

Now, here is the question: Can you tell (granted you don't already know the pieces) which song goes with which title? My guess is that most readers probably will be able to do so without difficulty. [The correct identification is in footnote: <sup>34</sup>.] Among the 30 students, there was only one incorrect match between music and title for "Search for Peace;" only one incorrect match for "On the Corner;" and two incorrect matches for the piece, "For Debby."<sup>35</sup>

### Seeing faces in frequencies

A jazz waltz in F major is in nearly every way we could identify empirically, *not* like a sweet little girl. One is a living, sentient being existing in four dimensions, composed of flesh and bone and other organic material. The other is a series of acoustical events; a set of rhythmic pulses and frequency vibrations organized into complex patterns. The point, while obvious, is still worth underlining, for the very reason that we make such identifications so readily.

Many American standardized tests include an "Analogical Thinking" section, in which students are asked to make all sorts of bizarre "appropriate" pairings ("Hairspray is to the United Nations AS Ringo Starr is to \_\_\_\_\_"). But our acts of musical matching are not like this. We do not merely feel that we are somehow able to pair one thing to another. We feel intuitively and deeply that there is something particularly *apt* about pairing *this* tune with *this* emotion. We would probably even say that the song

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<sup>34</sup> CD Track 4 is Bill Evans, "Waltz for Debby," [referred to above as "For Debby"] *Jazz Piano: A Smithsonian Collection*, vol. 4, Riverside, 1961 RLP (S9)399, Reissued, Smithsonian Collection of Recordings, 1989. CD Track 5 is McCoy Tyner "Search for Peace," *The Real McCoy*, Capitol Records, 1967, reissued, 1987 CDP 7 46512 2. CD Track 6 is McCoy Tyner, "Blues on the Corner," [referred to above as "On the corner"] *The Real McCoy*. Tyner's descriptions of these two works were taken from the liner notes, by Nat Hentoff. Here, as in the module lecture I truncated the first two titles (to "On the Corner" and "For Debby") in order to eliminate any referential clues to musical genre (i.e. "Blues" and "Waltz").

<sup>35</sup> One student switched the music and title of "Search for Peace" and "Waltz for Debby." Another student switched the identification of "On the Corner" and "Waltz for Debby." Once again, I played these three examples for several people outside the class, and in every case the listener was able to correctly match title and tune.

captures something of the aspect of a little girl that a linguistic description would not. Our sense of the fit of these elements is so strong that it may not occur to us that the association involves going beyond the physical qualities of the sound. Some of the students who listened to these examples were quite insistent that “Waltz for Debby” *just sounds like* a little girl. Of course it doesn’t. (What does a little girl sound like? Or even more to the point, what does the relationship between a loving father and his daughter sound like?) Still, we identify the resemblance between the two so readily that it seems like something which just *is* there.

I am not implying that our enjoyment of music is dependent upon being able to liken a song to a thunderstorm or a dancing bear or whatever. Far more often we enjoy a piece of music without associating it with some object in the extra-musical world. However, a full experience of music *is* dependent upon hearing a piece as stirring, or plaintive, or mournful, or exuberant. We do not (typically) listen to music simply with a structural sort of interest—“Oh isn’t that fascinating that he modulates to D flat there?” Nor do we only attend to the sort of dynamic qualities that Scruton and Zuckerkandl talk about. In addition to this, our deepest and most immediate reactions to music include some appreciation of what the music *expresses*. “The expressive qualities of a work of music” acknowledges Scruton, “form the most important part of its content.”<sup>36</sup> We make these expressive associations naturally, and (as we have seen) with a high degree of inter-subjective agreement.

### **Locating our experience of music**

Our survey of some of the roles of the imagination in music perception raises a number of important questions for this study. If music is pervaded by the imaginative

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<sup>36</sup> Scruton, 344.

shaping of sound, then in what sense can we claim music to be a source of knowledge about the external world? Does music not reflect what *we* bring to the *sound*, rather than what *sound* brings to *us*? Moreover, what is the source of these extra-musical mappings if they are not present in the acoustical properties of the sound? And if making these mappings involves us in going beyond what is given, how do we explain the extent, the immediacy and the inter-subjective agreement of these mappings? In addressing these questions, we must first clear away two common, but ultimately unhelpful, explanations.

### Cultural conditioning

It is often suggested that our culture trains us to make certain extra-musical associations.<sup>37</sup> Over time, one learns that *this* sort of melodic pattern is “ascending” and *that* sort is “descending.” We likewise learn that when the Bad Guy appears on the screen, one sort of music is played, and when the Good Guy appears on the screen, another sort of music is played. This, it is suggested, is the source of the “something more” we hear when we hear sounds as music.

As we saw in the last chapter, our culture indeed exerts a powerful influence over the way that we hear and think about music. And no doubt, we do come to learn that *this* is the sort of music one hears in church, while *that* is the sort of music one hears at a club on Saturday night. And yet we also saw that our musical intuitions and associations are so specific and so extensive that it is impossible to think that they have all arisen from conditioning. This is true both at the level of hearing musical structure, and at the level of hearing musical affect. We do not only distinguish “happy” music from “sad;” but “solemn” from “mournful,” and “mournful” from “quietly reflective.” How were we ever *conditioned* to recognize “Descending major thirds in the oboe section, punctuated by a

single note in the violins and cellos; in octaves, *mezzo piano*, *pizzicato*” represents “poignancy—calm but solemn resignation” ?

Besides, attributing affective associations to culture does not explain their origin; it only pushes the problem back several generations. *Someone* must have been the first to make these associations. At some point, someone had to decide that *this* sequence of sounds and not *that*, matches “triumphant celebration” or “graceful ascent” or whatever.<sup>38</sup>

### A language of the emotions

Another explanation suggests that the link between sound and music is a linguistic one: certain sequences of notes *stand for* emotions or events, the way that words stand for objects and ideas. Indeed, music has often been described as a “language of the emotions” due to its power to effectively communicate sentiment. In one of the most fully developed accounts of this sort, Deryck Cooke attempts to demonstrate a language-like tie between melodic motifs and certain emotions.<sup>39</sup>

Despite the potential explanatory power of this theory, the link between music and extra-musical meaning is not a linguistic one. First of all, the association between music and meaning is far “looser” than that between language and meaning. The statement: “I think my daughter is delightful” has a relatively limited compass of possible meanings. The music to “Waltz for Debby” on the other hand, might fit any number of extra-musical associations (i.e., might “mean” any of them equally well): an elderly couple dancing on their anniversary; a bright and serene Sunday morning in spring; a figure skater gracefully circling across the ice; or a musical gesture without any “about” attached to it at all. The

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<sup>37</sup> When I asked the undergraduates how they knew which piece was “Stormy” and which was “Serene,” this was the most frequently given explanation. See also my discussion of Leppert and McClary in Chpt. 3.

<sup>38</sup> See Zuckerkandl’s critique of this explanation (“associationism”) in *Sound and Symbol*, 41-52.

<sup>39</sup> Deryck Cooke, *The Language of Music* (London: Oxford University Press, 1959).

same piece of music may be placed in a number of different interpretive contexts, and in each of them communicate something profound.<sup>40</sup>

Neither do we look to music in order to communicate facts or information to us. We may feel that Bill Evans' melody communicates to us something of his affection for his daughter; but it cannot tell us how tall she is, the color of her hair or what her favorite meal is. The goals and standards of success for musical and linguistic communication are different as well. If I say "Debby is a little girl," and you take my statement to mean "We will have pizza on Friday," then linguistic communication has failed. However we do not need to know that Bill Evans' tune is "about" Debby in order to hear it with musical understanding.

In another sense, the link between music and what it communicates is tighter than that between language and meaning. There is no intrinsic "dogginess" to the linguistic symbol, "dog." *Hund* or *chien* or *canis* (or some other set of symbols we make up) will do just as well. The same is not true of music. Music cannot be paraphrased; it cannot be translated. In language, we attend to the symbol in order to arrive at what it signifies. In music, we attend to the symbol itself, and it is not dispensable.<sup>41</sup>

## Wiring and intention

Diana Raffman also dismisses the idea that the connection between sound and our perception of it is linguistic. Instead, she advances a cognitivist explanation of this connection:

Whereas the relation of a linguistic string to its meaning is a more or less conventional one, the relation of a musical string to the relevant feelings is nonconventional: we are presumably just *wired* in such a way as to have those feelings upon tokening those mental representations. Not

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<sup>40</sup> See Zuckerkandl's fascinating exploration of this in *Man the Musician*, 31-43.

<sup>41</sup> See the discussion in *Scruton*: Chapter 6, "Expression," 140-170; Chapter 7, "Language," 171-210.

surprisingly, the tie between music and feelings is considerably tighter than the tie between a sentence and its meaning.<sup>42</sup>

The statement epitomizes the cognitivist account<sup>43</sup> of the link between music and affective response—*we are just wired that way*. Raffman and a number of other cognitivists contend that not only groupings, but also our sense of notes as “tense” or “relaxed,” even the affect with which we associate different types of music—all of these arise directly from our preconceptual organization of sounds.

The idea is roughly this. You, the experienced listener, have unconscious knowledge of certain rules for musical analysis. As you hear an incoming musical signal, you unconsciously represent it and analyze it according to those rules; that is to say, you assign a structural description. *Ex hypothesi* it is in virtue of assigning a structural description that you have the conscious musical experience you do—that you hear, or as we often say, *feel* the music as you do. For example, it’s in virtue of assigning such an analysis that you feel the tonic as being the most stable pitch in a scale, or an accent as being relatively strong in its metrical context, or a harmonic progression as being “tense” or “relaxed.” As Lerdahl and Jackendoff will put it, having the right sort of musical structure in your head is what *understanding* the music consists in.<sup>44</sup>

This is not to say that cognitivists believe music remains arcane to the listener.

Raffman writes later,

The operations of the grammatical rules are unconscious, but of course the *results* of those operations ultimately gain entry into conscious awareness: the whole point of the M-grammar is to differentiate pitch-time events in a way that affords the conscious musical experience we know and love—the characteristic feelings of beat strength, tonal center, stability, tension, relaxation, and so forth.<sup>45</sup>

Nevertheless, for Raffman, our conscious experience of music emerges, more or less whole, from our preconscious cognitive organization of music. It may even be, she speculates, that

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<sup>42</sup> Diana Raffman, *Language, Music and Mind* (Cambridge, Mass. : Bradford Books, The MIT Press, 1993), 55. Emphasis original.

<sup>43</sup> Or at least, it represents the stance of one school of cognitivism. Sloboda, for instance, emphasizes the contributions of culture and the physical attributes of sound to our interpretation of musical expression.

<sup>44</sup> Raffman, 19.

<sup>45</sup> *Ibid.*, 27.

the music processor sits near the affective centers in the brain, so that activation of the minor key nodes in the musical net spills over into the fear area. The situation might be that brute.<sup>46</sup>

So while there is “doubtless an intimate tie between our musical and affective lives,” she writes, “the tie is not . . . a *meaningful* one.”<sup>47</sup>

## The object of intentional perception

Roger Scruton offers a very different picture of the connection between sound and perception.<sup>48</sup> Raffman suggests that “our musical feelings derive from the mental representation of . . . [musical] grammar”<sup>49</sup> (this is Scruton’s characterization of Raffman, Lerdahl and Jackendoff). Scruton, on the other hand, places *the imagination* at the center of our musical experience, and, unlike Raffman, he contends that this imaginative engagement with music is *intentional*. He argues, “Musical hearing, like certain other forms of aspect perception, lies within the province of the will.”<sup>50</sup> Scruton does not deny that we group sounds according to certain *Gestalt* principles. “The real question” he writes,

is not whether there might be a preconceptual organization exhibited by the musical *Gestalt*, but whether it would be sufficient to hear this organization in order to hear the music as *music*. And this I doubt.<sup>51</sup>

Instead, our experience of music arises from attending to sound in a special way: we hear sound under a description,<sup>52</sup> or according to a particular aspect.<sup>53</sup> Sounds may be identified as a group, or organized according to an internalized schemata, Scruton maintains, without hearing tension and release, movement, gestures in phenomenal space,

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<sup>46</sup> *Ibid.*, 59.

<sup>47</sup> *Ibid.*, 44. Emphasis original.

<sup>48</sup> For Scruton’s critique of Raffman, Lerdahl and Jackendoff, see *The Aesthetics of Music*, 189-202; for Raffman’s critique of Scruton, see *Language, Music, and Mind*, 56-60.

<sup>49</sup> Scruton, 200.

<sup>50</sup> *Ibid.*, 44.

<sup>51</sup> *Ibid.*, 95.

<sup>52</sup> *Ibid.*, 232.

<sup>53</sup> *Ibid.*, 90.

or causal relationships between the sounds. It is this sense of dynamic relationship, which is fundamental to hearing music. Ultimately, the aesthetic description is not a matter of identifying groupings or patterns; rather, it is the expression and commendation of a particular *response* to the sound<sup>54</sup>—*a way of hearing it, a way of imaginatively conceiving the patterns we are offered.*

In hearing sounds, we may attend to them in the way that we attend to pictures, on the look-out, or listen-out, for imaginative perceptions. There then arises the peculiar double intentionality that is exemplified in the experience of metaphor: one and the same experience takes sound as its object, and also something that is not and cannot be sound—the life and movement that is music. We hear this life and movement *in* the sound, and situate it in an imagined space, organized, as is the phenomenal space of our own experience, in terms of ‘up’ and ‘down’, ‘rising’ and ‘falling’, ‘high’ and low’.<sup>55</sup>

### Intention and imagination in music

Scruton presents several arguments in support of the intentional character of musical hearing. Most significantly, he points out that while our perception of affect in music is often compelling, it is not compulsory. The wall in front of me is pale yellow, and I cannot be talked into seeing it as orange or fuchsia. Any human being with properly functioning vision will also see it as pale yellow. But this is not the case with music.<sup>56</sup> We can come to hear a song differently than we have heard it before; we can hear different things *in* it. Expressiveness, Scruton argues is a *tertiary* quality.<sup>57</sup> And one of the distinguishing features of tertiary qualities, is that we can be persuaded to perceive them (or to not perceive them). By directing someone’s attention to a particular motif in a work, or pointing out the way in which it relates to others in the piece, I may convince

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<sup>54</sup> Ibid. , 372.

<sup>55</sup> Ibid. , 96.

<sup>56</sup> Ibid. , 88-90; 93-94.

<sup>57</sup> Ibid. , 160-165. Where primary qualities are those which reside physically in the object itself and can exist without being perceived, such as frequency vibration. Secondary qualities are those which any creature with the appropriate sensory equipment can perceive, such as pitched sound

them that the music does not express “serenity,” but “silent despair.” As with other instances of aspect perception (such as the famous duck-rabbit), we may even be able to shift back and forth between the two ways of hearing the music.

Scruton also wants to maintain that because our understanding of music is conscious and intentional, it is the sort of thing about which one may be right or wrong. One can present a form of argument for one interpretation versus another.<sup>58</sup> Raffman, (professionally a philosopher, but also an accomplished flautist), argues on the other hand, that among musicians, “the tacit rule is: In matters (musically) affective, to each his own.”<sup>59</sup> We can advance arguments about phrasing, tempo, dynamics, and so on, but “emotional responses to music are neither correct nor incorrect—typical or atypical, perhaps, but not right or wrong.”<sup>60</sup>

Both Raffman and Scruton acknowledge the reality of pre-conceptual grouping and patterning. Raffman however maintains that “it is in virtue of [pre-consciously] assigning a structural description that you have the conscious musical experience you do;”<sup>61</sup> Scruton on the other hand believes that such a structural description is a necessary, but not a sufficient condition for hearing music.<sup>62</sup>

## The dialogue of perception

I find Scruton’s critique of Raffman convincing. Our perception of music is no doubt shaped by structural descriptions we assign pre-reflectively. However, this structural description does not seem sufficient to explain our experience of music. I may perceptually group the clicks I hear when my hard drive saves this document; I may discern patterns in the tones my modem makes when dialing the university server;

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<sup>58</sup> *Ibid.*, 368.

<sup>59</sup> Raffman, 60.

<sup>60</sup> *Ibid.*, 59.

<sup>61</sup> *Ibid.*, 19.

however, a rich experience of music does not automatically emerge from these “structural descriptions.” A whole series of *intentional* identifications are also necessary; and these in turn are often related to material and cultural considerations (e.g. , “these sounds do/do not represent an opportunity for musical listening”).

The fact that we can choose to hear the modern *as music*, likewise underlines the voluntary character of the musical experience, to which Scruton refers. We can come to hear things differently over time. We can be argued into seeing *this* affect instead of *that* in a piece. We can also in some cases shift between different affective hearings of a work.

On the other hand, Scruton’s position must be qualified as well. Scruton claims that our musical imagination is intentional; not only at the level of our affective associations, but also at the level of mapping of sounds onto phenomenal space (hearing sounds as ascending, descending, etc.).<sup>63</sup> This seems unlikely. Our fundamental perception of motion in music is probably given to us preconceptually (the importance of this for my argument will become clear later in the chapter). *Gestalt* psychology offers several obvious analogies to the experience of musical motion from studies of visual perception. A series of still pictures for instance, viewed in rapid succession, appear to be in motion.<sup>64</sup> Scruton or Zuckerkandl might object that we do not merely hear notes as “going up” or “moving,” but as “gracefully ascending” or “pushing ahead;” and this is true as well.

It seems plausible to suggest that our musical experience is dependent upon both a general, pre-intentional, sense of musical motion; as well as an intentional metaphorical mapping of that motion onto phenomenal space (i.e. “gracefully ascending,” etc.). It

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<sup>62</sup> Scruton, 95.

<sup>63</sup> Scruton, 95.

<sup>64</sup> Robert C. Richardson, “figure-ground” in *The Cambridge Dictionary of Philosophy*, ed. Robert Audi (Cambridge: Cambridge University Press, 1995), 269; D.W.Hamlyn, “Gestalt theory” in *The Oxford Companion to Philosophy*, ed. Ted Honderich (Oxford: Oxford University Press, 1995), 312.

seems unlikely in fact that we could identify the point at which “moving quickly” (the preconceptual identification), becomes “racing” or “striving” (the intentional metaphorical mapping). In the last chapter I argued that our musical perception involves a complex counterpoint of conscious and pre-conscious activity. This interplay, it seems, offers us a reasonable response to the debate between Scruton and Raffman. The dividing line between intentional and pre-intentional activity in music is often exceptionally fine. In music, a multitude of different cognitive activities are wound together. The various functions of the imagination, like our conscious and preconscious application of those functions, are not sealed off from one another in lead-lined containers. Instead, they contribute to and draw upon one another in making sense of the world.

### Zuckermandl's gambit

Before moving on, it may be appropriate to say a word about one other explanation of the connection between sounds and our musical experience. Victor Zuckermandl is a musicologist whose work has attracted the interest of several theologians.<sup>65</sup> In some ways, Zuckermandl's argument parallels that of Scruton. Like Scruton, he insists that music fundamentally involves hearing motion and dynamic relationship between tones. And like Scruton, he argues that these dynamic qualities cannot be reduced to the realm of the physical, the cultural or the psychological. Scruton

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<sup>65</sup> Zuckermandl has been mentioned by Colin Gunton: *Yesterday and Today: A Study of Continuities in Christology*, 2<sup>nd</sup> ed. (London: SPCK, 1997), 116-17, 121-23; and, idem, *The One, the Three, and the Many: God, Creation and the Culture of Modernity* (Cambridge: Cambridge University Press, 1993), 67, 201. Jeremy Begbie has also drawn on Zuckermandl, in: *Voicing Creation's Praise: Towards a Theology of the Arts* (Edinburgh: T & T Clark, HarperCollins, 1991), 225-29, 245; “Theology through Music: Tavener, Time and Eternity,” in *Essentials of Christian Community: Essays for Daniel W. Hardy*, ed. David F. Ford and Dennis L. Stamps (Edinburgh: T & T Clark, 1996), 28-9; and, “Theology and the Arts: Music,” in *The Modern Theologians: An introduction to Christian theology in the twentieth century*, 2<sup>nd</sup> ed., ed. David F. Ford (Oxford: Blackwell, 1997) 689-90, 693. Begbie considers Zuckermandl at length, in his *Theology, Music and Time* (Cambridge: Cambridge University Press, forthcoming).

however, attributes this musical dynamism to the imaginative mapping of tones in terms of metaphorical, phenomenal space. Zuckerkandl would disagree emphatically: we do not (imaginatively or metaphorically) *bring* dynamism to tones; they bring it to *us*.<sup>66</sup>

The obvious question facing Zuckerkandl is, if the dynamic qualities of tones are not to be found in the physical properties of the sounds, nor in our perception of them—where *are* they to be found? Zuckerkandl replies, simply: “they come from the tones.”<sup>67</sup> However, this is not particularly helpful, and several philosophers have criticized Zuckerkandl for being rather opaque at this point.<sup>68</sup> Zuckerkandl wants to maintain that music does not belong to the physical realm, nor the psychic realm, but rather, it introduces us to a third layer of reality, “the ‘external psychic’ . . . [ : ] something purely dynamic, not feeling but force—a force for which the physical would be as it were transparent, which would work through the physical without touching it.”<sup>69</sup> He contends that music opens up to us aspects of the external world which are inaccessible to our other senses. “We *see* the rind, or under special conditions, *through* the rind, but we *hear* the core of this world.”<sup>70</sup>

I believe Zuckerkandl is entirely right to argue that there is more to reality—more to the reality of this world we live in—than can be seen. Moreover, this reality is, as he insists, a feature *of the world*, not a mere human projection onto it. I also agree that in music we encounter aspects of this wider reality. However, it is possible to embrace these insights without having to make as radical a metaphysical move as Zuckerkandl is suggesting. I also take issue with how completely Zuckerkandl seems to exclude human

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<sup>66</sup> *Sound and Symbol*, 41-52. The subtitle of *Sound and Symbol* conveys Zuckerkandl's concern: *Music and the External World*.

<sup>67</sup> *Ibid.*, 29.

<sup>68</sup> E. g., Scruton, 53-54; Stephen Davies, *Musical Meaning and Expression* (Ithaca, N. Y.: Cornell University Press, 1994), 234-35; R. W. Hepburn, “Time-Transcendence and Some Related Phenomena in the Arts,” in *Contemporary British Philosophy: Personal Statements*, ed. H. D. Lewis (London: George Allen & Unwin), 161-62.

participation in the unfolding of this reality. He is adamant that the dynamic qualities of tones are not the product of human imagination. This seems to emerge from an unfounded concern that human imaginative involvement undermines the reality of musical phenomena. However, as I shall go on to argue, the reality that emerges in music is not *generated* by the imagination, but it is made *manifest* by the imagination.

## The shape of the musical metaphor

I have been arguing that imagination lies at the center of our musical experience. Hearing music as music involves an imaginative mapping of sound: first of all onto phenomenal space, as we hear sounds as moving, calling to and answering one another, leading to and completing one another. Secondly, we imaginatively map these sounds onto human affect and attitude; hearing melodies as “serene” or “insistent.” These mappings are not secondary activities of musical hearing. Rather, hearing sounds as music, means to hear them *in this way*.<sup>71</sup>

We have also seen that these musical qualities of tones and melodies do not correspond completely to any physical property of sound. They cannot be completely accounted for in terms of cognitive processes nor by appeal to cultural conditioning. These qualities of music are ones which to a large extent are the product of our imaginative engagement with sound.

Given this central role of the imagination, given that musical motion and affect are not *in* the notes; what degree of reality can we attach to these musical mappings? In the Introduction, I spoke of “coming to terms” with music in the same way that we come to terms with biology or physics. Can we still claim that music speaks to us about *this world*,

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<sup>69</sup> Ibid. , 63.

<sup>70</sup> Ibid. , 147.

about *this reality* in which we live? Or is music only a “A tone/ Of some world far from ours”?<sup>72</sup> Recognizing the mediating role of the imagination in all our perceptions, Kant argued that “appearances are not things in themselves, but are the mere play of our representations.”<sup>73</sup> Should we hope, then, that the aural “appearance” of music will tell us anything about the shape of the world outside ourselves? As I pointed out earlier, we do not merely feel *able* to pair music to affect. Our persistent intuition is that music opens reality up to us in a unique way. We hear “Waltz for Debby” and we feel as if we *understand*, that we *know* something we did not before. Some quality of the father’s love for his daughter is made available to us, in a way that a hundred words could not have done. Based on the account of music I have developed to this point, what kind of reality may we attribute to this understanding?

## The human experience of music

There is a deep and persistent intuition that music puts us in touch with a reality outside ourselves, providing not just sensual pleasure, but insight and understanding (in the terms of our earlier discussion: not just feeling, but knowledge). Understandably, some of those gripped by this intuition have tried to find a way to root musical meaning in an objective actuality—some feature of the world external to human experience. The Pythagorean tradition appealed to the mathematical-numerical order running through all of the cosmos, and expressed in the rational relationships of musical sonorities.

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<sup>71</sup> Zuckerkandl has underlined this perhaps as clearly and as emphatically as anyone else. Cf., *Sound and Symbol*, 11-24; 53-63; 88-141.

<sup>72</sup> “Though the sound overpowers,  
Sing again, with your dear voice revealing  
A tone  
Of some world far from ours,  
Where music and moonlight and feeling  
Are one.”

Percy Bysshe Shelley, “To Jane: The Keen Stars Were Twinkling,” [text on-line], available at Poet’s Corner: <http://www.geocities.com/~spanoudi/poems/shell01.html>

<sup>73</sup> Kant, *Critique of Pure Reason*, A 101, tr., 133.

Schopenhauer suggested that music is a presentation of the transcendental Will. As I've said, this quest for an external source of musical meaning is understandable, but it is not particularly helpful; or at least not the most helpful place to begin. In fact, I will argue that we can only understand the reality of musical meaning if we first of all recognize music *as a human experience*. Our *subjective* experience of music turns out to be the key to the claim that music may provide real cognitive access to the world outside of ourselves. Before we can reach this point in the argument, we must re-orient the thrust of our discussion.

### Hearing in the body

Our exploration to this point has reflected one of the prevailing biases of our culture: we have focused attention primarily upon the mind/brain, and upon processes traditionally associated with it (e.g., cognition, imagination, intuition, abstraction). In considering how we perceive music, the tacit assumption has been that this perceiving "we" is located behind the eyes and between the ears. Yet, different cultures, Moltmann notes, have identified various locations of "the self." The self has been identified as residing in the heart, the breath, and so on. But when "the human being came to be viewed as the subject of reason and will . . . the self migrated once again, in the world of the imagination, and came to be lodged in the human brain."<sup>74</sup> However, we should not accept this localization of the self uncritically. If we do not perceive music apart from the brain, neither do we perceive it apart from the rest of the body. Acknowledging that we hear music *in the body* is an essential first step if we are to accord music meaning outside the body.

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<sup>74</sup> Jürgen Moltmann, *God in Creation: An Ecological Doctrine of Creation*, tr. Margaret Kohl (London: SCM Press, 1985), 255.

Of course, the sensual, physically experienced aspect of music has always been recognized, but these qualities have often cast suspicion on music, rather than appearing as any sort of virtue. Pike dismisses sensual appreciation as the lowest of all forms of musical experience. Those who attend to the physical presentation of sound rather than to its abstract (silent) structures, he claims, can hardly be said to be listening to music. What is more, by indulging in sensuality, they are in peril of moral corruption. Likewise, Arnold Schoenberg has nothing but disdain for those who are fascinated by the physical qualities of instrumental sound.

The childish preference of the primitive ear for [tonal] colours has kept a number of imperfect instruments in the orchestra, because of their individuality. More mature minds resist the temptation to become intoxicated by colours, and prefer to be coldly convinced by the transparency of clear-cut ideas.<sup>75</sup>

Here, the rational, reasonable perception of music is associated with its mental apprehension. The body is regarded as non-rational, and therefore, the sensual, embodied experience of music is considered suspect. Our examination of music, however, has suggested something like a tuneful collage of operations traditionally segregated into “mental” and “physical.” Here, abstract structural representations arise from sensual experience, and physical skills are enabled by reflection and conceptual organization.

It is difficult to harmonize this musical experience with the kind of dualism offered by Pike or Schoenberg. It is an experience however, which finds surprising resonances in Old Testament anthropology. Here, argues Moltmann, “the person *thinks with his body*. The brain and the bodily organs *instruct one another*.”<sup>76</sup>

The kidneys are often the seat of the conscience (Ps. 16.7). God proves a person’s heart and kidneys (Ps. 7.9 and frequently elsewhere). The liver can be called the organ of profound grief (Lam. 2:11). His bile makes a person ‘bitter’. The person’s life is his breath and also his blood. The heart

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<sup>75</sup> Arnold Schoenberg, *Style and Idea: Selected Writings of Arnold Schoenberg*, ed. Leonard Stein, tr. Leo Black (Berkeley; Los Angeles: University of California Press, 1984), 235.

<sup>76</sup> Moltmann, 257. My emphasis.

can be called the organ of the will and the desires. Here, feelings, ideas, intentions and decisions are linked with a whole series of representative bodily organs. . . . In this anthropology soul and body, the core of the inner life, and the outward mental horizon are seen as existing in reciprocal relation and mutual interpenetration.<sup>77</sup>

## The body in the mind

The intimate connection between the physical and the mental has been explored by Mark Johnson in his book, *The Body in the Mind*.<sup>78</sup> Johnson argues that the categories and concepts we use in reasoning, communicating, and imagining arise in large part from our embodied experience in the world. He writes, “Human bodily movement, manipulation of objects, and perceptual interactions involve recurring patterns without which our experience would be chaotic and incomprehensible.”<sup>79</sup> These recurring patterns are internalized as structures Johnson calls “image schemata,”<sup>80</sup> which serve as the foundation of our rational engagement with the world. Through metaphorical extension, our patterns of bodily experience provide us with dynamic frameworks around which we may organize meaning.

Johnson is not simply proposing that we make sense of our *physical* experience of the world in this way. He argues that *all* of our thinking and imagining draw upon schemata which arise from our bodily experience. Abstract reasoning generally is made possible by the metaphorical projection (mapping) of embodied experience on to non-physical or conceptual experience.<sup>81</sup>

The view I am proposing is this: in order for us to have meaningful, connected experiences that we can comprehend and reason about, there

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<sup>77</sup> Ibid.

<sup>78</sup> Like Raffman, Johnson is a philosopher who has been influenced by cognitive science. See also George Lakoff and Mark Johnson, *Metaphors We Live By* (Chicago: University of Chicago Press, 1980); George Lakoff, *Women, Fire and Dangerous Things. What Categories Reveal about the Mind* (Chicago: University of Chicago Press, 1987).

<sup>79</sup> Johnson, *The Body in the Mind*, xix.

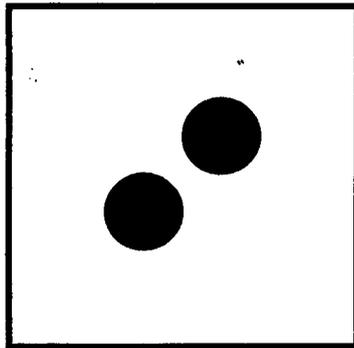
<sup>80</sup> For important distinctions between “schema” as Johnson uses the term and its usage in Kant, see Johnson, 18-30.

<sup>81</sup> Ibid., 40.

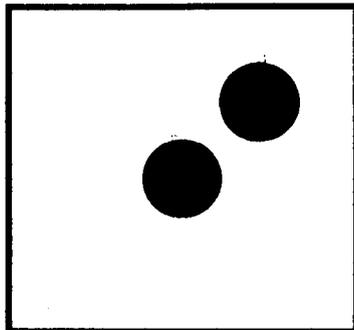
must be pattern and order to our actions, perceptions, and conceptions. *A schema is a recurrent pattern, shape, and regularity in, or of, these ongoing ordering activities.* These patterns emerge as meaningful structures for us chiefly at the level of our bodily movements through space, our manipulation of objects, and our perceptual interactions.<sup>82</sup>

The way in which these schemata are developed and function can be demonstrated through the BALANCE schema.<sup>83</sup> First of all, Johnson observes, balancing is “an *activity we learn with our bodies* and not by grasping a set of rules or concepts.”<sup>84</sup> And yet the *concept* of balance is one which pervades our experience at a number of levels. Johnson points out studies done on the perception of balance in visual fields.

4.9a



4.9b



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<sup>82</sup> Johnson, *The Body in the Mind*, 29.

<sup>83</sup> Johnson gives 25 pages (74-98) to exploring this schema; my discussion of it here is only meant to illustrate the outlines of how schemata function in Johnson's proposal.

<sup>84</sup> Johnson, 74. Johnson cites Polanyi's observation that one cannot provide another with a set of conceptual principles for balancing on a bicycle. It must be learned by bodily experience.

Arnheim presented subjects with a number of figures such as those in ex. 4.9,<sup>85</sup> and asked them whether the disks were at rest or moving in a particular direction. There was a high degree of inter-subjective agreement about these perceptions, and Arnheim noted an underlying “structural skeleton” of surprising complexity. Although neither disk is in the center of the square, figure, 4.9a, is perceived as balanced. However, if we were to remove one of the two disks from the square, subjects perceive the remaining figure as imbalanced. In figure 4.9b, on the other hand, the lower disk is oriented in the center of the square, but because it is perceptually paired with the upper dot, the figure overall is perceived as unbalanced. Arnheim found that perceptual balance could be achieved or lost by (to name only a few factors): the number of disks within the square, their position within the square, their position relative to one another, their size relative to one another, even color.<sup>86</sup>

Johnson points out that

we say that the *disks* . . . are balanced or unbalanced, [yet] the balance does not exist objectively *in* the figure drawn on the page, as if the balance were just *there* to be passively perceived by anyone. The disk on the white square is only balanced *in our acts of perception*.<sup>87</sup>

The balance in the figure is not achieved in physical space, under the influence of gravity; but it is a perceptual balance, in which concepts like “force” and “weight” are applied metaphorically. We should note that there are obvious affinities between the point Johnson is making and our explorations of music perception. Nothing moves in a melody. It does not “reach up” or “leap down,” but we hear it in these terms of physical motion.

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<sup>85</sup> Modeled after the illustrations in Johnson, 78.

<sup>86</sup> Johnson, 83.

<sup>87</sup> *Ibid.*, 79.

## Metaphorical extension

The significant step in Johnson's argument comes next. The BALANCE schema, Johnson maintains, is not only active in perceiving visual figures. Rather, this schema serves as the structural basis around which concepts of all sorts are organized. Johnson attempts to demonstrate the way in which the BALANCE schema is extended to a wide range of spheres. He lists a host of metaphors of: systemic balance, psychological balance, legal balance, moral balance, and mathematical balance. I will cite just a portion of his discussion, in which he is describing metaphors of balance in rational argument and conflict:

When I set out to convince others of my view, I *pile up* evidence, *amass* facts, and *build up a weighty argument*. Ideally, anyone who listens to my case will *weigh* its merits. Two arguments may carry *equal weight*, so we then try to *tip the scale* in favor of our view by *adding* further evidence. If we are successful, we feel the *balance tip* in our favor, as we add to our argument. . . . The notion of weight is intimately related to the structure of the BALANCE metaphor . . . . Thus we get reports such as,

The Argentine air force launched a *massive* attack on the British fleet. One frigate was *heavily* damaged, but only *light* casualties were suffered by British sailors. The Argentines paid a *heavy* toll in downed aircraft.

We are supposed to decide who won by *weighing* the relative losses.<sup>88</sup>

Johnson is not suggesting that we understand our world by constantly and consciously appealing to our physical experience. The point is that we organize our experience according to a number of image-schemata which are metaphorically extended across the whole range of our experience; and furthermore, that these metaphors tend to have a root meaning which can be located in our physical experience. The various metaphorical extensions of BALANCE in all their manifestations, depend upon understanding an experience which we have in our bodies.

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<sup>88</sup> Ibid. , 89. Emphasis original.

Logical inferences, I am claiming, are not just inexplicable structures of rationality (of *pure* reason). On the contrary, they can be seen to emerge from our embodied, concrete experience and our problem solving in our most mundane affairs. The patterns of our rationality are tied, in part, to the preconceptual schemata that give comprehensible order and connectedness to our experience.<sup>89</sup>

What Johnson is suggesting is that one is able, at some level, to recognize a likeness in experiential pattern between, (say):

*Orienting and relating the various aspects of my (emotional) being in such a way that I remain (emotionally, metaphorically) "stable" and able to function effectively;*

**and**

*Orienting and relating the various aspects of my (physical) being in such a way that I remain (physically, literally) stable and able to function effectively.*

Moreover, Johnson contends, this latter, embodied, experience of BALANCE provides me with the conceptual vocabulary and pattern of experience by which I am able to describe and make sense of the former, emotional experience of BALANCE.

### **Embodied schemata and the experience of music**

The potential of all of this for a philosophy of music is considerable.<sup>90</sup> I have argued over the last two chapters that in hearing music we rely upon imaginative mappings (or schemata) which we possess preconceptually. (In the last chapter, we considered just a portion of the considerable body of empirical data supporting the reality of these schemata.) At a very basic level, we perceive Gestalt patterns of motion, grouping, balance, orientation and so on. At higher levels, our music perceptions are metaphorically mapped onto fields such as those of gesture, and bodily motion (to take two that Scruton emphasizes).

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<sup>89</sup> Ibid. , 99-100. Emphasis original.

<sup>90</sup> The promise of Johnson's work for developing a richer understanding of music is suggested in Wayne D. Bowman, *Philosophical Perspectives on Music* (New York: Oxford University Press, 1998), 296-299.

What Johnson's study suggests is that these musical mappings are not some musical splinter skill, isolated from other aspects of our perceptual and conceptual being. Rather, we may regard them as part of an intricate network, in which various spheres of our experience are related cross-categorically, to recurring dynamic structures and patterns. They are not random or irrational, but arise in the same way as much of our abstract, rational thought—through the metaphorical extension of bodily experience. In hearing an interval “leap up”, or in hearing a likeness between a melody and a father's love for his daughter, I am employing the same sort of process by which we order all of our experience.

Connecting body and mind provides a solid grounding for our imaginative engagement with the world.<sup>91</sup> We come to see imagination, not as a random or completely unfettered *construction* of reality, but as a faculty which extends our embodied experience of reality. When we imaginatively extend our kinesthetic sense of balance to the circles of ink in ex. 4.8, we are not being fanciful. It is a *heuristic* application of the imagination, which draws on our experience of embodied reality in order to say something *real* and meaningful about the orientation of the printed figure. It is legitimate and meaningful to speak of the disks as *balanced* or *leaning toward the upper right corner*, though they are not contending with gravity. In the same way, it is legitimate and meaningful to speak of the B in the Chopin Prelude as *reaching up* and *straining toward* the D, although it does not move across physical space nor exert physical or emotional energy.

The body that experiences music is not just a hearing body, but the corporeal center that integrates the entire range of human experience. Accordingly, musical balance, musical force, even music's perennial patterns of ebb and flow, tension and release . . . are not simply formal qualities addressed to an appreciative, disembodied mind. They are experiential structures learned by the body and recognized in other embodied experience that is similarly structured. Moreover, the bodily basis of musical meaning offers to explain how emotion or affect are

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<sup>91</sup> Johnson, 205-212.

integral to the experience of music, not mere postperceptual or extramusical associations.<sup>92</sup>

## The reality of the musical experience

Can music open up reality to us? Can music be a kind of knowing? I would like to pursue some further implications of Johnson's proposal.

### Music and motion

We may apply this discussion to music using an obvious example, already mentioned. One of the most persistent and intuitive mappings of musical sound is onto various schema of bodily motion. We often think of music in terms of dance. At a very young age we spontaneously begin moving to music,<sup>93</sup> and we very naturally speak of melodies ascending, descending, leaning, leaping, falling, spinning, stretching, reaching, resting, turning, and so on. We encounter this association between music and bodily movement in one of the oldest philosophical reflections on music and in one of the most recent. In choosing music for a society, Plato suggests that we "try to discern the rhythms of a life which is well regulated and courageous."<sup>94</sup> Scruton too, suggests that "gesture" is at the heart of music,<sup>95</sup> and that the extraordinary appeal and power of music may be found in the way in which it is "a translation of the dance."<sup>96</sup>

One might ask, why should we value a translation of dance into *music*? Why not simply enjoy dancing, and leave it at that? I would like to propose that one reason we value such a translation is because music not only draws upon *but contributes to* our repertoire of schemata. The various schemata Johnson explores are grounded in fundamental visual, kinesthetic or tactile experiences. But why should not our *aural*

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<sup>92</sup> Bowman, 299.

<sup>93</sup> "In Moog's (1976) study it was found that nearly all babies made some sort of movement response to his tests [in which music was played for the infants]. The most common responses were swaying from side to side in a sitting position or bouncing up and down. These responses were most commonly observed to song and instrumental music rather than pure rhythms. . . . Between the ages of nine months and one year these movements increased in frequency, duration, and intensity." Sloboda, 201.

<sup>94</sup> Plato, *Republic*, 399e, trans. Robin Waterfield (Oxford: Oxford University Press, 1993), 97.

<sup>95</sup> Scruton, 333.

<sup>96</sup> *Ibid.*, 339.

experiences also contribute to our perceptual categories? It seems plausible to suggest that we organize our conceptual world, not only according to how we see and feel it, but according to the way we *hear it* as well.

If this is so, then music offers us more than a way of *expressing* our experience. In music, we enter into a unique mode of embodied experience, which *expands our way of being* in the world. It does so in two ways: (1) by presenting us with new schemata for thinking and acting; and (2) by modifying and expanding schematic structures which overlap with other areas of our experience. Let's consider the second of these two first, observing how music modifies and expands our schemata of bodily motion. As I have noted, Scruton appeals to a deep and primitive link between music and dance. Dancing, he says "illustrate[s] the peculiar pleasure that rational beings take in coordination, a pleasure that rises above every practical purpose."<sup>97</sup> In music we enter into a "dance of sympathy," moving in responsive identification with the "human life imagined in the sounds."<sup>98</sup> The dance of musical tone and gesture however, is of a special sort. Among a group of dancers,

each dancer occupies his own space: the harmony [of motion] between the dancers does not cancel their separation. In music, however, movements coalesce and flow together in a single stream. The phenomenal space of music contains no places that are 'occupied', or from which competing gestures are excluded. Moreover, the aural world is transparent: nothing that occurs in it is blocked from view, and all that flows through it is revealed to the ear as flowing.<sup>99</sup>

In music, we encounter motion of a special kind—one which allows movements and gestures and connections which are not possible in physical space. In this sense we may affirm Zuckerkandl's belief that in music we enter a realm of unity without the blurring of distinctions;<sup>100</sup> of coincidence in space without exclusion;<sup>101</sup> of dynamic

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<sup>97</sup> Ibid. , 338.

<sup>98</sup> Ibid. , 355.

<sup>99</sup> Ibid. , 338.

<sup>100</sup> *Sound and Symbol*, 301-2.

<sup>101</sup> Ibid. , 297.

forces acting through rather than upon bodies;<sup>102</sup> of individual parts which carry within themselves the knowledge of their place within the whole.<sup>103</sup> By opening up a whole world of movement to us, music expands the categories under which we may conceive of force, cooperation and connection. Ways of structuring thought and action are opened up to us which can be applied far beyond the realm of the aesthetic. (Remember our earlier example: we use the BALANCE schema, not just to conceptualize the way we think and talk about bicycle riding; but also in how we think and talk about legal and moral justice.) It is no accident that “harmony” is one of the most persistent metaphors in Plato’s *Republic*—for the right relationship of soul and body; the right relationship of members of society; the right relationship of different character traits; the right relationship of different pursuits and activities.<sup>104</sup> By contributing to our imaginative vocabulary, music not only moves us, but teaches us ways of moving.<sup>105</sup>

In addition to expanding schemata which overlap with other domains, I believe music may contribute unique conceptual categories to our experiential repertoire. Establishing and mapping out these schemata would in itself constitute a thesis-length project, but we can at least hint at how music might generate novel schemata. Musicians, particularly jazz musicians, often speak of a particular style (e.g. Swing, Bop, Post-Bop, Cool, etc.), in terms like “feel,” “swing,” or “groove.” These do not typically designate a single musical feature, but represent a musical *Gestalt*. “Swing” for instance, does not simply refer to a dotted eighth note rhythm. “Swing” (or groove or feel) includes rhythm, timing, dynamics, articulation, tone and a dozen intangibles; more than that, it includes the way all of these are brought together. One might say “swing” is an emergent property, which depends upon, but cannot be reduced to a number of constituent parts. Classical musicians likewise, know that the music of the Viennese masters or the late Baroque or

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<sup>102</sup> *Ibid.*, 365.

<sup>103</sup> *Ibid.*, 205.

<sup>104</sup> Plato, *Republic*, tr. Waterfield. Cf. 401a (tr. 99), 410e (tr. 112), 411b (tr. 113), 412a (114), 430e (tr. 137), 432a (tr. 139), 442a-e (tr. 153-54), 443d-e (tr. 155-56).

<sup>105</sup> Higgins argues that “Formal features of music can be seen as analogous to patterns observable in ethical experience. If we pursue these analogies, music can suggest metaphors and models of relevance to our ethical lives.” Kathleen Marie Higgins, *The Music of Our Lives* (Philadelphia: Temple University Press, 1991), 164. See her discussion of this ethical significance of music, 138-205.

the polyphony of the High Renaissance each have a distinctive “feel,” an experienced *Gestalt*, which cannot be described by listing musical properties.

Like the schemata we have considered already, these categories can be extended and used to map other experiential domains. It is not unusual to hear a musician (or a music lover) refer to a meal, a piece of clothing, an event, a person, or an attitude, as having a “funky sort of groove,” or a “soulful kind of feel” to it—and expect to be understood. One might dismiss this as a loose application of pop slang, but for those with ears to hear, such designations are truth-bearing metaphors. Such usages hint at the presence of musical schemata, which inform our understanding of reality, whether or not we ever draw upon them in conversation. I may or may not describe a town or the weather or an attitude as “bluesy.” Regardless, hearing and playing the blues has given me a way of making sense of my experience, in a way I could not have done otherwise. In chapter 6, I will return to this idea, considering the importance of “harmony” as a central metaphor of musical experience.

## Body language

We have considered some of the implications of Johnson’s argument for musical meaning, without attempting anything like a rigorous theological exploration of his philosophical system. If there are potential insights to be gained from Johnson and Lakoff’s “Experientialism”<sup>106</sup> there are, no doubt, real pitfalls as well.<sup>107</sup> In fact, whether or not we entirely accept his system is not of final importance to the account I have presented here. The more fundamental point I am advancing is rooted in the Judeo-Christian tradition: namely, the idea that “the person *thinks with* his body. The brain and the bodily organs *instruct one another*.”<sup>108</sup> I have offered this discussion of image

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<sup>106</sup> Or, “Experiential Realism,” George Lakoff, *Women, Fire and Dangerous Things*, xiv-xv.

<sup>107</sup> I agree with Janet Soskice’s cautious approval of Lakoff and Johnson in her *Metaphor and Religious Language* (Oxford: Clarendon Press, 1985), 81-3. She agrees that we do in many cases organize concepts around embodied metaphors. She also cautions that this proposal cannot give a complete account of all human thought and expression. Not every concept, nor every act of communication is ordered around an embodied metaphor, but many are.

<sup>108</sup> Moltmann, 257. My emphasis.

schemata as one possible way of giving a philosophical account of this claim. Johnson represents one contemporary philosophical attempt to delineate the contours of the conversation between mind and body.<sup>109</sup> Whether or not he succeeds, the vital point is that *the conversation does take place*. Imagination and sensation are bound together in our embodied being in the world, and this way of human being in the world underwrites our claim that music immerses us in external reality.

### Hearing as creation

Banana, rounded apple, russet pear,  
gooseberry . . . Does not all this convey  
life and death into your mouth? . . . It's there! . . .  
Read it on a child's face any day,  
when it tastes them. What infinity!  
Can't you feel inside your mouth a growing  
mysteriousness, and, where words were, a flowing  
of suddenly released discovery?  
Dare to say what 'apple' has implied!

Rilke, *Sonnets to Orpheus*, I. xiii<sup>110</sup>

I have been arguing that the reality of musical meaning is underwritten by our physical being in the world. Music reflects a kind of embodied experience, I have proposed, placing special emphasis on *embodied*. Equally important for our account is the fact that music is *our experience*—an experience which human beings in this world have.

Hearing sounds as music is an act of the imagination which involves going beyond what is given in the physical presentation of the sound. Some traditions have presented this imaginative transcendence as a betrayal, or a violation of the created order;

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<sup>109</sup> Another promising resource for such an account is provided by Michael Polanyi, who seeks to “throw light on the bodily roots of all thought, including man’s highest creative power.” (Michael Polanyi *The Tacit Dimension* (London: Routledge & Kegan Paul Ltd. 1966), 15.) See esp. *The Tacit Dimension*, 15-25; and idem, *Personal Knowledge: Towards a Post-Critical Philosophy* (London: Routledge & Kegan Paul, 1958), 49-65. Cf. Begbie’s use of Polanyi, in *Voicing Creation’s Praise*, esp. 198-258.

<sup>110</sup> Rainer Maria Rilke, *Sonnets to Orpheus. Written as a monument for Wera Ouckama Knoop*, tr. J. B. Leishman (London: The Hogarth Press, 1946), 59.

a transgression of established boundaries.<sup>111</sup> However, this imaginative engagement can also be construed more positively, as a *fulfillment*, a *realization*, of the created order. In imagination we are able to go beyond simply seeing and hearing “objects” and “events.” We identify the meaning, the purpose, and the significance of things. We go beyond seeing objects in clinical isolation, and discern their relationship to the whole, their place within larger patterns of order. With this power comes responsibility. Many have located human experience within imaginative frameworks which are deceptive and destructive. This abuse however, does not define the exercise of the imagination. Our imaginative engagement with the world also represents the opportunity for insight. It also represents an exercise of the role God has given us within his Creation.

### A human attitude toward the world

Anthony O’Hear observes that both art and science represent an imaginative engagement with reality: “one of which eliminates the human perspective altogether as far as it can, and the other which remains tied to human perspective and human response.”<sup>112</sup> “It is only within the second perspective” he argues, “that our inner sense of what it is to be alive and in this world is developed.”<sup>113</sup>

We must not miss the two poles of this statement: the artistic imagination reflects a *human experience* (“what it is to be alive”) of *external reality* (“in this world”). We do not (in the Pythagorean sense) find music *in* the world, but neither do we find it *apart* from the world. In music we express something about external reality, by means provided us by that reality. It is a concrete, sensual, physical experience, yet one in which we direct our attention toward more than just the physical qualities of music. “In understanding a work of music . . . one sees it as expressive in a way that *goes beyond its literally*

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<sup>111</sup> See for instance Plato, *Republic*, 595a-598d. I am indebted to the discussion in Trevor A. Hart “The Foam of Fancy? The Suspicion and suppression of imagination in culture and theology.” Lecture delivered to *Theology and Imagination* at St. Mary’s College, Candlemas Semester, 2000.

<sup>112</sup> Anthony O’Hear, *The Element of Fire: Science, Art and the Human World* (London; New York: Routledge, 1988), 27.

<sup>113</sup> *Ibid.*

*ascribable properties.*"<sup>114</sup> As a sensual experience that transcends its sensual qualities it is an act which is both creative and restrained; both generative of and responsive to meaning. Finding the meaning of the pigments or syllables or sounds, "is not a matter of pointing to objectively identifiable features of the work, so much as suggesting to another that it is possible to experience objectively identifiable features of the work in a particular way."<sup>115</sup> The musician commends a particular *response* to sound,<sup>116</sup> one which embodies a "human attitude" toward the world.<sup>117</sup> (Something like the *Lebenswelt* of the phenomenologists, says Scruton.<sup>118</sup>)

Art translates things into pure appearance, so that they lie revealed in their surface. . . . Just as we learn about the human face from painting, so do we learn about movement and life from music. Not that we learn new *facts*: rather that we come to see movement and life in another way, to sense its inward meaning, and to respond to it as in a dance. Our own life is transfigured as we listen, sensing the movement in ourselves, and the order in appearance that life can achieve.<sup>119</sup>

Both Scruton and O'Hear believe that the arts are—now more than ever—vitaly important to humanity. Art provides us with a way of making sense of the world as meaningful, as an ordered whole in which humanity has a part.<sup>120</sup> They are more important than ever, because this is a role which religion once filled, but can no longer:

If religion is not a living possibility for many today, it is left to art to inform the open, spiritual aspect of our life.<sup>121</sup>

The experience of this voice [of music] becomes the more important to us as the sense of a spiritual and religious community dwindles.<sup>122</sup>

Whether or not music can fill the role Scruton and O'Hear have in mind, if "religion is not a living possibility," is another question.<sup>123</sup> In such a world, music may

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<sup>114</sup> *Ibid.*, 111.

<sup>115</sup> *Ibid.*

<sup>116</sup> Scruton, 372.

<sup>117</sup> O'Hear, 111.

<sup>118</sup> Scruton, 223-225. Cf. Anthony O'Hear, "Scruton, Roger," in *A Companion to Aesthetics*, ed. David Cooper (Oxford: Blackwell, 1992), 394.

<sup>119</sup> Scruton, 235-36.

<sup>120</sup> Scruton, 460-66; 478. O'Hear, *The Element of Fire* 141-49.

<sup>121</sup> O'Hear, *The Element of Fire*, 159. Cf. O'Hear, "Scruton, Roger," 395.

<sup>122</sup> Scruton, 489.

indeed express the lived quality of human experience. It may also provide a kind of functional, practical knowledge about the world around us—an aesthetic sense of what things are like, built up through evolutionary trial and error.<sup>124</sup> It is less certain that in a world emptied of God, music can unfold the “inward meaning”<sup>125</sup> of things; that it can “discern harmony where once only discord and disorder were to be seen”<sup>126</sup> or find “the spirit in the mass.”<sup>127</sup> At least, it would not seem that this lived, human perception of the universe should have any more claim on the “inward meaning” of things, than a decentered, disembodied, scientifically objective view of the universe.<sup>128</sup> O’Hear attempts to demonstrate that the *Lebenswelt* is significant and of value, even if “human beings are simply products of a mindless, purposeless cosmos. . . . [and] our perspective on the world . . . a by-product of more fundamental processes and reflective of no deeper reality or purpose.”<sup>129</sup> Nevertheless, in a powerful and poetic passage, he confesses,

The idea that there is in human perception a singular and irreducible revelation of the real world becomes even more plausible if we see human existence as cosmically intended in some way. For what, from the cosmic point of view, could be the point of human existence, other than that the cosmos should be experienced and understood in a human way? . . . . It has long seemed to me. . . that if we are here for a purpose, and if human life has something unique to contribute to the cosmos, it is this: . . . .

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<sup>123</sup> Both authors seem aware of this as well at some level, e.g. : “It is I think, not coincidental that the modernist crisis in the arts has coincided with the . . . widespread repudiation in the West of religious faith.” O’Hear, *The Element of Fire*, 116.

<sup>124</sup> Scruton, “Our everyday concepts have evolved under the pressure of human circumstance, and the attempt to replace them with scientific concepts . . . may in fact deprive us of the little competence that we humans have acquired.” 222. O’Hear, *The Element of Fire*, 137, 149.

<sup>125</sup> Scruton, 235.

<sup>126</sup> O’Hear, 163.

<sup>127</sup> Ibid.

<sup>128</sup> “The ascription of beauty to truth and to meaning is either a rhetorical flourish, or it is a piece of theology. It is a theology, explicit or suppressed, masked or avowed, substantive or imaged, which underwrites the presumption of creativity, of signification in our encounters with text, with music, with art. The meaning of meaning is a transcendent postulate.” George Steiner, *Real Presences. Is there anything in what we say?* (London; Boston: Faber and Faber, 1989), 216.

<sup>129</sup> Anthony O’Hear, “The real or the Real? Chardin or Rothko?” in *Philosophy, Religion and the Spiritual Life. Royal Institute of Philosophy Supplement 32*, ed. Michael McGhee (Cambridge: Cambridge University Press, 1992), 51.

“Are we perhaps here to say: House,  
Bridge, Well, Gate, Jug, Fruit Tree, Window  
—at most, Pillar, Tower . . . But to say—oh!  
To say in this way, as the things themselves  
never so intently meant to be.”

(R. M. Rilke, *Ninth Duino Elegy*, lines 32-6)

That is, we are here to experience and articulate something about things,  
something which things themselves can neither articulate nor  
experience.<sup>130</sup>

## Naming the sound

O’Hear’s comments and (especially) Rilke’s lines are richly evocative of Genesis 2, in which the Man is indeed placed in the Garden to say something about things—their names, the unique human contribution to God’s creation.

Now the Lord God had formed out of the ground all the beasts of the field and all the birds of the air. He brought them to the man to see what he would name them; and whatever the man called each living creature, that was its name. So the man gave names to all the livestock, the birds of the air and all the beasts of the field.

Genesis 2:19-20

William Edgar suggests that music is a kind of “naming”—an extension of the responsibility given to Adam in Eden.<sup>131</sup> As such, it represents a real human contribution to reality; yet, it is a responsive creativity. Adam did not create the animals—God did. At the same time, God brought the animals to Adam, and invited him to name them: “And whatever the man called each living creature, *that was its name.*”

This naming, this articulation of human experience in the world, is not a betrayal nor a construction of reality, but a *realization* and a *fulfillment* of it. It is, as O’Hear suggests, the unique human contribution to the cosmos. Moltmann expounds this theme in wonderfully musical prose, observing that as human beings we are

able to discern the world in full awareness as God’s creation, to understand it as a sacrament of God’s hidden presence, and to apprehend it as a

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<sup>130</sup> *Ibid.*, 52.

<sup>131</sup> William Edgar, *Taking Note of Music* (London: SPCK, Third Way Books, 1986), 73-4.

communication of God's fellowship. That is why the human being is able consciously to accept creation in thanksgiving and consciously to bring creation before God again in praise. . . . As God's gifts, all his creatures are fundamentally eucharistic beings also; but the human being is able—and designated—to express the praise of all created things before God. In his own praise he acts as representative for the whole of creation. His thanksgiving, as it were, looses the dumb tongue of nature. It is here that the priestly dimension of his designation is to be found. . . . That is why in the praise of creation the human being sings the cosmic liturgy, and through him the cosmos sings before its Creator the eternal song of creation.<sup>132</sup>

Musical hearing, we have learned, is dependent upon several levels of aspect perception, or "hearing-as." We hear sounds *as* tones, we hear sequences of tones *as* a temporal Gestalt comprising a melody, we hear melodies *as* gestures in phenomenal space, and so on. In the same way, in this priestly role we engage in a type of "hearing-as-Creation"—hearing the world around us as a coherent unity, as meaningful, as exhibiting the glory of God. Through our imaginative engagement with the world, sounds become songs, and frequencies, harmonies. Mere acoustical events are transformed into articulate expressions, and our experience of the world around us is mapped onto rhythms and melodies. Like Adam naming giraffes and donkeys, so Mahler names his storm, Bill Evans his little girl, and McCoy Tyner his search for peace, in vibrant chords and musical textures. Steiner aptly describes music as "the naming of the naming of life."<sup>133</sup>

It is this sort of imaginative perception—a "seeing" which perceives the world, not objectively, but transformationally—that makes possible our experience of music: "To hear a sound as music is not merely to hear it, but to order it."<sup>134</sup> In thus perceiving the audible world, and in giving imaginative musical form to the world we encounter, we tune our ears to the song of the new Heavens and the New Earth, which John heard in his Revelation:

*Then I heard every creature in heaven and on earth and under the earth and on the sea, and all that is in them, singing.*

Revelation 5:13

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<sup>132</sup> Moltmann, *God in Creation*, 70-1.

<sup>133</sup> Steiner, *Real Presences*, 217.

<sup>134</sup> Scruton, 18.

# SECTION III



*The themes return, in a different key*



# Measuring Melodies



Augustine's *De Musica* -  
Part I

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## Chapter 5

*For we shall try and know  
more thoroughly by its  
place in this discipline what  
proportion is and how great  
is its authority in all things*

- St. Augustine, *De Musica*

Our study began with two different theological explanations of musical ubiquity. One linked the power of music to its location in the realm of spontaneous experience. The other, its photographic negative, placed music in the sphere of reflective knowledge. In the second section of the thesis, we found that while each of these explanations has some claim to validity, nevertheless—for this very reason, in fact—neither one is adequate as stated. In this final section, I would like to consider a third model for the theological study of music: Augustine's *De Musica*. In *De Musica* we shall find an account of music which does not explain its effects in terms of *feeling-not-knowing*, nor in terms of *knowing-not-feeling*. Augustine also gives far more attention to the actual theory and practice of music

than do Pike or Schleiermacher. This work represents, then, still another way of bringing theology and music into conversation.

Our transition from the world of psychomusicology to the late fourth century is not as radical a change of venue as it might seem at first. The same themes which have concerned us to this point occupy a central place in *De Musica*. Augustine carefully explores the individual components of musical sound and how these discrete units are organized into larger structures.<sup>1</sup> He considers at length “the function of the senses as well as judgmental capacity in determining *suavitas*,”<sup>2</sup> and argues that an exploration of music may “lead to an understanding of mind (*anima*) itself, and, ultimately, to God.”<sup>3</sup> Much as we have been doing, Augustine examines “the natural propensity of men . . . to make movements and sounds rhythmically or metrically, and considers, too, whether and if so how far exact knowledge, and not instinct only, is required.”<sup>4</sup> *De Musica* has even been characterized as the first attempt at a psychology of music.<sup>5</sup> Our interaction with Augustine, therefore, represents an extension, not an abandonment of the issues we have taken up.<sup>6</sup>

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<sup>1</sup> Nancy van Deusen, “Musica, De” in *Augustine Through the Ages: An Encyclopedia*, ed. Allan D. Fitzgerald (Grand Rapids, Cambridge: Eerdmans, 1999), 575.

<sup>2</sup> Ibid.

<sup>3</sup> Ibid.

<sup>4</sup> W. F. Jackson Knight, “Foreword” to *St. Augustine’s De Musica: A Synopsis* (London: The Orthological Institute, 1947), 8.

<sup>5</sup> Carl Johann Perl, “Augustine and Music,” tr. Alan Kriegsman, in *The Musical Quarterly* 41:4 (1955): 496-510, 502. Cf. Jackson Knight, “Foreword”, 2.

<sup>6</sup> In connecting this chapter with earlier ones, it is also interesting to note several similarities between *De Musica* and Schleiermacher’s *Christmas Eve*. They are both among the earliest works produced by these two prolific figures: *De Musica* was begun in Milan, before Augustine’s baptism and was completed sometime around 390/391. *Christmas Eve* was published in 1805, five years after the anonymous *Monologues*, and (aside from some early sermons) is the first published work to which Schleiermacher attached his name. Both works are written in the form of a dialogue. Both have received relatively little scholarly attention, especially when compared with that given to other works by these authors. And obviously, the authors are each enormously influential figures in the history of Christian thought—Augustine often being identified as the Father of Western Theology, and Schleiermacher the Father of Modern Theology. Of course, the immediate point of interest for us is that each of these works have a great deal to say about music.

At the same time, we should not be so single-minded that we pass over this fascinating work too quickly. At the outset of the thesis I complained that there are few guides to follow in carrying out a theological exploration of music. In *De Musica*, we have a rigorous theological investigation of music, written by arguably the most important theologian of the Christian tradition. *De Musica* is an invaluable resource; not only for whatever insights Augustine may contribute to our discussion, but also as a model for the sort of project in which we are presently engaged. Consequently, I have two goals in these chapters. The first is simply to offer an exposition of a neglected work, which in recent times has been misread nearly as often as it has been read. This will take up much of this first chapter on *De Musica*. The second goal will be to consider the contribution of this work to the questions we have been exploring all along.

## **The Platonic-Pythagorean Tradition**

To avoid some misunderstandings, it may be useful first to sound out some of the musical-philosophical themes of late Antiquity, which would have formed the backdrop to Augustine's study.<sup>7</sup> Without doubt, the most influential tradition of music philosophy in the Greco-Roman world was that associated with Pythagoras and extended through Plato. I will only survey its themes briefly here. Some, which have already come up in our discussion (e.g. , musical ethics in the Platonic tradition; music and number in the Pythagorean tradition), I will simply mention.

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<sup>7</sup> And these traditions must be regarded as *background*, not foreground, in our reading of *De Musica*. Some of the same themes emerge in Plato and Augustine, but Augustine's analysis of music is distinctive and original.

## Music, number, and universal order

One of the primary emphases of the Platonic-Pythagorean tradition is the correspondence between intervallic relationships and mathematical ratios; between music and number. Of all the liberal arts it was mathematics to which music was most closely related. Boethius, (writing later, but in the same tradition) identified mathematics and music as something like “pure” and “applied” branches of the same discipline:

“Arithmetic explores that multitude which exists in and of itself, whereas the appropriate admixtures of musical modulation become fully acquainted with that multitude which is related to something.”<sup>8</sup>

The connections the ancients drew between number and musical harmony were not an acoustical “explanation” of sonorities. For Pythagoras and his followers, the correspondence between numerical and musical relationships was both a wonderful mystery and a profound revelation (with all the religious and theological overtones that word carries). In simple ratios—so fundamental to mathematical theory, so basic to the workings of numbers, expressed so directly in the concords of music—they believed they had found proportions basic to the workings of the cosmos itself. The movements of the planets and stars in the heavens, the ordered relationship of one part of the sensible creation to another, the relationship of the soul to body, and of one person to another; all of these relationships were thought to be held together and governed by a single cosmic mathematical principle. Aristotle describes the Pythagoreans’ beliefs in this way:

They thought that the principles of mathematical entities were the principles of all entities. . . . Since . . . all other things seemed to be

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<sup>8</sup> Boethius, *De Institutione Arithmetica*, I, i, in “Boethius’ The Principles of Music, An Introduction, Translation and Commentary,” tr. Calvin M. Bower (Ph. D. diss., George Peabody College for Teachers, 1966), 25.

assimilable to numbers in their nature, and the numbers were primary of the whole of nature, they assumed that the elements of the numbers were the elements of things as a whole, and they thought that the whole heaven was a harmony and a number. And all features of numbers and harmonies that were in common with the affections and parts of the heaven and the whole cosmic order, these they brought together and applied.<sup>9</sup>

The same proportions which order the universe find expression in the consonances of musical harmony, and the musical harmonies we hear resonate to a deeper, cosmic fundamental. The dimensions of the musical scale correspond to the movement of the celestial bodies, and these, in their courses across the sky, sound out the “music of the spheres”—a universal vibration to which all of reality resonates. It is a beautiful vision of the cosmos, in which “the very motion of the stars is resounded in harmonic modulations.”<sup>10</sup>

## Music and Knowledge

Beyond its aesthetic appeal, several important implications follow on from this model of reality. The most obvious is that such a cosmology accords an epistemic and even a “scientific” value to music. If music is an expression of the rational principle which underlies all of creation, then by exploring music and musical relations we can come to know something about reality itself. The shape, balance and character of the cosmos is sounded out for us in melody and rhythm, and we may discover there the *sound* of truth. For this reason, music was regarded as one of the sciences (while the sciences in turn were more “poetic” and oriented toward questions of philosophy than they generally are now). For Pythagoras, Plato, and the ancient philosophers who stand in their tradition, music is

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<sup>9</sup> Aristotle, *Metaphysics*, Alpha 5, 986a tr. Hugh Lawson-Tancred (London: Penguin, 1998), 19-20.

<sup>10</sup> Boethius, *De Institutione Arithmetica*, I, i. , tr. Bower, 30.

not in the first place a diversion, an entertainment, or an outpouring of the artist's soul. Rather, it is a means of knowing—it tells us about how things are.<sup>11</sup>

## Music and ethics

The universal ratio does not only order material reality, but was believed to govern spiritual, social and moral relations as well. In the same way that the heavenly bodies keep good order by maintaining their proper speeds and proportions, so the well ordered society, the well ordered individual, maintains proper proportion and ratio. To engage in immoral or chaotic behavior is literally to become *ir-rational*. Moreover, just as there were believed to be deep correspondences between music and the heavens, it was believed that there were deep correspondences between music and the human soul. The soul moves in sympathy with music and is profoundly shaped by its melodic contours and rhythmic motion. All of this meant that within the Platonic-Pythagorean tradition, music was manifestly an area of *ethical* concern. Dissonant, chaotic or ill-proportioned music was not just displeasing, but dangerous. This conviction is reflected in a famous passage from Plato's *Republic*:

“So which are the plaintive musical modes? You must tell me—you're the musician.”

“The Mixed Lydian,” he replied, “and the Taut Lydian, and any others like them.”

“We should exclude them, then,” I said. “They don't help even women achieve the required goodness, let alone men.”

“Right.”

“Now it's utterly inappropriate for our guardians to be drunk and soft and idle.”

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<sup>11</sup> “All art, including music, was a much more serious matter before the self-conscious aestheticism of the late nineteenth century took root. It is a recent notion that music is a *divertissement* to be enjoyed in comfortable surroundings at the end of the day. . . . [Among earlier generations] its ability to give pleasure was deemed to be not only the least of its attributes but even a perversion of its true purpose. Most serious thinkers before the nineteenth century considered the sensual delight of musical performances to have the same relationship to the ideal nature of music that sex had to love in Christianity: the former were transitory, without higher purpose, and ultimately debilitating to the soul; the latter were pure and enlightening, providing a connection between our earthly existence and eternal reality.” Jamie James, *The Music of the Spheres: Music, Science and the Natural Order of the Universe* (New York: Copernicus, Springer-Verlag, 1993), 4. James' book offers a wonderfully entertaining history of the concept of the musical universe.

“Of course.”

“Well, which modes are soft and suitable for drinking-parties?”

“There’s an Ionian mode which is called ‘loose’,” he answered, “and another Lydian one as well.”

“Can you find any use for them, Glaucon, when you’re dealing with military men?”

“None at all,” he replied. “It looks as though you’re left with the Dorian and Phrygian modes.”<sup>12</sup>

### Ambivalence toward music

This section from the Republic reflects another characteristic of the Platonic-Pythagorean tradition: a deep ambivalence toward music. On the one hand, music was recognized as a fundamental element of universal order. Music was also esteemed as a means of intellectual and moral training. The right sort of music nurtures those “rhythms of a life which is well regulated and courageous,”<sup>13</sup> and teaches one to love that which is beautiful and well proportioned in all things. On the other hand, this power to influence makes music a potentially dangerous force as well, and is what prompted Plato to ban the majority of the musical modes from his Republic.

In addition to the potential of music to corrupt, Plato (and others in the Platonic tradition) were troubled by its evident sensuality and gratuity. The making of music is among those “occupations which leave the essential requirements of a community behind,” and so make it “bloated and distended.”<sup>14</sup> “Variety in music tends to engender lack of discipline,”<sup>15</sup> Socrates observes, and is likened to such indulgences as “savory sauces,” “Attic pastries,” and Corinthian lady friends.<sup>16</sup> These other “sensual excesses” to which Plato refers suggest that his misgivings about music relate to a deeper conviction:

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<sup>12</sup> Plato, *Republic*, 398e-399a, 400a tr. Robin Waterfield (New York, Oxford: Oxford University Press, 1994), 96-7.

<sup>13</sup> *Ibid.*, 400a, tr. 97.

<sup>14</sup> *Ibid.*, 373b, tr. 64.

the ideal society dispenses with indulgences, and limits itself to that which is necessary and useful.<sup>17</sup>

### Taking music seriously

In any case, whether the attitude toward music was positive or negative, music in ancient Greek and Roman culture was regarded as an activity of tremendous social, moral, metaphysical and philosophical importance. It is this more than anything else which marks ancient attitudes toward music and sets them dramatically apart from those of the modern West. While contemporary philosophers still reflect on music (theologians much less so), this reflection is generally bracketed off from epistemology, ethics, political philosophy and metaphysics. Philosophers of art may (and do) reflect on epistemological, ethical and political questions, but this conversation tends to move in only one direction. Insights from other branches of philosophy are applied to music, but very rarely is the reverse the case. Music is not generally regarded as integral to the study of philosophy or an essential element in epistemological or ethical reflection. By contrast it seems that in the ancient world something like this was just the case.

Of course, the shift in modern thinking is not simply the result of a bias against music. Disciplinary specialization has come to characterize all of modern academic life. The philosophical reflections of Pythagoras, Plato, Aristotle and others embraced not only music, but astronomy, biology, mathematics, political theory and a host of other areas which have subsequently developed into independent disciplines. Even taking this

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<sup>15</sup> Ibid. , 404e, tr. 104.

<sup>16</sup> Ibid. , 404c-3, tr. 104.

<sup>17</sup> Ancient ethical concerns about music become more understandable still when one takes into account the often bacchic and orgiastic uses of music in Ancient religious and social life.

into account, it still would seem that the philosophical stock of music has dropped more dramatically than that of other disciplines. Philosophy of science and mathematics are recognized as important areas of epistemological study. More than ever, physics and astronomy are at the forefront of philosophical reflection on chance and indeterminacy, chaos and order, space, motion, and the nature of time. Various branches of the biological sciences likewise contribute significantly to discussions of the nature of humanity, and increasingly, to ethics as well. Few appeal to music, on the other hand, when considering the shape of the universe, the fabric of time, the nature of human beings, or models of ethics. For most ancient thinkers, these connections were apparent; for some (such as the Pythagoreans), they were fundamental.

#### A tradition of music scholarship

The important place of music in Classical philosophy demanded that the student of the liberal arts be conversant with music theory. Therefore in addition to discussions of music in philosophical works of all kinds, a number of ancient authors produced treatises specifically devoted to music theory. A few of the many figures who contributed significant works of this type are Aristoxenus, Cleonides, Aristides Quintillianus, Nicomachus of Gerasa, Ptolemy and Porphyry.<sup>18</sup> Such treatises would have formed part of the curriculum of any student of the liberal arts. And so again, while we may be unaccustomed to theologians composing treatises on music theory, in the culture of late Antiquity Augustine's *De Musica* would not have been a novelty, but a scholarly addition to a well established genre.

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<sup>18</sup> M. L. West. *Ancient Greek Music* (Oxford: Clarendon Press, 1992), 6-9.

## The disregarded *De Musica*

Indeed, it would not have been at all unusual for an ambitious young academic to set out to write a treatise on each of the liberal arts, as a way of demonstrating his competence as a scholar. Some of the work's detractors have argued that this is exactly what we have in *De Musica*. In this dialogue, we do not meet Augustine the bishop and doctor of the church, but Augustine the young man, newly acquainted with neo-Platonism, and even more recently converted to Christianity. It represents, some claim, an early attempt—tentative and at times a bit clumsy—to bring together his classical training and his new found faith.<sup>19</sup>

There is, we shall see, little truth to this critique, apart from the biographical details on which it is based. *De Musica* is one of Augustine's earliest works; its six books completed between 387 and 391.<sup>20</sup> It was also intended to be part of a series of works on the liberal arts, although Augustine never completed this massive project. A work on Grammar was apparently composed, and others on Arithmetic, Dialectic, Geometry, Philosophy and Rhetoric were begun,<sup>21</sup> but only the text of *De Musica* has survived.<sup>22</sup> Yet it has survived to relative obscurity. Little has been written about *De Musica*, and much

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<sup>19</sup> Van Deusen acknowledges and rejects this critique. "Rather than constituting either a derivative, fairly standard discussion of metric theory, popular at the time, or, as has also been suggested, the preoccupation of a youthful Augustine, soon to leave his study of the liberal arts to move in the direction of his true theological calling, Augustine's extensive discussion of a *rhythmus*, *metrum*, and *versus* held an important disciplinary place within the order required for erudition." van Deusen, "Music, Rhythm" in *Augustine Through the Ages*, 574.

<sup>20</sup> There has been considerable debate over the chronology of these six books, a debate which will be addressed below.

<sup>21</sup> Robert Catesby Taliaferro, "Introduction", to St. Augustine, *De Musica*, tr. Robert Catesby Taliaferro, *The Fathers of the Church: A New Translation*, vol. 4 (New York: Fathers of the Church, Inc., 1947), 153. Cf. the translator's note in Saint Augustine, *The Retractations*, tr. Sister Mary Inez Bogan, *The Fathers of the Church: A New Translation* (Washington, D. C.: The Catholic University Press of America, 1968), 49.

<sup>22</sup> Taliaferro indicates that treatises on Grammar, Rhetoric and Dialectic under Augustine's name have survived, but that these have not been accepted as authentic by the Benedictines. Recent scholars however have accepted the treatise on Dialectic as being a draft of an original done by Augustine. Taliaferro, "Introduction," 153.

of what has been written has been negative or dismissive. One theologian with a special interest in Patristics recently confessed to me that he had never heard of the work. “It is not much studied nowadays, even by Augustinian specialists,” confirms another writer, adding bluntly, “The common wisdom about the work is that it is tedious and derivative.”<sup>23</sup> “Common wisdom” should be qualified, perhaps, given the treatise’s sixteen hundred year history. For much of that lifespan, *De Musica* has been held in esteem.<sup>24</sup> Likewise, in the modern era, the work has attracted some admirers. Classicist W. F. Jackson Knight maintained that “the main metrical theory in it, attempting answers to questions which so far as I know await final answers yet, is elaborate, coherent, and

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<sup>23</sup> James, 71.

<sup>24</sup> “*De musica* has been largely ignored in recent times . . . This, however, was not the case in the Middle Ages. The work was a storehouse of vocabulary, conceptualization, topics of discussion or subject matter, as well as . . . a basis for the discussion of music itself. There are approximately seventy-nine extant manuscripts of *De musica*, from the late eighth century to the fifteenth century. At least twenty-nine of these were copied during the thirteenth century . . . All of these sources are connected to major centers of learning during the medieval period.” van Deusen, “Musica, De”, 575-76.

The exact extent *De Musica*’s influence is difficult to assess, particularly because (through much of the Middle Ages) it was less widely read than Boethius’ *De Institutione Musica* (and in some communities less than Cassiodorus’ *Institutiones divinarum et humanarum litterarum*). Nevertheless, Augustine is often cited as an authority in discussions of music, and variations of his definition of music (*Musica est scientia bene modulandi*) appear in a number of texts, including those of Cassiodorus and Boethius. William Waite wrote an influential work (*The Rhythm of Twelfth-Century Polyphony* (New Haven: Yale University Press, 1954) ), arguing that Augustine’s theory of rhythmic directly shaped the music of composers such as Leonin and Perotin (of the twelfth and thirteenth century Notre Dame school). His thesis is detailed and learned, and has been widely accepted. Still, it’s worth noting that his argument is based on observed resemblances between Augustine’s rhythmic theory and that of the Notre Dame theorists, rather than any explicit reference to *De Musica* on the part of these musicians. In any case, while reserving any final judgment on Waite’s suggestion, (and while also acknowledging that some medieval writers continued to draw on Augustine’s rhythmic), it would seem that during the Middle Ages *De Musica* exercised the *greatest* influence through its definition of music, its methodology, and its more explicitly theological and philosophical reflections on music. It was this material—found mainly in the first and sixth books of *De Musica*—that was taken up and developed in the sixth through the thirteenth centuries.

In the fourteenth, fifteenth and sixteenth centuries there seems to have been a renewal of interest in *De Musica*, not only as a speculative treatise, but as a work of music theory. Scholars, inspired by the *ad fontes* ethic of the Renaissance devoted more attention to Augustine’s work directly, rather than relying on summaries in Cassiodorus, Isidore of Seville, or Boethius. Even with this increased attention to music theory, *De Musica* continued to exert its greatest influence as a philosophical and theological reflection on music, rather than as a guide to music as a liberal art.

Cf. van Deusen, “Musica, De”; William R. Bowen, “St. Augustine in Medieval and Renaissance Musical Science,” in *Augustine On Music: An Interdisciplinary Collection of Essays*, ed. Richard R. La Croix. Studies in the History and Interpretation of Music, vol. 6 (Lewiston, N. Y. : The Edwin Mellen Press, 1988), 29-52; Richard L. Crocker, “*Musica rhythmica* and *Musica metrica* in Antique and Medieval Theory,” *Journal of Music Theory* 2 (1958); Jamie James, 71-8; James McKinnon, “Christian Antiquity” in *Antiquity and the Middle Ages*, ed. James McKinnon. Man & Music Series. vol. 1 (Houndmills,

perhaps even brilliant. Further, it is supported at length by a theory of aesthetic psychology.”<sup>25</sup> The composer Hindemith characterized *De Musica* as “a most intelligent analysis of musical perception and understanding,” which offers us a “truly modern analysis of our faculty of hearing.”<sup>26</sup>

In fact, *De Musica*'s reputation—as a dull piece of second rate scholarship—can be traced to the influence of a handful of nineteenth century scholars and should not be taken as the consensus of Western history. The German critic Westphal was one of the progenitors of this estimate of *De Musica* (*Fragmente und Lehrsätze der Griechischen Rhythmiker*. Leipzig: Teubner, 1861), and he took great delight in pointing out all of the supposed mispronunciations and metrical errors in the examples Augustine gives in Latin verse. Interestingly enough, studies done over the last fifty years have suggested that Augustine, the native speaker (and teacher of rhetoric to boot), may have possessed a more advanced understanding of Latin than nineteenth century Germans like Westphal. The work of Waite and Crocker in particular has vindicated Augustine's understanding of music, and exposed a general ignorance of ancient metric and rhythmic theory among his latter day critics.<sup>27</sup>

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Hampshire: The MacMillan Press, 1990), 80-7; Gustave Reese, *Music in the Middle Ages* (London: J. M. Dent & Sons LTD, 1941), 125; Taliaferro, “Introduction,” 154-61.

<sup>25</sup> Jackson Knight, “Foreword,” 2.

<sup>26</sup> Paul Hindemith, *A Composer's World: Horizons and Limitations*. The Charles Eliot Norton Lectures 1949-1950 (Gloucester, Mass : Peter Smith, 1969; reprint Harvard University Press, 1952), 4, 5. Others who have expressed an appreciation of the work include Carl Johann Perl, “Augustine and Music;” Catherine Pickstock, “Ascending Numbers” in *Christian Origins: Theology, Rhetoric and Community*, ed. Lewis Ayres and Gareth Jones (London: Routledge, 1998), 185-215; Nancy van Deusen “Music, Rhythm” and “Musica, De” in *Augustine Through the Ages*; and William G. Waite, *The Rhythm of Twelfth-Century Polyphony*, idem, “Augustine of Hippo” in *The New Grove Dictionary of Music and Musicians*, vol. 1, Vols. 1-20. ed. Stanley Sadie (London: Macmillan, 1980), 695-96. Van Deusen and S. MacCormack are currently preparing a new edition of Augustine's treatise: *Augustine's "De Musica": An Edition, Translation, Commentary*.

<sup>27</sup> Richard L. Crocker, “*Musica rhythmica* and *Musica metrica* in Antique and Medieval Theory,” *Journal of Music Theory* 2 (1958); William G. Waite, *The Rhythm of Twelfth-Century Polyphony*; “Augustine of Hippo” in *New Grove Dictionary*. See also William R. Bowen, “St. Augustine in Medieval and Renaissance Musical Science,” 29, and Taliaferro, Introduction to *Augustine On Music*, 154-61;

## A study of rhythmic

The treatise's orientation toward rhythmic has also puzzled some modern writers. *De Musica* addresses the metrical and rhythmic aspects of music and poetry, but other theoretical questions such as the tuning of strings, modes and scales, the spacing of harmonic intervals, and so on, are not considered at all. Because he is discussing rhythm, and because he did not have modern musical notation, Augustine uses examples in verse to demonstrate different rhythms. This has led some to misinterpret the work.<sup>28</sup> Walhout for instance writes that “the first five Books discuss mainly poetic meter, so that [Augustine's] thoughts on *music* are limited to Book VI in the main.”<sup>29</sup> This sort of comment fails to take account of Augustine's own assessment of his treatise. Years later Augustine recalls that after his return to Africa from Italy he composed “six books on *musica*.”<sup>30</sup> Walhout's assessment also implies a very limited definition of “music”—as if a lengthy discussion of sound, rhythm and meter does not amount to a discussion of music. The point in any case is that these six books are truly a consideration of *music*, even if only one of its aspects.

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<sup>28</sup> Cf. Waite, “Augustine of Hippo”: “The intention of the first five books has frequently been misinterpreted, for Augustine chose to discuss rhythm in terms of poetry. This has led many to regard the book as a bad treatise on metrics.” 696.

<sup>29</sup> Donald Walhout, “Augustine on the Transcendent in Music,” *Philosophy & Theology* 3 (Spring 1989), 285. My emphasis.

<sup>30</sup> *Retractations* I, x, 1; tr. 45. Augustine also indicates that he originally intended to extend his study to harmonics. Some twenty years after writing *De Musica*, he would recall that he “wrote six books on rhythm alone, and proposed, I may add, to write another six on music as I at that time expected to have leisure. But from the time that the burden of ecclesiastical cares was laid upon me, all these recreations have passed from my hand.” Augustine, “Letter CI,” *The Letters of Saint Augustine*, vol. 1, tr. R. G. Cunningham, A Select Library of The Nicene and Post-Nicene Fathers of the Christian Faith, ed. Philip Schaff [text-on-line] (Edinburgh: T & T Clark), available at Christian Classics Ethereal Library: <http://www.ccel.org>

## Musica est scientia bene modulandi—Book I

In fact, the first question the treatise raises is the definition of music: *De Musica* is written in the form of a dialogue between a master and his apprentice, and naturally enough, the two begin their first lesson by attempting to fix the limits of their study, so that they may inquire “into all the power and reason of whatever art this is.”<sup>31</sup> After a brief introduction the master suggests a definition: *Musica est scientia bene modulandi*—“music is the science of modulating [*modulandi*] well” (or even “measuring well”).<sup>32</sup>

This famous definition of music would be repeated countless times by medieval writers on music,<sup>33</sup> although it has not been nearly so popular among modern writers. “Not much of a definition,” sniffs one author, “and such as it was, he borrowed it from the Roman scholar Varro.”<sup>34</sup> Yet the master’s definition is carefully chosen, and though it may have been borrowed, Augustine invests this short description with far more content

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<sup>31</sup> *De Musica*, I, ii, 2, tr. 171. There is currently only one translation of *De Musica* into English: *On Music (De Musica)*, tr. Robert Catesby Taliaferro, *The Fathers of the Church: A New Translation*, vol. 4 (New York: Fathers of the Church, Inc., 1947). W. F. Jackson Knight produced *St. Augustine’s De Musica: A Synopsis* (London: The Orthological Institute, 1949), but as the title indicates, this is a summary, not a translation. Nevertheless, Knight’s overview is helpful, and where he does move closer to translation, he is invariably less wooden than Taliaferro. Where I have compared these translations to the original, I have used the text found in *Patrologia Cursus Completus*, Series Latina, ed. J. P. Migne, 221 vols. (Paris: Garnier, 1844-1904), 32:1081-1194 [text on-line], available at Thesaurus Musicarum Latinarum, <http://www.music.indiana.edu/tml/start.html>

<sup>32</sup> *Ibid.*, I, ii, 2, tr. 172. The translation of *modulandi* is problematic. I have been tempted to follow Brian Brennan’s rendering of *modulandi* as “measuring.” (“Augustine’s *De Musica*”, *Vigiliae Christianae* 42 (1988), 272). “Measuring” has the virtue of making explicit the etymological link to “measure” which Augustine himself draws out in his text. The dialogue explains, “[*modulari*] is taken from ‘measure’ [*modus*], since in all things well made measure [*modus*] must be observed.” “Measuring” also seems to come close to what Augustine is really after here—the idea of proportion and balance. The weakness of “measuring” is that it carries no sense of being a specialized musical term, which *modulandi* seems to carry in Augustine’s text. W. F. Jackson Knight paraphrases the definition as “how to make controlled variations of sound in the right way.” (*St. Augustine’s De Musica: A Synopsis*, 11). This captures some aspects of the definition, but obscures the essential element of ratio and proportion. Taliaferro translates *modulandi* as “mensurating”, indicating in a footnote that he has chosen this somewhat awkward term over the more natural “modulating” because of the specific and technical musical connotation attached to “modulate” in Western music theory. “Mensurating” however is simply too unwieldy. It seems that the most common rendering of *modulandi* among those writing on *De Musica* is “modulating,” and this is the rendering I have settled on with some reservations. The reader should bear in mind that “modulation” as Augustine is using it does not carry the technical meaning it bears in modern Western music. It also should be borne in mind that there is a strong element of “measuring” in Augustine’s “modulating.”

<sup>33</sup> Bowen, “St. Augustine in . . . Musical Science.” Cf. footnote 24.

<sup>34</sup> James, 72.

and substance than some of his critics have recognized. There are three components to the definition, each of which the master explains at length: music is *modulating* [*modulandi*], it is modulating *well* [*bene modulandi*], and it is *scientia*.<sup>35</sup>

### Skill, ethics and understanding

Taking these elements in turn, the master and apprentice first discuss the meaning of *modulandi* (which I have rendered here as “modulating” but carries a connotation of something like “measuring”). Whereas modern usage of “measuring” suggests a single act of judging size or distance, Augustine seems to have in mind a continuous, active maintenance of good measure and proportion. This sense is drawn out a few paragraphs later when the master refines his definition, observing, that *modulandi* “is not improperly called a certain skill in moving, or at any rate that by which something is made to move well. For we can’t say anything moves well unless it keeps its measure.”<sup>36</sup> While all sorts of things animate and inanimate move gracefully, music is the art of motion in a special way.<sup>37</sup> In arts such as carving or sculpting for instance, a craftsman moves well in order to produce something. However, in the case of music, the movement “is desired for itself and charms through itself alone.”<sup>38</sup> Since that which is prized in itself is to be esteemed over that which is valued only for what it produces, music is given a special place of honor.

So music is the science of skillful, proportioned and balanced motion. Why then, one might ask, should *bene* be added to *modulandi*—if *modulandi* contains within itself the concepts of balance, proportion and skill? “I don’t know” admits the apprentice, “and

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<sup>35</sup> I am indebted to my officemate David Hogg for many helpful discussions of Augustine’s Latin, and in particular, the lexical range of the different components of Augustine’s definition of music.

<sup>36</sup> *De Musica*, I, ii, 3, tr. 174.

I don't know how it escaped me. For it had been in my mind to ask this."<sup>39</sup> The master replies:

Music is the science of moving well. But that is because whatever moves and keeps harmoniously the measuring of times and intervals can already be said to move well. For it is already pleasing, and for this reason is already properly called [modulation]. Yet it is possible for this harmony and measuring to please when they shouldn't. For example, if one should sing sweetly and dance gracefully, wishing thereby to be gay when the occasion demanded gravity, such a person would in no way be using harmonious [modulation] well.<sup>40</sup>

A moral and ethical component therefore, is built into Augustine's definition of music. The *bene* in "modulating well" does not in the first instance point toward the technical facility of composer or performer, but rather is bound up with the intention of the musician and the social use to which the music is put. Social function and moral value are essential elements of Augustine's musical aesthetic, rather than utilitarian or moralizing additions tacked on to purely "artistic" concerns. For Augustine, beauty has to do with proportion and balance, not in a merely formalist sense, in which the different *formal* elements of a work of art are in fitting relation to one another. In addition to this, the beautiful object is in a *teleological* sense in right proportion and relation. Not only the elements of the work fit together, but the song or poem itself—if it is beautiful—is fitted into its right place morally, socially and cosmically. As the master insists, "we shall try

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<sup>37</sup> The reader should note the connection here with the "special motion" of music discussed in the last chapter. We will draw this connection out more fully in the next chapter.

<sup>38</sup> *De Musica*, I, ii, 3, tr. 175.

<sup>39</sup> *Ibid.*

<sup>40</sup> *Ibid.*, I, iii, 4, tr. 175-6. Again, I have substituted "modulation" for Taliaferro's "mensuration" in the places indicated.

and know more thoroughly by its place in this discipline what proportion is and how great is its authority in all things.”<sup>41</sup>

The final component of Augustine’s definition is that it is “*scientia*”—the *knowledge*<sup>42</sup> of modulating well. By way of explanation, the master directs his student’s attention to the nightingale. “Tell me then” he says,

whether the nightingale seems to [measure] its voice well in the spring of the year. For its song is both harmonious, and sweet and, unless I’m mistaken, it fits the season.

*Disciple*: It seems quite so.

*Master*: But it isn’t trained in the liberal discipline, is it?

*Disciple*: No.

*Master*: You see, then, the noun ‘science’ is indispensable to the definition.

*Disciple*: I see it clearly.<sup>43</sup>

The nightingale meets two of the three criteria of music as a liberal art: it measures its voice skillfully, and its song is fitting in its relation to the times, seasons and place in the created order. (It is also significant that the master indicates the nightingale’s song can be *recognized* as skillfully measured *because* it is “harmonious” and “sweet.”) Yet the nightingale clearly is not trained in the liberal art of music. It has no comprehension of music theory, of the numerical foundations of musical practice, nor of the broader philosophical and theological significance of the song it is sweetly singing. The nightingale is without the science of music. The same judgment can be extended to those who “sing well under the guidance of a certain sense, that is, do it harmoniously and sweetly,

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<sup>41</sup> Ibid. , I, xii, 23, tr. 200.

<sup>42</sup> Taliaferro and others have rendered *scientia* as “science;” certainly an acceptable translation, but one which carries considerable conceptual baggage for the modern reader. Indeed, as I will go on to argue, many of *De Musica*’s critics are guilty of anachronistically reading a modern concept of science back in to Augustine’s *scientia*.

<sup>43</sup> Ibid. , I, iv, 5, tr. 176-7.

although if they were questioned about these numbers or intervals of high and low notes they could not reply.”<sup>44</sup>

Blinded with ‘science’ <sup>45</sup>

Understandably, some modern scholars have been troubled by the “scientific” and “un-musical” aspect of Augustine’s definition. Music, it would seem, has been intellectualized. Augustine suggests (they claim) that the true musician is not a maker of beautiful sounds, but a thinker of abstract principles. The one who truly loves music is not the one who delights in a melody, but the mathematician who can divine the acoustical principles of the string’s vibration, or the philosopher who can speculate on the metaphysical qualities of sound. McKinnon cites this passage as an example of Augustine’s “basic theme of the superiority of the spiritual over the material—or at least the intellectual over the practical.”<sup>46</sup> Gunton notes this same aspect of Augustine’s definition, concluding, “Here we have a truly intellectualist theory of aesthetics.”<sup>47</sup> O’Connell warns the modern reader against being misled by Augustine’s uses of the word *ars* to describe music, as Augustine’s “view of art is frankly intellectualistic.”<sup>48</sup> Far from being a theory of art in any modern sense O’Connell insists, “the very first move [Augustine] makes in the *De Musica* aims to show that ‘music,’ in his understanding of it, is quite properly a ‘science.’”<sup>49</sup>

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<sup>44</sup> *Ibid.*, 177.

<sup>45</sup> Cf. Thomas Dolby

<sup>46</sup> McKinnon, 82-3.

<sup>47</sup> Colin Gunton, “Creation and Re-Creation: An Exploration of Some Themes in Aesthetics and Theology,” in *Modern Theology* 2:1 (1985), 2.

<sup>48</sup> Robert J. O’Connell, *Art and the Christian Intelligence in St. Augustine* (Oxford: Basil Blackwell, 1978), 32. Gunton footnotes O’Connell for his interpretation of St. Augustine, and *De Musica* in particular. In fact, all of Gunton’s citations of *De Musica* are taken from (“as cited in”) O’Connell’s text.

<sup>49</sup> *Ibid.*

There is indeed some validity to these criticisms, but they are overstated and easily misunderstood. A closer look at the text of the dialogue itself suggests an understanding of music which is both more moderate and more complex. No doubt Augustine does believe that a full understanding of music (such as the master is describing) is superior to an entirely untrained appreciation. Yet it is surely an exaggeration to characterize such a belief as “intellectualist.” *Scientia* is one component of Augustine’s definition, referring to intellectual comprehension of music, but it is only one component. Music also involves *modulandi*, which as we have seen, is expressed in sounds which are “sweet” and “harmonious,” (adjectives, it should be noted, that the master uses to describe the song of the nightingale, as well as the singing of the unschooled vocalist). Augustine’s definition of a full and complete music includes a sensual and practical dimension (*modulandi*); an ethical and relational dimension (*bene*); and a dimension of the intellect or understanding (*scientia*). Describing this as a “purely intellectualist aesthetic” therefore ignores two-thirds of Augustine’s definition.<sup>50</sup>

Additionally, one must remember the genre of *De Musica*, and the setting of the dialogue. The work is pedagogical in nature, and is cast in the form of a tutorial between an instructor and a student who has come to be trained in the liberal art of music. And music as a liberal art, as *scientia*, involves a level of intellectual understanding. The explicit purpose of the work is as a guide to music theory and the academic study of music. “We have undertaken,” the master reminds his student, “to follow the *theory* of music.”<sup>51</sup> The

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<sup>50</sup> Knight’s synopsis of the relevant sections of *De Musica* is helpful: “The musician thus acts by means of an impulse to imitate by means of sensation, *sensus*, and by means of memory. These faculties are possessed both by men and by animals. But if a performer, besides his ability to lay in this spontaneous way, ‘by ear’, has also a knowledge and an intellectual comprehension of what he is doing, that is something higher.” *St. Augustine’s De Musica: A Synopsis*, 13.

<sup>51</sup> *De Musica*, II, ii, 2, tr. 207. My emphasis.

reader should not be surprised therefore, to encounter some emphasis on the theoretical, the academic and the intellectual! Nevertheless, it is worth noting that the singing of the nightingale is not condemned as worthless. It simply “isn’t trained in the liberal discipline, is it?”<sup>52</sup> Likewise, those who sing sweetly or listen without understanding are not condemned, but are simply “without this science.”<sup>53</sup> Moreover, the master assures his charge that there is indeed an appropriate place for this sort of listening, when for instance great men

wish to be one with the common people who are not very different from the beasts [in their manner of listening to music] and whose number is great; and they do this very properly and prudently. . . . Or after great cares in order to relax and restore the mind they very moderately partake of some pleasure. And it is very proper to take it in from time to time.<sup>54</sup>

O’Connell is justified in warning the reader against transposing modern conceptions of “art” back into Augustine’s usage, but is himself guilty of a similar anachronism when it comes to *scientia*. If Augustine’s understandings of *ars* was far more “scientific” than our own, it is equally true that our understanding of *science* is far less “artistic” than was Augustine’s. The harmony and proportion of musical numbers was for Augustine a thing of extraordinary beauty and a cause for delight. O’Connell himself recognizes elsewhere that this rational-aesthetic dichotomy is untenable,

For Augustine’s intellectualism is at bottom “erotic,” his eroticism profoundly penetrated with intellectualism. The Truth he longs to see is never merely propositional, never a dry or antiseptic reality; it shimmers with all the grace and charm of beauty.<sup>55</sup>

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<sup>52</sup> Ibid. , I, iv, 5, tr. 176.

<sup>53</sup> Ibid. , 177.

<sup>54</sup> Ibid. , 177-8. Warning his student against the mindless sensual indulgence in music which characterizes the theatergoers, the master completes the above statement: “And it is very proper to take it in from time to time. But to be taken in by it, even at times, is disgraceful.”

<sup>55</sup> O’Connell, 57.

There is without question an intellectualist streak that runs through *De Musica*, but “harmonizing” this with Augustine’s emphasis on beauty and delight is our problem, not his. Augustine lived in a world where intellect and beauty had not yet been set against one another. We will return to this issue shortly; for now it is enough to observe that criticisms of Augustine’s “intellectualism” in *De Musica* have been overstated. As a characterization of the entire work, “intellectualist” is plainly inaccurate.

### Number, Rhythm and Ratio

Following the definition of music and the discussion of its parts, the master turns his attention to the theory of rhythmic, beginning with a consideration of time and number. Durations of time, the pair agree, can be short or long. Moreover, these lengths of time can be related to one another in ratio:

What we call “of long duration” or “not of long duration” is capable of such measurements and numbers that one motion is to another as two to one. . . . And again that one movement is to another as two to three. . . . And so it is possible to run through the rest of the numbers in a way that avoids any indefinite and indeterminate spaces, and relates any two movements by some number.<sup>56</sup>

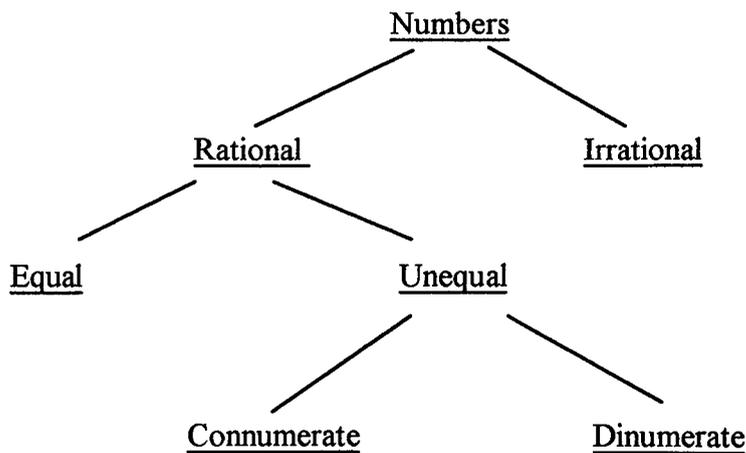
Having established that periods of time and numerical movements can be related to one another in such a way, the master divides these movements into two sorts: those which have a common measure and can therefore be related to one another numerically are called *rational*; those which cannot are called *irrational*.<sup>57</sup> Rational numbers are then further divided into two types: *equal* (times or motions of the same duration, as 2 is to 2,

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<sup>56</sup> *De Musica*, I, viii, 14, tr. 189.

<sup>57</sup> *Ibid.*, I, ix, 15, tr. 190.

or 6 is to 6); and *unequal* (times or motions of differing duration, as 2 is to 5, or 3 is to 6). Equal numbers, the master observes, are to be preferred to unequal. These unequal numbers are then further divided into two categories: *connumerate* and *dinumerate*. Connumerate numbers are those which can be related to one another rationally without any remainder, as in the case for example of 2 and 4, 2 and 6, or 2 and 8. Dinumerate numbers then, are those which cannot be so related to one another, as in the case of 4 and 11, or 3 and 10.<sup>58</sup> Once again, “those we prefer”<sup>59</sup> are called connumerate; dinumerate numbers are less pleasing. These divisions can be represented graphically as follows:



What we should note in all of this is how central the concept of ratio is to Augustine’s argument from the very outset of *De Musica*. Durations of time take on their particular character and quality only as they stand in relation to other things. Similarly, we can only perceive and make sense of things in terms of their relationship to everything else. And so the master will observe in the last book of *De Musica* that “nothing is large

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<sup>58</sup> Ibid. , 191.

<sup>59</sup> Ibid. , I, ix, 16, tr. 191.

of itself in space and time-stretches, but with respect to something shorter; and again nothing is small of itself, but with respect to something larger.”<sup>60</sup> Taliaferro comments on this passage, “Being then belongs more to the *relations* than to the *relata*.”<sup>61</sup>

In the hierarchy of proportions just outlined, the categories of *connumerate*, *dinumerate*, *equal*, *unequal* and so on, do not describe the character of any number, but the character of relationships between sets of numbers. (The number 10 for instance, cannot be characterized absolutely as either connumerate or dinumerate. 10 and 5 stand in a connumerate relation; 10 and 3 stand in a dinumerate relation.) The concept of *ratio*—the proper relationship of different things to one another—is foundational to the theory of rhythmic developed in *De Musica*. To return to Augustine’s definition of music: *Musica est scientia bene modulandi*. *Modulandi* (modulating or measuring) means that the movements of the music are related rightly and in good proportion to one another. *Bene* means that these “sweet and harmonious” sounds are voiced in a way that is rightly related to the situation, and that the intention and motivation of the performer is in a proper relation to those around him.<sup>62</sup> Similarly then, when we turn to the *scientia* of music, we find that it has to do with relation; with times and rhythms and numbers being ordered in right relationship to one another.

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<sup>60</sup> *Ibid.*, VI, vii, 19, tr. 344.

<sup>61</sup> *Ibid.*, footnote 5. My emphasis. Ironically, Augustine is one of the figures repeatedly indicted by Colin Gunton in *The One the Three and the Many*, for emphasizing substance and neglecting relation. Gunton draws a sharp contrast between Augustine’s thought and his own thesis that persons and particulars “are constituted in their particularity both by their being created such by God and by the network of human and cosmic relatedness in which they find their being” (202). While it is no part of this project to give a complete interpretation of Augustine’s thought, it should be recognized that something very much like a “network of human and cosmic relatedness” is central to his account of music.

<sup>62</sup> “When you have persuaded me or proved to me that any actor, if he has any talent, neither has developed it nor does he exhibit it to please the people for gain or fame, then I shall concede it is possible both to possess the science of music and to be an actor.” *De Musica*, I, vii, 13, tr. 187.

Again, this is important to bear in mind as we continue our overview of *De Musica*. The work has often been characterized as “numerical” or “mathematical” in its theory of music, and in a certain sense this is true. However, we must not understand this to mean “numerical” or “mathematical” in a Western post-Enlightenment sense. Augustine is less interested in numbers in themselves than in *ratio*. Taliaferro observes that throughout the work, “there is a continuous play on the Latin word *ratio*, which means both ratio and reason.”<sup>63</sup> Understanding the full lexical range of this word is essential to a correct interpretation of *De Musica*. This single term embraces both the concept of “reason,” and that of “balance, proportion and right relation.” Throughout *De Musica*, whenever Augustine speaks of reason, the concept almost always carries an aesthetic overtone. It is not even that Augustine strives to hold together rationality and beauty, or that he endeavors to balance intellectual and aesthetic considerations. Such an assessment suggests an antithesis Augustine did not recognize. Rather, the single word, *ratio*, denotes a concept which the modern mind has segregated into two, often antagonistic ideas. For Augustine, beauty, harmony and proportion are analytic in rationality, and rationality in order and beauty.

### **Grouping rhythmic pulses—Books II-V**

Book I lays the ground work for the discussion, setting out definitions and the basic concepts of number and ratio. In Book II, the master turns his attention to the topic of syllables, and how they are to be combined. Again, the discussion is guided by the principles established in Book I, “comparing syllables with each other and seeing by what

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<sup>63</sup> *Ibid.* , 194. Footnote 8.

numbers they are related to each other.”<sup>64</sup> Short and long syllables can be joined together in a variety of combinations to produce two, three and four syllable metric feet of different sorts (e.g., two short syllables is a pyrrhic; a short followed by a long syllable is an iamb; a long syllable followed by a short is a trochee; etc.).

“Now, since enough has been said about the harmony and agreement of feet among themselves,” the master declares at the beginning of the third book, “this third discussion warrants our seeing what arises from their composition and from the sequences of them.”<sup>65</sup> It is demonstrated how syllables and metrical feet can be strung together into rhythm and meter—rhythm being simply fixed feet smoothly rolling forward, meter referring to the fixed boundaries within which those rhythms are expressed.<sup>66</sup> Book IV offers a fuller exploration of meter, providing examples in verse of different sorts of pyrrhic meters (those of 2 feet in length, 2 1/2 feet, 3 feet, 3 1/2 feet, and so on).<sup>67</sup> Iambics, trochaics, spondaics and others are set out and illustrated in the same manner.<sup>68</sup> From meter, the discussion in Book V progresses to verse. Of meters there are two types: “there are some where there is no ratio of division within them and others where there certainly is. . . . [T]he kind of rhythm where this ratio is [not] has been properly called meter; where it is they have named it verse.”<sup>69</sup> Much of the rest of the chapter is taken up with an examination of the different ways meters can be combined into verses and the rules for such combination; different varieties of verse such as the heroic, the iambic and the Asclepiadean are considered.

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<sup>64</sup> *De Musica*, II, iii, 3, tr. 209

<sup>65</sup> *Ibid.*, III, i, 1, tr. 237.

<sup>66</sup> *Ibid.*, III, i, 2, tr. 238-9.

<sup>67</sup> *Ibid.*, IV, i-iii, tr. 260-66.

<sup>68</sup> *Ibid.*, IV, iv-x, tr. 266-75.

<sup>69</sup> *Ibid.*, V, i, 1, tr. 297.

We can see in all this that just as with the discussion of duration in Book I, the concept of ratio—the proper relationship of different things to one another—is the central category around which Augustine develops his theory of rhythmic. He begins by considering the smallest component of musical rhythm, a single beat or pulse. By combining these pulses into different patterns of relationship, we arrive at a rhythm—two short beats followed by a long beat, two long beats followed by a short beat, four short beats, and so on. These rhythms then, can themselves be grouped into different patterns of meter, and verse. What sets these patterns apart from one another is not that they are constructed of different elements. In other words, it is not as if some rhythms are composed of beats and others are not. Similarly, what sets a pleasing or correct rhythm apart from a displeasing one is not that one lacks or the other possesses a rhythmic pulse. All of these different patterns are composed of the same basic element—the single beat, or rhythmic pulse. What distinguishes an anapest from an iamb from a trochee is *how these different beats are placed in relationship to one another*. Augustine's theory of rhythm, meter and verse is completely saturated with the concept of ratio.

### An authentic engagement with music

Another reason for spending time on these first five books is to make a methodological point. Most assessments of *De Musica* make only the briefest mention of the first five books, devoting the vast bulk of their attention to the more theologically and philosophically oriented material of Book VI. However, I have taken the time to outline the early books to draw attention to the fact that such an exhaustive and somewhat

technical treatment (Westermeyer characterizes it as “a complicated work”<sup>70</sup>) constitutes a genuine attempt to engage with musical (rhythmic) theory. It is sometimes suggested that *De Musica* is merely *musica speculativa*—metaphysical theorizing draped beneath a thin curtain of ersatz musical terminology. One author states that, “St. Augustine . . . has left us a treatise *De Musica*, but it is devoted largely to meter, versification, eternal and spiritual numbers, etc. , rather than to music as we understand it.”<sup>71</sup> That *De Musica* presents a view which is different from music “as we understand it” may or may not be the case; what is certain however is that Augustine’s work is an engagement with music as *he* understood it.

*De Musica* is neither freestanding metaphysical speculation, nor philosophical propositions accompanied by musical illustrations. The treatise is exemplary and exceptional in the way that it develops its theological conclusions out of an extended study of the material particulars of music. Of the six books which comprise the work, four are given almost entirely to a systematic and painstaking examination of sound, rhythm and meter. It is here, through an examination of music, that Augustine derives his central category of ratio, which is then in Book VI extended to theology and philosophy. These central four books, barely mentioned in most assessments of *De Musica*, form the basis for the more explicitly theological dialogue of Book VI. For this reason alone Augustine’s treatise deserves our attention as a model for theological reflection on music.

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<sup>70</sup> Paul Westermeyer, *Te Deum: The Church and Music* (Minneapolis: Fortress Press, 1998), 87. Cf. Knight, “The argument is protracted by dialogue form and theological phraseology, and is superficially at least hard to follow.” “Forward,” *St. Augustine’s De Musica: A Synopsis*, 1.

<sup>71</sup> Gustave Reese, *Music in the Middle Ages* (London: J. M. Dent & Sons LTD, 1941), 63-4.

## “Sense announcing and reason judging”

In addition to methodology, one of the fascinating things to emerge from these early books is the important role they give to the senses. This may seem surprising—it certainly surprised me, coming to *De Musica* after having read a host of characterizations such as this one from a recent textbook:

Augustine saw the the [sic] Kingdom of God as at war with the Kingdom of the World, believing that sensory perception might be real but had no ultimate worth and could give no genuine knowledge.<sup>72</sup>

No doubt, Augustine would have denied that sensory perception was of “ultimate worth” (is there a school of Christian thought which holds that sensory perception *is* of “ultimate” worth?), and it may be that the authors are summarizing Augustine’s position in other works. Nevertheless, in *De Musica* the senses are indeed a source of genuine knowledge. Clearly there is an ambivalence toward the senses and sensual pleasure in Augustine’s thought generally, and in *De Musica* specifically (we will return to this issue again). But as we have seen in the case of the textbook cited above, “ambivalence” is often read: “antipathy.” The ambivalence in *De Musica* is genuine. If at times Augustine is pulled toward a suspicion of the senses, he just as often acknowledges their value and worth.<sup>73</sup>

Book I concludes with the following exchange:

*Master:* [S]ince music somehow issuing forth from the most secret sanctuaries leaves traces in our very senses or in things sensed by us, mustn’t we follow through those traces to reach without fail, if we can, those very places I have called sanctuaries?

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<sup>72</sup> Hilary Brand and Adrienne Chaplin. *Art and Soul: Signposts for Christians in the Arts* (Carlisle: Solway, 1999), 69.

<sup>73</sup> “Sense experience, put to good use, was obviously important to Augustine. *De ordine* and especially *De musica* abound in expressions of sensual pleasure, deliciousness, even voluptuousness.” van Deusen, “Music, Rhythm” in *Augustine through the Ages*, 574.

*Disciple:* We certainly must, and I earnestly pray we do so now.

*Master:* Then let us not speak of those bounds of time extending beyond the capacity of our senses, and discuss, as far as reason goes, the short interval lengths which delight us in singing and dancing. Or do you, perhaps, think of some other possible way of following these traces which have penetrated, as we said, our senses and the things we sense with this discipline?

*Disciple:* I think it can be done no other way.<sup>74</sup>

Many issues are raised by this text, and there are aspects of it which do tend toward the “disincarnate” kind of thinking which O’Connell and Gunton fault in Augustine. For the time being, note that here Augustine insists that the starting place of knowledge in this discipline is “our senses and the things we sense.” (Note as well that the master is considering those sounds “which delight us in singing and dancing.” This is further evidence that Augustine’s musical reflections are not purely speculative, nor divorced from the actual practice of music.) The student’s attention is explicitly directed toward his experience of rhythm in music, not to those things “which are beyond the capacity of our senses.” Indeed there is “no other way” to arrive at a correct understanding of music or to ascend to the more profound truths it discloses.

This exchange is not an isolated admonition, but a theme which runs throughout the entire work. In Book II for instance, the master contrasts the way of music with the way of the grammarian. The grammarian is derided for giving “no other reason why this syllable should be contracted than that those who lived before us and whose books survive and are discussed by grammarians used it as a short syllable.”<sup>75</sup> There is no

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<sup>74</sup> *De Musica*, I, xiii, 28, tr. 204. Cf. Knight’s synopsis: “Music, making her way forth from some most intimate core of being, *procedens quodam modo de secretissimis penetralibus musica*, has left her footprints, *uestigia*, both on our senses and on the objects of our sensation. We should follow these footprints to arrive at that intimate core, for that is the only way; and to do so we must neglect the longer intervals of time, and confine ourselves to those which are shorter, of lengths that occur in performances of song and dance.” *St. Augustine’s De Musica*, 18.

<sup>75</sup> *De Musica*, II, i, 1, tr. 206.

reason, the master insists, for the student to rely on such blind appeals to authority. The master recites two versions of a verse. In one he commits a grammatical “barbarism” which nevertheless preserves the meter; the other version is grammatically correct, but disturbs the meter. Tell me, the master asks, which version “gives your senses” greater pleasure?<sup>76</sup> The grammatically flawed verse has a pleasing sound, the student acknowledges, but in the other, “I am disturbed by a sort of deformity of sound.”<sup>77</sup> You are correct, responds the master, “your ears were right.”<sup>78</sup> The difference between the judgments of music and those (inferior) judgments of grammar is the difference “between what the sense of hearing demands and what authority demands.”<sup>79</sup>

A representative passage from Book III similarly appeals to the senses to confirm which meters are correct and which are incorrect:

M. Consider these, too: *Si aliquid es, Age bene, Male qui agit, Nihil agit, Et ideo, Miser erit.*

D. These too run harmoniously, except in one place . . . .

M. That’s just what I wanted of your ears. It’s not for nothing they are offended.<sup>80</sup>

False meters, the student observes, are “clearly convicted of error by the ear’s judgment.”<sup>81</sup> As the master reviews examples of different sorts of pyrrhics, he asks again and again, “How do these seem to you? . . . . What about these?”, and the student responds that they “flow very smoothly and vigorously,”<sup>82</sup> or “are enjoyable”<sup>83</sup> or are

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<sup>76</sup> *Ibid.* , II, ii, 2, tr. 208.

<sup>77</sup> *Ibid.*

<sup>78</sup> *Ibid.*

<sup>79</sup> *Ibid.*

<sup>80</sup> *Ibid.* , IV, ii, 3, tr. 263.

<sup>81</sup> *Ibid.*

<sup>82</sup> *Ibid.* , IV, iii, 4, tr. 264.

<sup>83</sup> *Ibid.* , 265.

“agreeable.”<sup>84</sup> Having completed the pyrrhics the master admonishes his disciple: “But now *listen* to the iambics.” “I am listening;” the disciple answers him, “begin.”<sup>85</sup>

Examples of this sort could be multiplied, but perhaps the most striking instance occurs when the student offers his opinion on the combination of certain meters. He asks the master if he has any corrections. “Not I,” responds the master,

But you, when you put your ear to judging the matter. Tell me, when I say or beat this meter . . . and this one . . . and this one . . . whether your senses receive the third as happily as the other two. . . .

D. They clearly receive the first two with pleasure, but not the last.

M. Then it’s not right to put an iamb after a dichoree.

D. So it isn’t.<sup>86</sup>

Here, the decisive factor in determining the correctness of a rhythmic combination is the judgment of sense (“*then* it’s not right”).

This relationship between sense and reason in the discipline of music is stated *in muce* at the outset of Book V. The master urges: “Let’s investigate these other things, if you will, as we are wont, *with sense announcing and reason discovering*” (*sensu nuntio, iudice ratione*).<sup>87</sup> The method of discovery is not purely intellectual, but rather “in the measuring of verse . . . we first perceive its measured length naturally by the ear, and then establish it by the rational consideration of numbers.”<sup>88</sup>

What Augustine describes is a process in which sensual experience and feeling, and intellectual knowledge and reflection engage in a differentiated dialogue, each *playing a role in our apprehension of music*. In Augustine’s treatise, music is in no sense, *feeling-not-*

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<sup>84</sup> *Ibid.*

<sup>85</sup> *Ibid.*, IV, iv, 5, tr. 266. My emphasis.

<sup>86</sup> *Ibid.*, 275.

<sup>87</sup> *Ibid.*, IV, xi, 12, tr. 298. My emphasis. Cf. Knight, “We are now ready to proceed with our investigation according to our regular method, relying on the reports which our perceptions render to us, and submitting those reports to the arbitrament of reason.” 70-1.

<sup>88</sup> *Ibid.*, V, v, 10, tr. 306.

*knowing*. Our feeling (experience), he suggests, is the ground of our knowing. Neither, for the same reason, can music be characterized as knowing-not-feeling. These two aspects of music perception are held together in Augustine, rather than placed in opposition to one another. In *De Musica*, we finally encounter a theological exploration of music which acknowledges the complex differentiated unity of musical experience.

O'Connell maintains that in early works such as *De Quantitate Animae*, and *De Libero Arbitrio*, Augustine "is still convinced that the body's contribution . . . is chiefly negative: it can do little more than impede the mind in its quest for understanding and vision."<sup>89</sup> However, the later *De Musica* reflects a "somewhat more positive correlation . . . between the order of supernal numbers and traces (*vestigia*) they have left in the sense order."<sup>90</sup> O'Connell concludes that in *De Musica* "Augustine comes very close . . . to implying that rationality can penetrate the judgment of sense."<sup>91</sup> But O'Connell's evaluation is still far too reserved. "Sense announcing and reason discovering" does not come "very close" to "implying" that the senses are accessible to the reason. It demands that such cooperation and agreement between the two is a matter of course. Nor is it merely the case that the senses are "accessible" to reason—as if the ear were simply passing along raw data to the discerning intellect. The master urges the student to "put your ear to *judging* the matter."<sup>92</sup> Metrical errors are "convicted . . . by the ear's *judgment*."<sup>93</sup> Similarly, after a correct response the student is congratulated, "your *ears*

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<sup>89</sup> O'Connell, 57.

<sup>90</sup> *Ibid.*, 68.

<sup>91</sup> *Ibid.*, 69.

<sup>92</sup> *De Musica*, IV, xi, 12, tr. 275. My emphasis.

<sup>93</sup> *Ibid.*, IV, ii, 3, tr. 263. My emphasis.

were right,”<sup>94</sup> not: “*your reason has successfully penetrated and interpreted your senses.*”

What Augustine has joined together O’Connell rends asunder.

## **De Musica’s contribution—the first five books**

Again, this is an aspect of *De Musica* which has been misrepresented in the secondary literature. Not only does Augustine devote four books in their entirety to a careful exploration of music, but that exploration is guided by the ear, by *sensus*. As I noted above, one significant contribution *De Musica* makes to our study is the way it models this musical-theological interaction. *De Musica* also offers us a helpful account of music perception. In fact, Augustine outlines a model of perception which is not unlike that presented in the last chapter: *sense announcing and reason discovering*. Contrary to the Orphean position, music can be discovered and explored by the reason. Contrary to the Pythagorean, Augustine contends that it is *sense* which “announces”—which guides our musical understanding.

*De Musica* recognizes that explicit understanding of music is not a prerequisite for musical skill. Master and student recognize those who “sing well under the guidance of a certain sense, that is, do it harmoniously and sweetly, although if they were questioned about these numbers or intervals of high and low notes they could not reply.”<sup>95</sup> The master even poses something similar to our Paradox of Musical Perception: “How do you explain the fact that an ignorant crowd hisses off a flute-player letting out futile sounds, and on the other hand applauds one who sings well . . . ? For it isn’t possible to believe

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<sup>94</sup> *Ibid.* , II, ii, 2, tr. 208. My emphasis.

<sup>95</sup> *Ibid.* , I, iv, 5, tr. 177.

the crowd does all this by the art of music, is it?”<sup>96</sup> He also answers the paradox in similar fashion to the cognitivists: “D: ‘I think it is done by nature giving everyone a sense of hearing by which such things are judged.’ M: ‘You are right.’”<sup>97</sup> The dialogue suggests that even this ‘instinctive’ or intuitive musical sense can be characterized as a kind of reason, for “that ‘art’ of the ignorant . . . comprises also, or operates in association with, reason, *ratio*, which the animals lack.”<sup>98</sup> Musical understanding is not a matter of the intellect only, but is a capacity of both mind and body: “M. : ‘Further, do you attribute the sense of hearing to the mind, to the body or to both?’ D: ‘To both.’”<sup>99</sup>

At the same time, the work recognizes that if a performer “also [has] a knowledge and an intellectual comprehension of what he is doing, that is something higher.”<sup>100</sup> Again, this is similar to my earlier argument: Human beings possess an intuitive and innate musical sense, but explicit knowledge of musical conventions enables us to extend those abilities. “The evidence suggests . . . that untrained musicians have implicit knowledge of that which musicians can talk about explicitly.”<sup>101</sup> Most musicians would agree, I think, that while a “good ear” (i.e. intuitive understanding of music) is essential, it is better still to possess *both* sense *and* understanding (i.e. musical training, explicit knowledge).

Still, we may find Augustine’s emphasis on the intellect troubling at times. Those who lack *scientia* are not simply *less able* musicians. They

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<sup>96</sup> *Ibid.*, I, v, 10, tr. 184.

<sup>97</sup> *Ibid.*

<sup>98</sup> Knight, *St. Augustine’s De Musica*, 12 [I. iv. 6]; Cf. *De Musica*: “M: ‘But don’t you think art is a sort of reason and those who use art use reason? Or do you think otherwise?’ D: ‘It seems so.’” I, iv, 6, tr. Taliaferro 178.

<sup>99</sup> *De Musica*, I, iv, 8, tr., 181.

<sup>100</sup> Knight, *St. Augustine’s De Musica*, 13.

<sup>101</sup> Sloboda, 5.

*do not have science* [knowledge, understanding] even if they seem to do many things cleverly and skillfully *unless they possess in the purity and truth of the intellect* the very thing they profess or exhibit.<sup>102</sup>

If this is the case for the actors and comedians of the Roman stage, the master declares,

there is no reason, I believe, why you should hesitate to deny them science, and therefore, music which is the science of mensurating.<sup>103</sup>

Is this not as Gunton charges, “a truly intellectualist theory aesthetic”?<sup>104</sup> I don’t believe so. As we have just seen, Augustine’s position is complex, not one-dimensional. We must resist the temptation to caricature. In *De Musica*, the mind is superior to the body, but body and sense are by no means dispensable. In fact, *De Musica* insists there is “no other way”<sup>105</sup> to uncover the highest truths of music than by following our senses.<sup>106</sup> Gilson contends that for Augustine, “Illumination does not dispense with knowledge through the senses, at least so far as the material world is concerned, the activity of the senses does not simply lead us to the inner light, but it is necessary to bring us there.”<sup>107</sup> Harrison agrees. While the mind is accorded a superior virtue and beauty “a separation between the senses and the mind, the body and the soul, is never mentioned by Augustine.”<sup>108</sup>

In summary, *De Musica* offers us an account of music perception which is at several points in agreement with contemporary studies of music, and one which is far more palatable than either the Orphean or Pythagorean position. *De Musica* contends that

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<sup>102</sup> *De Musica*, I, iv, 8, tr. 181-82. My emphasis.

<sup>103</sup> *Ibid.*, I, iv, 8, tr. 182.

<sup>104</sup> Gunton, *Creation and Re-creation*, 2.

<sup>105</sup> *De Musica*, I, xiii, 28, 204.

<sup>106</sup> *Ibid.*

<sup>107</sup> Cited in Carol Harrison, *Beauty and Revelation in the Thought of Saint Augustine* (Oxford: Clarendon Press, 1992), 147.

<sup>108</sup> *Ibid.*, 155.

nature has given an intuitive musical sense.<sup>109</sup> This musical sense, rooted in the body, nevertheless possesses its own rationality.<sup>110</sup> Neither is this intuition opaque to the intellect, or closed off to the mind. Rather, both mind and body participate in musical hearing.<sup>111</sup> Musical ability is expanded and enhanced (indeed, for Augustine, “instinct” rises to the level of “musical art”) as this implicit knowledge is made explicit.<sup>112</sup> There is, therefore, a reciprocal relationship between spontaneous and reflective knowledge. Knowledge depends upon intuition to lead it forward; intuition depends upon knowledge to make its tacit understanding explicit.<sup>113</sup>

## Music and measure

All of this amounts to a significant contribution; but perhaps the most valuable insight to emerge from these early books has to do with the way Augustine develops the category of *ratio*. According to *De Musica*, music is *scientia bene modulandi*—knowing how to maintain right measure, and we have seen how comprehensively Augustine applies this standard of right measure in his definition of music. The idea of ratio is at the heart of Augustine’s rhythmic theory as well. Different rhythms take on their distinctive qualities and are correct or incorrect according to the *relationship* between pulses. Meter is satisfying to the ear when we discern a right relationship of well measured proportion among the metric feet of which it is composed.

But does Augustine’s analysis correspond in any way to our actual experience of music? Surely when we listen to an impassioned passage from a Chopin Etude or John

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<sup>109</sup> *De Musica*, I, v, 10, tr. 184.

<sup>110</sup> *Ibid.*, I, iv, 6-7, tr. 178-80.

<sup>111</sup> *Ibid.*, I, iv, 8, tr. 181.

<sup>112</sup> *Ibid.*, I, iv-v, tr. 181-182.

Coltrane's frenetic improvisations we are not appreciating their well measured number and ratio, are we? This is the intuition behind many of the critiques of *De Musica*—"it is interesting enough as metaphysical speculation, but it has little to do with music."<sup>114</sup> Such an accusation first of all neglects the fact that of the six books of *De Musica*, the first five are given over entirely to an exhaustive treatment of rhythmic theory. It is only in the sixth book that Augustine moves beyond more narrowly musical considerations to those of metaphysics. But more than this, I believe that Augustine's central concept of *modulandi*—understood as the maintaining of right measure and ratio—is singularly appropriate for describing the dynamics of tonal music.

Music theorists point out that we do not hear music primarily as notes—A, B, C, or D; but as tones—the first, second or third degree within a scale. That is to say, the musical qualities of a sonic event are not a function of its acoustical frequency, but of its place within a dynamic tonal field. When we hear a melody as a melody, the first question our ear asks of each sound is not "are you an A or a C sharp?", but rather "where do you stand in relation to the other tones in this melody?". This is what we saw in the last two chapters as well. Babies encoded melodies, not according to pitch classes, but according to patterns of shape and contour. A repeated 6 note pattern transposed to a different starting pitch was perceived as "the same." For adults as well, it is this kind of hearing of relationship which makes musical transposition possible. I can begin "Amazing Grace" on E or on B. We hear the tune as "Amazing Grace" in both cases, because musical

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<sup>114</sup> E.g. Gustav Reese's assessment: "St. Augustine . . . has left us a treatise *De Musica*, but it is devoted largely to . . . eternal and spiritual numbers . . . rather than to music as we understand it." *Music in the Middle Ages*, 63-4.

listening does not have to do with hearing pitch classes, but with hearing *relationships* between tones.

Here is another example. The first chord of Beethoven's *First Symphony* sounds, and the flutes and oboes sing out a high E. This top note in the orchestration (the third of a C<sup>7</sup> chord, which functions as an applied dominant) has a purposeful quality to it—gracefully, yet insistently leaning forward and upward, toward its resolution to F.

However, when my clock alarm buzzes out a high E at six in the morning, I hear no similar sense of gentle yet persistent direction! While both the flutes and the clock alarm sound an E, the latter is merely a sonic event with certain acoustical properties; the former exists as a *hierarchically ordered event within a tonal field of dynamic force*. It bears a relationship to the other tones of the composition and serves a distinctive function within that composition.<sup>115</sup>

When music theorists speak of chords as “dominant,” “subdominant,” “tonic” and so forth, they are identifying the role and function of those harmonies within a tonal hierarchy.<sup>116</sup> These identifications are merely the formalization of what we hear intuitively. One standard music theory textbook defines tonality as “a process of establishing the relationship of . . . tones. . . . Each scale degree has its part in the scheme of tonality, its *tonal function*.”<sup>117</sup> The idea of identity-within-relationship is also central to

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<sup>115</sup> “The concept of the hierarchic ordering of pitch content has in one manifestation or another served as a basis for musical structure since the earliest stages in the Western tradition.” Wallace Berry, *Structural Functions in Music* (New York: Dover, 1976), 27.

<sup>116</sup> Wallace Berry writes: “Tonality may be thus broadly conceived as a formal system in which pitch content is perceived as functionally related to a specific pitch-class or pitch-class complex of resolution. . . . The foregoing definition of tonality is applicable not just to the ‘tonal period’ in which the most familiar conventions of tonal function are practiced (roughly the eighteenth and the nineteenth centuries), but through earlier modality and more recent freer tonal applications as well.” *Structural Functions in Music*, 27. Emphasis original.

<sup>117</sup> Walter Piston, *Harmony*, 5<sup>th</sup> Edition, rev. and exp. Mark Devoto (New York, London: Norton, 1987), 53. Emphasis original.

the cognitivist/generative analyses of music we have considered. Lerdahl and Jackendoff write:

The most fundamental characteristic of musical groups is that they are heard *in a hierarchical fashion*. A motive is *heard as part of* a theme, a theme *as part of* a theme-group, and a section *as part of* a piece.<sup>118</sup>

The various parts of a phrase, a melody, or a rhythm take on their meaning according to their place within a musical hierarchy—a system of relationship based upon differentiated roles, qualities and functions.<sup>119</sup> Nor is this insight the unique province of cognitivism. Roger Scruton is skeptical about many of the claims of the cognitivists, but he too acknowledges the fundamental importance of relationship: “A key is a particular kind of organization *around* the tonic, in which other notes are disposed in relation to it,

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<sup>118</sup> Fred Lerdahl and Ray Jackendoff, *A Generative Theory of Tonal Music* (Cambridge, Mass. ; London, England : The MIT Press, 1996/1983), 13. My emphasis. There are a number of other striking resemblances between Augustine’s rhythmic theory and that of Lerdahl and Jackendoff. Both set out to formalize grouping rules of rhythmic and structural organization, and both do so by beginning at the smallest level, and then moving to progressively higher levels. Augustine begins by discussing the way in which we group beats into rhythms (Book II-III), then rhythms into meter (Book III-IV), then meter into verse (Book V); at each stage considering how the lower groups influence groupings at higher levels. Lerdahl and Jackendoff likewise begin by considering how we organize beats into rhythms (Chpt. 2-3), how we organize rhythms into meter (Chpt. 4), and how we organize rhythms and meter into large scale structural forms (Chpt. 5-10).

<sup>119</sup> The word “hierarchy” is philosophically, as well as politically, loaded. I will employ the term from time to time, because it is used in music theory, and because it is in many ways an apt term to describe Augustine’s theory of music. Nevertheless, the reader should bear in mind that it is not a term Augustine uses. (Instead, as we have seen, he emphasizes *ratio* and *modulandi*.) Dominic O’Meara wisely cautions against the careless use of “hierarchy” to describe Plotinus’ understanding of the world (“The hierarchical ordering of reality,” in *The Cambridge Companion to Plotinus* ed. Lloyd P. Gerson (Cambridge: Cambridge University Press, 1996), 66-81), and his warning may be usefully applied to analyses of Augustine’s thought as well. O’Meara’s concern is that “hierarchy” is too vague a term (Aristotle expresses a similar concern in the *Metaphysics*). There are many ways after all, in which one thing can be ordered “above” or “before” another thing. O’Meara concludes that for Plotinus “the central kind of priority is priority ‘by nature,’ which is also priority by power and dignity.” (79) Plotinus’ conception of priority by nature suggests a web of “relational patterns that span every area of the structure of reality as he sees it. Reality is a structure of dependence, the posterior depending on the prior, being constituted by the prior, incapable of existing ‘without’ the prior which can exist without it.” (79) Similarly for Augustine in *De Musica*, those things “higher” in his ordering exhibit a greater degree of independence, while those which are “lower” are effects of higher causes. However, for Augustine there is also a kind of dependence of the higher elements upon the lower—not a dependence of origin, but in order to maintain proper ordering and arrangement. So for instance, while the soul is higher than the body, Augustine can write that “as it [the soul] cannot be entire without the Lord, so it cannot excel without a servant [the body.]” (VI, v). He therefore warns against understanding this ordering as an absolute ascription of value, but rather as having to do with propriety, with each thing occupying the place it was created to fill: “Listen, then, to this other thing, nearer to the mark than ‘better.’ For you won’t deny what is proper is better than what is not proper.” (VI, iv) I will address all of this in more detail in the next chapter.

and the whole system set in the context of other possible keys.”<sup>120</sup> “Each tone has a character, arising from its relation to the tonic . . . . [Dominant and subdominant] are heard in relation to the tonic, and we sense the possibility of movement between them.”<sup>121</sup> In hearing sounds as music, it is precisely this dynamic quality of relationship we are hearing. “To hear rhythm is to hear a kind of animation . . . . Beats do not follow one another; they bring each other into being, respond to one another, and breathe with a common life.”<sup>122</sup> Zuckerkandl has offered perhaps the most lucid exploration of this dynamic and relational quality of musical hearing, and he places it at the center of the account of music he develops. When one hears a melody, “there is an immediate recognition of one tone . . . as 3 [the third degree of the scale], another as 7 [the seventh degree]—an eloquent indication of the fact that, besides itself, a tone also expresses its personal relation to the tone 1 [the tonic], its place in the tonal system as a whole.”<sup>123</sup> Tonality itself can be understood as “a system in which the whole is present and operative in each individual locus, in which each individual locus knows, so to speak, its position in the whole, its relation to a center.”<sup>124</sup>

This bears a resemblance not only to *De Musica*’s description of music, but also to its characterization of reality: “to each living thing in its proper kind and in its proportion with the universe is given a sense of places and times.”<sup>125</sup> Far from being detached metaphysical ramblings, Augustine’s account of music is surprisingly consonant with the contemporary theories of psychology, philosophy and musicology. We identify

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<sup>120</sup> Roger Scruton, *The Aesthetics of Music* (Oxford: Clarendon Press, 1997), 248. Emphasis original.

<sup>121</sup> *Ibid.*, 249.

<sup>122</sup> *Ibid.*, 35.

<sup>123</sup> Victor Zuckerkandl, *Sound and Symbol: Music and the External World*, tr. Willard R. Trask (Princeton, N. J. : Princeton University Press, 1973/1956), 36.

<sup>124</sup> *Ibid.*

musical tones according to their place within a *scale*—a significant term within the context of our discussion. Or for music outside the common practice period, we identify a tone according to its place within a *mode*, a musical term derived from the Latin *modus*, meaning “measure.” The same dynamic of relationship characterizes musical rhythm as well. We hear musical pulse and movement according to where beats fall within a *measure*—another significant term. Hearing sounds as music means hearing them in terms of their relationship to one another.

This emphasis on relationship in music will prove theologically significant in a number of ways, as we shall see in the next chapter. It also allows us to avoid some of the more problematic implications of other descriptions of music we have encountered. If we locate musical meaning and coherence in structures abstracted from the musical surface (as does Pike), then we will have difficulty accounting for the very visceral and embodied character of our musical experience. For Pike and accounts like his, the deepest engagement with music is the one least concerned with sound; the one least occupied with music in all its material particularity. On the other hand, as we have seen again and again, hearing music as music does involve something like abstraction. Musical hearing involves *going beyond* the musical surface, *going beyond* what is given to us in the acoustical properties of sound. The concept of *modulandi*—of well ordered ratio and relationship—offers us a way of characterizing music which includes, but does not reduce it to, the physical qualities of sound. Determining relationship means attending to the particulars which comprise the relation, and yet, we can also consider the relationship itself, as something different than the elements it includes. The relation cannot exist independent of the *relata*; and yet the relationship is more than the combination of its components. I believe that this sort of dynamic movement between the particular and the general characterizes our perception of music. In hearing music, we attend to the particulars of the musical surface, discerning the particular qualities of sound, timbre, dynamics and so on.

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<sup>125</sup> *De Musica*, VI, vii, 19, tr. 343.

At the same time, we move beyond the musical surface, considering not only these particular qualities, but their relationship to one another. This is an activity of the imagination, taking place at multiple levels. At a very fundamental level, some relationships may be worked out preconsciously according to *Gestalt* patterns of perception. Other relationships—whether large-scale structure, the particular affective character of a musical event, or relationships between the musical and the extra-musical—may be reckoned more actively. In any case, the activity is fundamentally different to that of abstraction. In the sort of abstraction Pike describes, the attention is focused on a formal structure uncovered behind the music. *Scientia bene modulandi* on the other hand, demands that we consider *these particular elements*, as well as the pattern of relationship between them.

This sort of attention is also different than the blind intuition of the Orphean. There, particularity is swallowed up in a shapeless, nameless wash of feeling and emotion. The local and particular are not only irrelevant, but are even a distraction from the universal feeling of joy, or pathos (or whatever), that we encounter through the music. *De Musica*'s portrayal gives us a more attractive way of characterizing music, and one which better fits our experience. Neither reflection nor intuition, neither knowing nor feeling, but *relationship* is the musical principle *par excellence*. When we hear sounds as music, we are, no less than St. Augustine, measuring melodies—working out ratios and relationships.

“But now it is time to track, as acutely as we can, the metrical part of music back from the sensations, in which we first find its traces, right to its secret bower, far beyond the world of matter. . . .”<sup>126</sup>

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<sup>126</sup> Knight, *St. Augustine's De Musica*, 84. (V, xiii, 28).



# Carmen Universitatis



Augustine's *De  
Musica*—Part II

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## CHAPTER 6

*Just as when one hears from afar a lyre, made up of many different strings, and wonders at their harmonious symphony, that not only the low one produces a sound, not only the high one, and not only the middle one, but all sound together in balanced tension; and one concludes from all this that the lyre neither operates by itself nor is played by many, but rather that there is one musician who by his art blends the sound of each string into a harmonious symphony—even though one fails to see him—so too, since there is an entirely harmonious order in the world as a whole, without things being at odds with those below, and those below with those above, but one completed order of all; it follows that we know there is one leader and king of all reaction, not many, who illuminates and moves everything with his own light.*

—Athanasius, *Oratio contra gentes* 38

As we have seen, the first five books of *De Musica* address technical and theoretical issues of rhythmic. In the last book, the emphasis shifts from a predominantly musical discussion to metaphysical and theological reflection. Along with this change of focus, the sixth book also seems to represent a far more perplexing shift in Augustine's

attitude toward music as a liberal discipline. Through five books he has carefully explored the theory of rhythmic, recited line after line of poetic verse, and made repeated appeals to the judgment of the ear. The thorough and appreciative examination of music in these early books leaves the reader wholly unprepared for the stern indictment of such study which Augustine unleashes at the start of Book VI:

We have delayed long enough and very childishly, too, through five books, in those number-traces belonging to time-intervals. And let's hope a dutiful labor will readily excuse our triviality in the eyes of benevolent men. For we only thought it ought to be undertaken so adolescents, or men of any age God has endowed with a good natural capacity, might with reason guiding be torn away, not quickly but gradually from the fleshly senses and letters it is difficult for them not to stick to. . . .

. . . these [first five] books are written for those who, given up to secular letters, are involved in great errors and waste their natural good qualities in vanities, not knowing what their charm is. And if they would notice it, they would see how to escape those snares, and what is the place of happiest freedom.<sup>1</sup>

The treatise ends on a similarly dour note, concluding apologetically:

If any read this talk of ours committed to writing, they must know these things have been written by persons much weaker than those who, having followed the authority of the two Testaments . . . venerate and worship the consubstantial and unchangeable Trinity of the one highest God.<sup>2</sup>

If such weaker souls do derive some limited benefit from this sort of study, the master says, they nevertheless "go more slowly than holy men who deign not to wait in their flying ascent."<sup>3</sup>

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<sup>1</sup> Augustine, *De Musica*, VI, i, tr. Robert Catesby Taliaferro, *The Fathers of the Church: A New Translation*, vol. 4 (New York: Fathers of the Church, Inc., 1947), 324-5.

<sup>2</sup> *Ibid.* VI, xvii, tr. 378.

<sup>3</sup> *Ibid.*, 379.

## A change of tune?

What could account for such a dramatic and abrupt shift in tone? Why has music, commended through the bulk of the work, suddenly fallen from favor?

Augustine's later correspondence would seem to confirm his dismissal of Books I-V. Sometime around 408, Memorius, Bishop of Capua wrote a letter to Augustine, requesting a copy of Augustine's treatise on music, for his son Julian.<sup>4</sup> In response, Augustine sent him a revision of Book VI only, indicating that he had been unable to place his hands on the first five books of *De Musica*. However, he assured the Bishop, these first five books "are all but unintelligible."<sup>5</sup>

The sixth book, however, which I have found already revised, and in which the product of the other five is contained, I have not delayed to send to your Charity; it may, perhaps, be not wholly unsuited to one of your venerable age. As to the other five books, they seem to me scarcely worthy of being known and read by Julian, our son, and now our colleague.<sup>6</sup>

Different theories and explanations of Augustine's comments and the change in Book VI have been suggested. Indeed, while *De Musica* as a whole has received relatively little scholarly attention, a great deal of the attention it has received has focused on the relationship between Book VI and the five which precede it.<sup>7</sup>

Edelstein, in *Die Musikanschauung Augustins nach seiner schrift 'De Musica'* (1929) proposed that the first five books were composed after Augustine had been converted to Neo-Platonism, but before he had been baptized, or become a fully

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<sup>4</sup> This same Julian would later become Augustine's opponent in the Pelagian controversy.

<sup>5</sup> Augustine, "Letter CI," *The Letters of Saint Augustine*, tr. R. G. Cunningham, *A Select Library of The Nicene and Post-Nicene Fathers of the Christian Faith*, ed. Philip Schaff [text on-line] (Edinburgh: T & T Clark), available at Christian Classics Ethereal Library: <http://www.ccel.org>

<sup>6</sup> Ibid.

<sup>7</sup> The following summary of this scholarship is informed by the thorough discussion in Robert J. O'Connell, *Art and the Christian Intelligence in St. Augustine* (Oxford: Basil Blackwell, 1978). (Although

convinced Christian. The sixth book, written after Augustine's baptism and training in Christian doctrine, reflects his move away from Neo-Platonist philosophy and its relatively positive view of the liberal arts, and toward the austere and world denying asceticism of Christianity. Svoboda in *L'Esthétique de saint Augustin et ses sources* (1933), follows Edelstein's proposal, maintaining that the first five books date from the period of Augustine's retreat at Cassiciacum (386). The sixth book he argues, was produced in 391, after Augustine had moved through Neo-Platonism into a full-fledged Christianity. As such, the sixth book reflects the increasing "spiritualization" of Augustine's thought—his progressive turning away from this world, the arts and the sensual. This chronology has passed into the mainstream of scholarship. Echoes of it can be heard in McKinnon's 1990 summary of *De Musica*, where he states matter-of-factly: "The first five books were written not long before [Augustine's] baptism in 387, when he was a neo-Platonist, and the final book a few years later."<sup>8</sup>

The dating of the six books cannot be passed over as an item of scholarly trivia. The Edelstein-Svoboda proposal carries significant implications which extend beyond *De Musica* itself. Such a chronology suggests a trend in Augustine's intellectual evolution; the severity of Book VI revealing the effect of Christian teaching on Augustine's views and values. Gilbert and Kuhn for instance (acknowledging their debt to Svoboda), conclude that while Augustine defended the arts early in his career, he grew increasingly harsh, ascetical and intolerant with age.<sup>9</sup>

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at the end of the day; I arrive at a slightly different interpretation of Book VI than does O'Connell). See esp. pp. 1-27, 65-6, and "Appendix B. The Dating and Interpretation of the *De Musica*", 178-88.

<sup>8</sup> James McKinnon, "Christian Antiquity" in *Antiquity and the Middle Ages*, ed. James McKinnon. Man & Music Series. vol. 1 (Houndmills, Hampshire: The MacMillan Press, 1990), 82.

<sup>9</sup> Katherine Everett Gilbert and Helmut Kuhn, *A History of Esthetics*, rev. ed. (London: Thames & Hudson, 1956), e.g., 121, 140. This assessment of Augustine's intellectual development is countered by

## Augustine's dating

The first thing that must be said in response to this explanation of Book VI is that it conflicts with Augustine's own dating of *De Musica*. In his *Retractationes*, Augustine recalls those "six books I wrote when already baptized and already returned from Italy to Africa; I had only started on that discipline at Milan."<sup>10</sup> Later in the *Retractationes* he states that he composed "six books on *musica*"<sup>11</sup> after completing *De Genesi contra Manichaeos*. This again places *De Musica* well after Augustine's conversion and baptism, and after his return to Africa. There is no indication of a gap between the six books, rather Augustine is able to state that after his return to Africa "I wrote six books on music." If there were a chronological and philosophical gap between Books V and VI, and if in fact Augustine's estimate of music became more stern and severe over time, one would expect the later Augustine of the *Retractationes* to draw attention to the pre-Christian provenance of the first five books—to put distance between himself and these writings, and to rationalize their contents as the product of one not yet baptized.

## A later addition

More fundamentally, a thorough reading of Book VI reveals that the book as a whole is *not* characterized by an antagonism toward music. The stern words seem to be

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O'Connell's *Art and the Christian Intelligence*, where he demonstrates that Augustine's early writings become progressively *less* hostile toward the body (although according to O'Connell he never manages to shake off a fundamental anti-materialism). Inexplicably, Colin Gunton cites O'Connell in support of his assertion that over time Augustine's thinking "takes the form of a greater tendency towards intellectualism rather than towards an appreciation of material beauty for its own sake." ("Creation and Recreation," 2 ). O'Connell's work has been surpassed and significantly improved upon by Carol Harrison's outstanding study *Beauty and Revelation in the Thought of Saint Augustine* (Oxford: Clarendon Press, 1992). Harrison likewise argues (I think conclusively), that Augustine's thought became more and more "incarnational" over time. She further contends that he moved much farther in this direction than O'Connell is able to recognize.

<sup>10</sup> Augustine, *The Retractations*, I, x, 1, tr. Sister Mary Inez Bogan, *The Fathers of the Church: A New Translation* (Washington, D. C. : The Catholic University of America Press, 1968), 45.

<sup>11</sup> *Ibid.* I, xi, 1.

limited to the opening and concluding paragraphs. Though attention is now focused on explicitly theological questions, the tone and attitude toward music as a liberal art remains consistent with that of the first five books. The prelude and finale may seem harsh, but there is no invective against music running through the whole of Book VI. Henri Marrou drew attention to this fact in a convincing rebuttal of Edelstein's theory (in *Saint Augustin et la fin de la culture antique* (1938) ). Marrou suggests that these opening and concluding paragraphs were added by Augustine in 408/9 when he sent the sixth book to Memorius, and that these paragraphs are in fact the revision (*emendatum*) to which he refers in his accompanying letter.<sup>12</sup>

I believe Marrou is correct. The opening and closing chapters of Book VI stand out from the rest of the work not only in attitude, but in their style and tone. It makes sense to suppose that if Augustine were sending only Book VI to Memorius he would have composed some sort of introduction and conclusion to better enable the book to stand alone. (The other five books all take up rather in mid stream, e.g. Book III: "Now since enough has been said about the harmony and agreement of feet . . ."; Book IV: "Let's return to the question of meter.", etc.).

While this suggestion preserves the unity of the bulk of *De Musica*, the question of Augustine's supposed growing antagonism toward the arts remains. It would still seem that, if not immediately after his conversion, then at least by the time he sent Book VI to Memorius, Augustine's ideas about music had taken a dramatic and ascetical turn.

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<sup>12</sup> Augustine, *Letter CI*.

However, even these opening and closing statements are not the sweeping condemnations of music that they are often made out to be.<sup>13</sup>

### A pastoral concern

The master begins by characterizing the first five books as “triviality” (*nugacitatem*), only written so that readers accustomed to letters may “with reason guiding” (*duce ratione*) gradually be torn away from the fleshly sense. Yet, he continues, “this trifling way is not of trifling value, this way we, too, not very strong ourselves have preferred to walk.”<sup>14</sup> He then goes on to caution those “not educated to understand these things [i.e. musical theory and rhythmic],” not to concern themselves with such studies,

if, steeped in the sacraments of Christian purity and glowing with the highest charity for the one and true God, they have passed over all these childish things, for fear they descend to them and, having begun to labor here, bewail their backwardness.”<sup>15</sup>

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<sup>13</sup> Note Jackson Knight’s synopsis which moves closer to translation than paraphrase in Book VI. His renderings are at nearly every point less harsh than Taliaferro’s. Jackson Knight translates the opening of Book VI:

“We have now spent quite enough time on this childish task. But perhaps benevolent readers will excuse us for so devoted an effort. The purpose of it is to lead young people of ability, and perhaps older people too, gradually, with Reason for our guide, from the things of sense to God, in order that they may cling to Him who rules all and governs our intelligence, with no mediating Nature between. We have here been concerned with minds which have inclinations toward grammar and poetry. That is not because we choose to linger in association with such minds, but because we wish to travel by way of them. If God grants us success, the reader, coming to this last book, will find that our cheap way of travel leads to a possession by no means cheap; not unnaturally we have preferred to walk with the weaker travellers, being ourselves, indeed, not so very strong, rather than to fall steeply through freer airs.” *De Musica*, VI, i., 1, tr. 85.

“Satis diu pene atque adeo plane pueriliter per quinque libros in vestigiis numerorum ad moras temporum pertinentium morati sumus: quam nostram nugacitatem apud benevolos homines facile fortassis excuset officiosus labor; quem non ob aliud suscipiendum putavimus, nisi ut adolescentes, vel cujuslibet aetatis homines, quos bono ingenio donavit Deus, non praepropere, sed quibusdam gradibus a sensibus carnis atque a carnalibus litteris, quibus eos non haerere difficile est, duce ratione avellerentur, atque uni Deo et Domino rerum omnium, qui humanis mentibus nulla natura interposita praesidet, incommutabilis veritatis amore adhaerescerent. Illos igitur libros qui leget, inveniet nos cum grammaticis et poeticis animis, non habitandi electione, sed itinerandi necessitate versatos. Ad hunc autem librum cum venerit, si, ut spero et supplex deprecor, Deus et Dominus noster propositum meum voluntatemque gubernaverit, et eo quo est intenta perduxerit, intelliget non vilis possessionis esse vilem viam, per quam nunc cum imbecillioribus, nec nos ipsi admodum fortes ambulare maluimus, quam minus pennatos per liberiores auras praecipitare.”

<sup>14</sup> *De Musica*, VI, i, tr. 324.

<sup>15</sup> *Ibid.*, tr. 325.

First of all, these statements reveal that Augustine believes the “trifling” way of reason, music and the liberal arts still has value, and is the way in which many weaker souls have been led out of error. O’Connell is right I believe, in detecting an autobiographical note in Augustine’s description of those “weaker souls” “endowed with a good natural capacity,” who have been given to “fleshly senses and letters,” and “educated to understand these things.”<sup>16</sup> There may be a deprecatory note to Augustine’s characterization, but the humbler way he is describing is in fact the way he himself has traveled.

Nor should the several mentions of letters, reason, education, and training be overlooked. Augustine’s comments in the sections being considered have less to do with his suspicion of music and the senses than they do with setting out the limits of the way of reason. Much can be learned through the liberal arts and there is value in their study, but these are “difficult roads,”<sup>17</sup> thick with “labor and dust.”<sup>18</sup> Those who are “given up to secular letters”<sup>19</sup> may attain great insight and erudition. But the truly wise are those

who, having followed the authority of the two Testaments . . . venerate and worship the consubstantial and unchangeable Trinity of the one highest God. . . . For they are purified, *not by flashing human reasoning*, but by the effective and burning fire of charity.<sup>20</sup>

Such a passage highlights how unfair are characterizations of *De Musica* as “intellectualist.” Augustine is trapped in a Catch-22. The early sections of Book I argue

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<sup>16</sup> O’Connell, 183-6. O’Connell reads the teaching of these opening and closing chapters somewhat differently than I do, but he nevertheless likewise concludes that these chapters do not reflect the sort of antipathy to music which some have attributed to them.

<sup>17</sup> *De Musica*, VI, i, tr. 325.

<sup>18</sup> *Ibid.*

<sup>19</sup> *Ibid.*

<sup>20</sup> *Ibid.*, VI, xvii, 59, tr. 378. My emphasis. It is also interesting to note that at this point, where Augustine denotes the limits of reason unaided by revelation, he explicitly mentions the Trinity. While

for the legitimacy of music as a field of academic inquiry, and are then described by critics as elitist and overly intellectual. The first and last chapters of Book VI look back over this academic investigation and warn of the limits of reason and academic pursuits. These passages are then held up as evidence of Augustine's antagonism toward music! Yet the intent of the warning is not to denigrate music, but to expose those who "deceive with the promises of *reason and false science*."<sup>21</sup> Study of the liberal arts may at length lead one to consider the ultimate Source of truth and beauty. But this is a long and unnecessary road, the master says, and study itself will never bring one to God.

These passages then, point to a related pastoral concern: Augustine is eager to assure those who are "steeped in the sacraments of Christian purity" and yet not educated to understand the lengthy discussions of music theory, that they need not "descend to them." In their piety, their love for God, their devotion to the Scriptures, they have already attained the goal to which these dialogues are directed. There is no academic prerequisite for holiness, (a point Augustine repeats years later in his wonderful observation that "many holy people have not studied [the liberal arts] at all, and many who have studied them are not holy"<sup>22</sup>).

The Pythagoreans guarded their musical-mathematical mysteries as holy secrets, by which the enlightened could ascend to beatific visions. By contrast, Augustine, undertaking a similar program of metaphysical reflection on music, insists that there is no hidden musical *gnosis* for the Christian; a wise warning perhaps to a young man like

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reason and philosophy may lead one to the knowledge of a Supreme Being, it is only "the authority of the two Testaments" which reveals the "consubstantial and unchangeable Trinity."

<sup>21</sup> *Ibid.* , 379: My emphasis.

<sup>22</sup> *Retractationes*, i. 3. 2. As quoted in Henry Chadwick, *Augustine*. Past Masters series (Oxford, New York: Oxford University Press, 1986), 35.

Julian, eager to begin training in the liberal arts. It is also a gracious and pastoral reassurance to one like Memorius, who most likely was among those “not educated to understand these things.” As we saw earlier, Augustine described the first five books of *De Musica* as “almost unintelligible.” “*Unless,*” he continues

one be at hand who can in reading not only distinguish the part belonging to each of those between whom the discussion is maintained, but also mark by enunciation the time which the syllables should occupy, so that their distinctive measures may be expressed and strike the ear, especially because in some places there occur pauses of measured length, which of course must escape notice, unless the reader inform the hearer of them by intervals of silence where they occur.<sup>23</sup>

Apparently, in the case of Memorius and his son Julian, there was not “one at hand” who could distinguish the parts, the syllables and meters of the many examples in verse. “Almost unintelligible” is therefore not Augustine’s characterization of the quality or coherence of the first five books, but reflects their inaccessibility to those not educated in the liberal arts. Augustine’s comments in Book VI then, also serve as assurance to a Christian leader of “venerable age” that his lack of training in the liberal art of music is no cause for embarrassment, and certainly no obstacle to piety.

No wedge can or need be driven between Book V and VI of this work; *De Musica* is a coherent whole which sustains a consistent approach to music throughout all its parts.

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<sup>23</sup> Augustine, *Letter CI*. My emphasis.

## The numbers of music

Having opened Book VI with this warning against those who trust solely in the way of reason, the master turns back to his pupil and asks

Tell me if you will, when we recite this verse, *Deus creator omnium*, where you think the four iambs and twelve times are it consists of. Is it to be said these numbers are only in the sound heard, or also in the hearer's sense belonging to the ears [*sensus qui ad aures pertinet*], or also in the act of the reciter, or, because the verse is known, in our memory too?<sup>24</sup>

Through the first five books, the master has argued that music subsists by virtue of maintaining right relation and proportion, and at several levels. His analysis raises a question however. If music (specifically rhythm) consists of different elements, brought together in proper ratio and proportion, then by what virtue or agency do these various elements cohere? Why in other words, do the various beats which comprise a rhythm hold together, so that we recognize these pulses not as disparate and random events, but as a pattern, as a set of relationships? This is what the master asks, when he asks, *Where are the numbers of music? Deus creator omnium*, like all rhythms, consists of a series of numbers, ratios and relationships; in this case, for instance, four iambs. One trained in the liberal arts immediately recognizes the organization of the ratios in the verse, and the rhythm, meter and “feel” of the organization is apparent to the uneducated listener as well (as the master points out in the first book). But where do these numbers originate? The master offers several possibilities: Perhaps the ratios and patterns we discern are properties intrinsic to the sounding bodies themselves (“in the sound heard”). Or alternatively, perhaps the numbers of music are a function of our perception, an

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<sup>24</sup> *De Musica*, VI, ii, tr. 326.

organization which arises from the way in which our senses engage with sound (“in the hearer’s sense belonging to the ears”). Again, maybe the numbers and order we perceive result from the intentional, active ordering of a speaker or musician (“in the act of the reciter”). Or, finally, maybe this organization and patterning is in our memory—something we have learned, or a pattern we have grown familiar with through previous experience (“because the verse is known, in our memory”).

As the discussion continues, master and pupil notice that there is a further distinction to be drawn among the numbers of the “hearer’s sense belonging to the ears”; namely, there is a passive and an active sense of hearing. Consider a verse in rhythm, says the master. The same verse is pronounced; once slowly, once more quickly. On the one hand, the two performances are heard as different to one another. The hearer *recognizes* the tempo and the length of time occupied by the verse. This is the passive hearing; hearing simply at the level of sensation. It is but “the measure of the sound producing it.”<sup>25</sup> On the other hand, the listener also recognizes that although one is slow and one is faster, the two verses have the same rhythm. That is, the “same ratio of feet . . . [is] preserved.”<sup>26</sup> This is the active hearing; the power “belonging to the judiciary, you might say.” It is the power to measure out ratios, to identify and abstract patterns from the sound heard. This competence is “present in the ears, is still there during the rest, and the sound does not bring it into us, but is rather received by it to be approved of or disapproved of.”<sup>27</sup> The distinction between active and passive hearing then, yields a fifth category of number in music, that of judgment.

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<sup>25</sup> *Ibid.* , VI, ii, 3, tr. 327.

<sup>26</sup> *Ibid.*

<sup>27</sup> *Ibid.* , 327-8.

## Locating the music

And so, to return to the master's opening question, where among these five different sorts of numbers—in the sound, in the act of the performer, in the (passive) hearing, in the memory, in the listener's judgment (active hearing)—do we find music? Hopefully, the question has a familiar ring to it, for this is the very issue that has occupied us throughout our investigation. The answers the master suggests even correspond in a rough sort of way to some of the various proposals we have considered.

Is the meaning of the music:

*in the sound*—latent in the vibrations of the string itself? *or*

*in the hearer's sense*—passively sensed? *or*

*in the act of the reciter*—given by norms of performance? *or*

*in the memory because we have learned it*—a conditioned response to sound? *or*

*in the judgment*—actively constructed by the listener?

Here are the classic oppositions we have encountered a number of times now. Is the music learned or innate? Rational or sensual? Active or passive? Intentional or pre-intentional? Is it in the composer, in the sound, or in the listener? *In which of these do we find music?*

With a simplicity which confounds all of these oppositions, the disciple replies:

*“In all of them, I think.”*<sup>28</sup>

Each of the different accounts we have considered in our study has had some merit, but (for this very reason) the most satisfying answer, in fact, the only possible answer is the one the student offers: *In all of them, I think*. For Augustine, all of these different aspects of music possess “number” of some sort, and when we recite *Deus*

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<sup>28</sup> Ibid. My emphasis.

*creator omnium*, all of these numbers sound. As the master says later (using different terms for the same categories),

I think when that verse *Deus creator omnium* we quoted is sung, we hear it through reacting numbers, recognize it through memorial numbers, pronounce it through advancing numbers, are delighted through judicial numbers and appraise it by still others<sup>29</sup>

Augustine advances a *polyphonic* account of music: music perception is presented as a unified whole, composed of differentiated parts. Different qualities of music and a broad range of human faculties all make their distinctive contributions. Each of the “numbers” of perception (as well as the numbers of sound) play a different role in the process.

According to Augustine, the order we perceive in music is not purely intellectual, nor is it purely a physical phenomenon, nor is it entirely conventional, but there is number and ratio in *all* of these. Not only that, but significantly, music depends on holding all of these different elements together in proper ratio and relationship. In a piece of music, in *Deus creator omnium*, all of these classes of number contribute to and find expression in its rhythm. And this understanding of music is possible for Augustine, because he perceives *all of reality* as supremely ordered, and therefore, related. For Augustine (and this is part of his inheritance from Plato and Pythagoras, as well as from the Christian scriptures) there is a fundamental ratio and order which extends through and finds voice in all of reality—material and spiritual, animate and inanimate, physical and intellectual. This insight will form the cornerstone of the account I will advance later in the chapter. First,

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<sup>29</sup> Ibid. VI, ix, 23, tr. 349. Note too that the verse *Deus creator omnium* is sung, again, against those such as Walhout who suggest that Augustine’s study of rhythm and meter in verse means that he is dealing with poetry rather than music.

however, I would like to conclude our survey of Book VI, giving special attention to another problem it raises.

## Body and soul

If Augustine's understanding of music really is marked by the sort of non-reductionism I have suggested, if it offers the kind of polyphonic account of meaning just outlined, then what should we make of the master's next question to his disciple?: "Come, now, tell me which of these five is the most excellent."<sup>30</sup>

Having acknowledged the part of musical sounds, the part of the senses, the part of the imagination and so forth, is not Augustine now about to dismiss some as being of little importance, and elevate others as "most excellent"—the *real* source of music? This is indeed how many have read Augustine at this point. McKinnon for instance writes that *De Musica's* "basic theme of the superiority of the spiritual over the material—or at least of the intellectual over the practical" is "deepened and enriched in book 6,"

where Augustine describes a series of hierarchically ordered musical 'numbers'. At the lower end are sensible or corporeal numbers, that is, the musical sounds produced by the player and felt by the auditor. At the upper end are 'judicial numbers' whereby the soul evaluates the equality and harmony of the lesser numbers.<sup>31</sup>

The broad outlines of McKinnon's comments are sound enough—Augustine does establish a hierarchy of these numbers of music, and those at the top are the numbers of judgment, those at the bottom, the numbers of the hearing belonging to the senses.

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<sup>30</sup> *Ibid.*, VI, iv, 6, tr. 330.

<sup>31</sup> McKinnon, "Christian Antiquity", 82-3.

Similarly the comments of McKinnon, Gunton, and others<sup>32</sup> along these lines are more or less correct: Augustine does order the reason and senses in *De Musica*, with the reason being ranked “higher” and the senses “lower.” Moreover, he encourages an ascent “from corporeal to incorporeal things.”<sup>33</sup> However when presented in a bare and unqualified manner (as in McKinnon’s remarks), these true statements approach caricature. There are indeed aspects of Augustine’s account of the body and the senses which are problematic, and with which I will take issue. However the dialogue of Book VI presents a much more interesting, complex, and insightful account of the relationship between sense and reason than one might expect from many descriptions of the work. Likewise, close consideration of the text reveals a relationship between corporeal and incorporeal beauty which is far richer and far more sophisticated than the bland “reason—good; body—bad” kind of mentality that is often attached to Augustine. What has been said about *De Musica* has not been said without reason, but it has perhaps been said too quickly, with too little sympathy, and with too little awareness of the work’s depth and insight.

### Ordering the numbers

The master and student rank the five numbers according to their excellence, based on the following criteria: immortal things are higher than mortal; things making (causes) are higher than things made (effects); and (closely related to this last criterion), independent things are higher than dependent. “Reason is higher than sense” is not one of the primary criteria, nor is “spiritual things are higher than physical things.” Augustine certainly does

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<sup>32</sup> See for instance Jeremy Begbie, “Christ and the cultures: Christianity and the arts” in *Cambridge Companion to Christian Doctrine*. ed. Colin Gunton (Cambridge: Cambridge University Press, 1997), 106; Wayne D. Bowman, *Philosophical Perspectives on Music* (New York, Oxford: Oxford University

indicate that reason is higher than sense, the soul higher than the body, and that the spiritual is higher than the physical, but while these convictions shape his argument at various points they are subordinate to these other considerations.

The order of numbers and terminology our pair eventually arrive at is:

- (1) *Judicial numbers*—those numbers of the active perception in hearing, by which we approve sounds as harmonious and pleasing (or not).
- (2) *Advancing numbers*. These are what were first called numbers “in the act of the reciter,” and are those numbers (in the imagination it would seem) by which a speaker or musician orders a verse being pronounced or sung.
- (3) *Reacting numbers*. These are what were earlier called sounding numbers, and are the numbers in the sound heard.
- (4) *Memorial numbers*—those numbers of the memory in recalling a verse or rhythm.
- (5) *Sounding numbers*, or what were originally called the numbers of the “hearer’s sense, belonging to the ears.”

The *judicial numbers* are considered the highest of all, first because they are less ephemeral and mortal than the others. Those numbers of physical hearing, for instance, only last while the sound causing them lasts. Judicial numbers are also higher as causes are higher than effects; for the numbers of physical hearing arise in response to sounds heard, whereas our capacity to approve good sounds and disapprove of bad ones is resident in us whether any note sounds or not. “The sound does not bring it into us,” as the master says, “but is rather received by it to be approved or disapproved of.”<sup>34</sup> Moreover, it is pointed out, these numbers must be most excellent if they are to pass judgment on all the others.<sup>35</sup> Based on similar criteria—especially that things making are to be preferred to things made—*advancing numbers* are given the second place.

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Press, 1998), 60-2; Colin Gunton, “Creation and Re-creation”, 2. Carol Harrison, *Beauty and Revelation in the Thought of Saint Augustine* (Oxford: Clarendon Press, 1992), 30.

<sup>33</sup> *De Musica*, VI, ii, 2, tr. 326.

<sup>34</sup> *Ibid.*, VI, ii, 3, tr. 328.

<sup>35</sup> *Ibid.*, VI, iv, 6, tr. 330.

When it is time to award the third place, however, the student is in a dilemma. On the one hand, the numbers of sounding notes seem to be “things making,” whereas our hearing of them seems to be the “thing made.” But on the other hand, he says,

I am disturbed how the sounding numbers, certainly corporeal or somehow in a body, are to be considered of more worth than those found in the soul when we sense.<sup>36</sup>

Third place then, is given to the numbers of the sounds themselves. Augustine’s stance on music has been often characterized as something like “the less physical, the better.” Yet the fact that the numbers of sounding (corporeal) notes are awarded a higher place than the immaterial numbers of the memory suggests that Augustine’s musical aesthetic is more sophisticated and carefully thought through than a simple “less body = better music” equation. In fact, by scripting the type of response he has from the student (how can corporeal numbers be of more worth than incorporeal?) he has anticipated what probably would have been a common objection from some readers of his day. It also provided Augustine—as it now provides us—with the opportunity to set out in some detail his thoughts on the body, the soul, and the relationship between the two.

### The place of the body

What troubles the student is, if the soul is higher than the body, how can corporeal sounds, how can the bodily senses, produce a response in our soul? Perhaps they could not, responds the master, if humanity had never fallen into sin.<sup>37</sup> But now, this body, “which the soul once used to animate and govern with the greatest ease” is “subject to

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<sup>36</sup> *Ibid.* , VI, iv, 7, tr. 331.

<sup>37</sup> *Ibid.* , 332.

death and corruption.”<sup>38</sup> When the body is operating as it should, is experiencing good health, or encountering that which is in harmony with itself, it requires no attention from the soul. In this fallen world, however, the body encounters sickness, disease, and temptation; in short, that which is not in harmony with itself (“things affecting the body, you might say with otherness”<sup>39</sup>). For the sake of its own protection then, the body must always be monitored by the soul. The senses which affect the soul should be regarded as, “an instrument of the body directed by the soul for its ordering so the soul may be more prepared to act on the passions of the body with attention to joining like things to like and of repelling what is harmful.”<sup>40</sup> Though this monitoring of the body is necessary, the soul is nevertheless diminished whenever it turns its attention from God who is its master to the body which is its servant. This is also, the master explains, why we should seek out music which is harmonious and well ordered. Music which is disordered must be either repelled or assimilated with difficulty. In either of these cases the result is the soul’s gaze must be turned from God to the body.

This suggestion seems to resemble some of the passages we encountered in Pike—the highest engagement with music disregards the physical and turns toward the intellectual. And, as we saw in our evaluation of Pike, this emphasis is problematic for a theological reflection on music. It seems to run up hard against the New Testament insistence that God has made himself known, not by turning us away from corporeality, but by becoming *flesh* and making his dwelling among us.

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<sup>38</sup> Ibid.

<sup>39</sup> Ibid. , VI, v, 10, tr. 336.

<sup>40</sup> Ibid.

Nevertheless, we must again resist the temptation to oversimplify and caricature. If Augustine's argument is problematic, it is still not anything like a dogmatic rejection of corporeality. The student's quandary is Augustine's quandary, and it is genuine. Augustine has throughout his treatise acknowledged the capacity of music and physical sensation to give understanding and produce some sort of influence in the soul. It is only now, as the discussion comes to the point of determining how such a thing can be—how the body which is inferior can influence the soul which is superior—that he backs away from fully embracing these affirmations. The dialogue at this point represents Augustine's attempt to hold together conflicting convictions. On the one hand he affirms that the body is good and seems certain that the senses are a reliable source of knowledge; on the other hand it seems self evident to him that the soul is better than the body, and that causes are higher than effects.

More biographically, I think the dialogue probably also represents Augustine's attempt to hold together the two sides of his experience with the sensual.<sup>41</sup> He admits elsewhere to a deep love for music,<sup>42</sup> and speaks of the profound effect which the music of Ambrose's church had upon him as a new Christian.<sup>43</sup> However he also admits to an unchecked sensuality which held him captive as a young man. In a well known section of the *Confessions* Augustine's love of music and his fear of the senses wrestle within him ("thus I fluctuate between the danger of pleasure and the experience of the beneficent effect"<sup>44</sup>). So in this section of *De Musica*, he wrestles and wavers in his opinion; not sure

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<sup>41</sup> Cf. Margaret R. Miles, "The Body and Human Values in Augustine of Hippo," in *Grace, Politics and Desire: Essays on Augustine*, ed. H. A. Meynell (Calgary: University of Calgary Press, 1990), 55-67.

<sup>42</sup> Augustine, *Confessions*, X, xxxiii, 49-50, tr. Henry Chadwick (Oxford: Oxford University Press, 1991), 207-208.

<sup>43</sup> *Ibid.*

<sup>44</sup> *Ibid.*

how to explain his method or the conclusions it suggests, but certain of the superiority of the soul:

[D.] What happens, then, when a person hears?

[M.] Whatever it is—and perhaps we cannot find or explain it—it won't result, will it, in our denying the soul's being better than the body? . . . . And since things are thus, I shall try as much as God will help me to conjecture at and discuss whatever lies there. But if, because of the infirmity of either or both of us, the result should be less than [sic] we wish, either we ourselves shall investigate it at another time when we are less agitated, or we shall leave it to more intelligent people to examine, or, unworried, we shall leave it unsolved.<sup>45</sup>

This is hardly an emphatic statement of antimaterialism. Again, one is immediately reminded of Augustine's similarly hesitant and agonized conclusions on music in the *Confessions*: "I am led to put forward the opinion, (not as an irrevocable view) . . ." <sup>46</sup> And so this point—at which something like a hostility or at least ambivalence toward the body emerges in Augustine's treatise—is also the point at which he confesses the least certainty and issues an appeal for help. We shall take the master at his word and treat this section not as a categorical statement of settled conviction, but as an instance of one man courageously endeavoring to bring personal experience, education, cultural assumptions, and Christian faith into harmony.

It is also important to recognize that even in this portion of the dialogue there is no venom in the participants' description of the body.<sup>47</sup> The human problem is not that

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<sup>45</sup> *De Musica*, VI, v, 8, tr. 334.

<sup>46</sup> *Confessions*, X, xxxiii, 50, tr. 208.

<sup>47</sup> "The body does well in Augustine's account . . . . The body . . . can and will participate in Augustine's explicitly imaginary vision of the perfection and completion of human nature—the resurrection of the body. He described the resurrection of the body in the last book of the *City of God* and his vision is inclusive, sensual, and exuberant. . . . Human bodies, sexually differentiated, 'risen and glorious' will be the 'ultimate fulfillment' of whole persons." Miles, "The Body and Human Values in Augustine," 64. See also Stephen J. Duffy, "Anthropology" in *Augustine Through the Ages: An Encyclopedia*, ed. Allan D. Fitzgerald (Grand Rapids: Eerdmans, 1999), 24-31; Allan D. Fitzgerald, "Body," in *Augustine Through the Ages*, 105-107.

we have bodies, but that body and soul no longer exist in their right place, proportion and ratio. Once, the two resided together in harmony—in a right relation and ratio with the soul governing the body, and the body enjoying peace, rest and good health. The fall however, has corrupted and unsettled the proportions of all God’s creation. No longer do body and soul, material and immaterial, humanity and beast, humanity and God live together in right relation, with each being and object occupying its right place. It is this “ir-rationality” which is our dilemma. The ideal to which we should aspire therefore is not to be free from all body, but to exist again in right relation to our bodies, to one another and to God—to occupy our right place within what Augustine calls the “poem of the universe”.<sup>48</sup> Our goal is not the denigration of the body, but its health, which can only be found in it occupying its proper place. The master believes that

When the soul is turned from its God to its servant [the body], it is necessarily deficient; but, when it is turned from its servant to its God, it necessarily progresses and furnishes its servant a very easy life, and, therefore, the least laborious and full of business, no attentions being given it in its surpassing peace. Just so is the bodily affection called health. . . . But this health will be the most firm and certain when this body will have been restored to its former stability, in its own time and order. And this its resurrection is properly believed before it is fully understood. For the soul must be ruled by the superior, and rule the inferior. But God alone is superior to it, and only body is inferior to it, if you mean the soul whole and entire. And so as it cannot be entire without the Lord, so it cannot excel without a servant. . . . But when the Lord is neglected, intent on its servant with the carnal concupiscence it is seduced by, the soul . . . is less.<sup>49</sup>

The statement confirms that Augustine esteems the soul above the body. But this passage also makes clear that *De Musica* does not urge us to aspire to freedom from the body, to name the body as the source of human evil, or to deny the body’s goodness.

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<sup>48</sup> *De Musica*, VI, xi, 29, tr. 355.

Even as the master says the soul is better than the body, he checks himself: “nearer to the mark, I believe than ‘better’ . . . [is] what is proper.”<sup>50</sup> “No one doubts a man would be improper in the same clothes a woman would be proper in,”<sup>51</sup> he continues. In just the same way, the body is good when it occupies the place and fills the function of a body. Problems only arise when the body is placed in a position or given a role which does not fit. When in its proper place, the body is the soul’s “servant;” it possesses its own beauty and nobility and the soul “cannot excel” without it. The hierarchy of order and proportion that Augustine envisions requires both soul and body, and that they be in right relation to one another. To lack a body is just as much a disruption of this order as to esteem the body above the soul. Body and soul are both created by God, and find health and peace when rightly related to their Creator, one another, and the rest of creation. Such a state is the body’s “resurrection properly believed.”

Augustine’s discussion of soul and body, like his discussion of music theory, is thus pervaded by an emphasis upon *ratio* and relation—an emphasis which further mitigates his supposed antagonism toward the corporeal. This theme, at the core of Augustine’s rhythmic, is also at the core of his vision of humanity and the creation.<sup>52</sup> Ratio—every thing being in right proportion and relation to every other thing and contributing its unique and distinctive function to the beauty of the whole—this is how music works. It is also how he believes the universe is meant to work: “to each living thing in its proper kind and in its proportion with the universe is given a sense of places

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<sup>49</sup> Ibid. , VI, v, 13, tr. 337-8.

<sup>50</sup> Ibid. , VI, iv, 4, tr. 333.

<sup>51</sup> Ibid.

<sup>52</sup> When we see how fundamental this concept is to Augustine’s thinking, it becomes clear how authentic is his move from music theory to metaphysics. It also becomes clear why he might believe that music can afford us some insights into the shape of reality.

and times.”<sup>53</sup> The master can even go so far as to describe “salvation” as “a proper order in place or time or weight of body.”<sup>54</sup>

So we should acknowledge that there remains,

a certain duality in [Augustine’s] anthropology that is rooted in the hierarchical superiority of soul over body. *Yet what Augustine sought was unity in the diverse dimensions of human being*, a dynamic process of integration that gave proper value to all levels in subordination to God. The ideal is not escape from the body and the world, but reestablishment of inner equilibrium by unification of all one’s levels of being, which includes the body’s spontaneous submission to the soul.<sup>55</sup>

I believe that the “dynamic integration” to which Augustine aspired is not unlike the differentiated unity<sup>56</sup> described in Chapter 4. There, I argued that mind and body and all the different human faculties instruct and inform one another, in a community of relationship.<sup>57</sup> We find warrant for this dynamic diversity in the Judeo-Christian tradition (Moltmann’s description of Old Testament anthropology—“thinking with the body”<sup>58</sup>—colorfully parallels Mark Johnson’s philosophical account of embodied cognition). If, however, that tradition provided us with no clues about human anthropology, we would still find in our experience of music a sonorous enactment of this perichoretic movement between hearing, feeling, knowing and imagination. Augustine has recognized as much in his discussion of the numbers of music (*Where do we find the numbers of music? In all of them*). However, while acknowledging this unified diversity, I also want to recognize,

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<sup>53</sup> Ibid. , VI, vii, 19, tr. 343-4.

<sup>54</sup> Ibid. , VI, xvii, 56, tr. 375.

<sup>55</sup> Duffy, 26. My emphasis.

<sup>56</sup> Cf. Jürgen Moltmann, *God in Creation: An Ecological Doctrine of Creation*, tr. Margaret Kohl (London: SCM Press, 1985), 259-60.

<sup>57</sup> Ibid. , 257-58.

<sup>58</sup> Ibid. , 256.

along with Augustine, a dualism of experience.<sup>59</sup> We often do *not* experience a harmonious, well ordered relation of our different capacities; nor do our bodies always act in a way which pleases us. The community of our own person—like every other community in our experience—is fallen, broken, and incomplete.

## Harmony

Again and again, our attention has been directed to the theme of harmony, proportion, ratio and relation. This is the fundamental pulse which beats beneath all the rhythmic elaborations of *De Musica*. Musically, it is a study of how sounds stand in relation to sounds, syllables in relation to other syllables, and beats to other beats. In terms of its psychology of music, it is a reflection on how different levels of perception stand in relation to one another, depending upon, informing, judging and completing one another. Cosmologically, it is a consideration of how the various parts of reality are fitted together into an ordered and harmonious whole. Ethically, it presents one's obligation to act in a way that is fitting; to sound the note solicited by the surrounding harmonies. Spiritually, it also holds up the holy life as one which is well ordered: "that soul keeps order that, with its whole self, loves Him above itself, that is, God, and fellow souls as itself. In virtue of this love it orders lower things and suffers no disorder from them."<sup>60</sup>

Augustine's vision—and his account of music—is comprehensive. What music presents to our sensible experience is a reality which is profoundly ordered and unified, a cosmos which is extravagantly interconnected and delightfully fit together. Music is by its very nature dependent upon this richly polyphonic character of reality, and as clearly as

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<sup>59</sup> Duffy, 26.

<sup>60</sup> *De Musica*, VI, xiv, 46, tr. 368.

anything else sounds it out for our apprehension. As Augustine would later write to

Memorius:

the powers belonging to numbers in all kinds of movements are most easily studied as they are presented in sounds, and this study furnishes a way of rising to the higher secrets of truth, by paths gradually ascending, so to speak, in which Wisdom pleasantly reveals herself, and in every step of providence meets those who love her.<sup>61</sup>

I would like to advance two theological conclusions based upon this richly relational and unitive character of music; one of which Augustine hints at, and one which is more speculative. First the more speculative proposal.

#### The ratio of redemption

I began this thesis by asking why *music*, of all things, should occupy such a prominent place in human society and worship. Why should a plucked string, or a fluttering reed, move us so deeply? How strange—how mysterious—“that sheep’s’ guts should hale men’s souls out of their bodies.” In the course of our exploration, we have begun assembling an answer; identifying those features which are unique and which mark out music’s special appeal. Our discussion of *De Musica* offers us yet another building block—perhaps even the keystone—in understanding the ubiquity of music. I would like to suggest that one reason music affects us as it does is precisely because of the way in which it participates in and depends upon maintaining right ratio and relationship between different aspects of reality.

This would seem especially plausible if the human dilemma has fundamentally to do with a *loss* of right relation, and indeed, *De Musica* presents both the human dilemma

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<sup>61</sup> Augustine, *Letters*, CI.

and its resolution in terms of *ratio*. (The primary example being the discussion of body and soul which we have just considered. The human problem is not that we have bodies, says the master, but that body and soul no longer exist in their right relation, proportion and ratio. Nor do we look forward to deliverance from our bodies, but rather, to body and soul restored to proper ratio.) Following Augustine's lead, we may usefully consider the human condition under the motif of ratio and relationship:

The fundamental human dilemma is that by aspiring to equality with God (Genesis 3:5) humanity has abandoned its well-ordered place within God's Song of the Universe [*carmen universitatis*]. There has been a universal loss of ratio. We no longer stand in right relation to God. We no longer stand in right relation to the non-human creation ("Cursed is the ground because of you, through painful toil you will eat of it." Genesis 3:17), and we no longer stand in right relation to one another. More than this, we no longer stand in right relation to ourselves. (And so Paul for instance can speak of the members of his body waging war against the law of his mind, making him a prisoner of his own members. (Romans 7:23).) As Augustine recognizes, though body and soul are part of a differentiated unity, our experience in this life is often that of a hostile and mutually antagonistic plurality: body and mind, affections, appetites, and imaginations, resisting, refusing, and tormenting one another. In each of these arenas, we see that Satan is the Father of separation; that the dynamic of sin is division; that the hallmark of corruption is the distortion of relation.

Salvation, *De Musica* suggests, may be thought of as finding one's "proper order in place or time or weight of body."<sup>62</sup> The Good News of Jesus Christ, is that by his death and resurrection, right relationship can be restored. We may be restored to right relationship with God. Once his enemies (Rom. 5:10) and objects of wrath (Ephesians 2:3), we have now been *reconciled* (Rom. 5:10-11, 2 Corinthians 5:19-20), and *united* with Christ (Rom. 6:5, ). The blood of Christ likewise makes possible right relationship with others; inclusion in the diversified unity of the body of Christ.

Now in Christ Jesus you who once were far away have been brought near through the blood of Christ. For he himself is our peace who has made the two one and has destroyed the barrier, the dividing wall of hostility, by abolishing in his flesh the law with its commandments and regulations. His purpose was to create in himself one new man out of the two, thus making peace, and in this one body to reconcile both of them to God through the cross, by which he put to death their hostility. (Ephesians 2:13-16)

The body is a unity, though it is made up of many parts; and though all its parts are many, they form one body. So it is with Christ. For we were all baptized by one Spirit into one body—whether Jews or Greeks, slave or free.  
(1 Corinthians 12:12-13)

The salvation for which we long also holds the promise of right relationship between humanity and the rest of the created order. We look forward to a New Creation in which "the wolf and the lamb will feed together, and the lion will eat straw like the ox." (Isaiah 65:25); in which every creature in heaven and earth and under the earth will make music together (Rev. 5:13); in which mountains and hills, trees and fields, rivers and

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<sup>62</sup> *De Musica*, VI, xvii, 56, tr. 375.

mountains, join hands and voices with those of humanity in praising the Lord God (Psalm 96:11-13; 98:7-9; Isaiah 55:12).<sup>63</sup>

Is it possible then that one reason music affects us so deeply is because it anticipates, and at least faintly, enacts the reconciliation for which all of creation is longing? Here, the material and immaterial, the physical and intentional, the social and individual are brought together in harmony, in fit proportion and right ratio; for a moment at least, no longer at war with one another, but each singing its part within a universal polyphony.<sup>64</sup> Music, then, would be neither an escape to another world (as the Orphean suggests), nor an exact reproduction of the pure mathematical order of the cosmos as it is

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<sup>63</sup> Indeed, this idea of ratio, right relationship, and harmony, is the theme which sounds through all of Augustine's description of peace, and the peace we shall enjoy in the Heavenly City: "The peace of the body, therefore, lies in the balanced ordering of its parts; the peace of the irrational soul lies in the rightly ordered disposition of the appetites; the peace of the rational soul lies in the rightly ordered relationship of cognition and action; the peace of the body and soul lies in the rightly ordered life and health of a living creature; peace between mortal man and God is an ordered obedience, in faith, under an eternal law; and peace between men is an ordered agreement of mind with mind. The peace of a household is an ordered concord, with respect to command and obedience, of those who dwell together; the peace of a city is an ordered concord, with respect to command and obedience, of the citizens; and the peace of the Heavenly City is a perfectly ordered and perfectly harmonious fellowship in the enjoyment of God, and of one another in God. The peace of all things lies in the tranquillity of order, and order is the disposition of equal and unequal things in such a way as to give to each its proper place." Augustine, *The City of God Against the Pagans*, XIX, xiii, ed. and tr. R. W. Dyson, Cambridge Texts in the History of Political Thought (Cambridge: Cambridge University Press, 1998), 938.

<sup>64</sup> In arguing that music embodies a kind of differentiated unity, it is important to fully affirm both the "differentiated" and "unity" poles of this equation. This is not the unity of Pythagoreanism—an impersonal, numerical, monism. It is a personal, relational unity, upheld by the God who is Three in One. Moltmann (e.g. *God in Creation*) and Gunton (e.g. *The One, the Three and the Many*), have both emphasized the importance of preserving particularity within community, and that the trinitarian community of God's own person is where we find this diversified unity perfectly expressed. I have argued over the last two chapters, music provides us with a paradigm instance of a relational ontology, in which tones and rhythms are "substantial particulars . . . rendered such by the patterns of relations that constitute them" (to borrow Gunton's characterization of a relational ontology from *The One, the Three and the Many*). I have also argued that Augustine's theory of music depends upon this sort of relational ontology, expressed in its organizing theme of *ratio*. I am aware that Gunton (particularly in *The One, the Three and the Many*) lays much of the blame on Augustine for propagating a metaphysic which at every point privileges the one over the many. Responding to this charge would take us too far out of our way. However, I believe Gunton's indictment of Augustine, while not without basis, is also not entirely fair. It is true that Augustine emphasizes the one over the many, (so that the harmony of Creation is conceived as the differentiated imitation of divine unity). However, Gunton has not given adequate attention to the theme of ratio, proportion and measure in Augustine's thought. For Augustine, being itself is defined as "a rediscovery of the *ratio* that is essential to our being and with provides us with our place in the order of things as a whole." (Lewis Ayres, "Being (esse/essentia)" in *Augustine Through the Ages*, 97. Cf. also Ayres, "Measure, Number, Weight" and Frederick Van Fleteren "Natural Place" in *Ibid.* ) There is, in other words, more of a relational component, more of an affirmation of diversity and differentiation in Augustine than Gunton acknowledges.

(as the Pythagorean would have it). Rather, music is the imaginative discovery of the Creation *as it will be*. It is imaginative, because it involves going beyond any order or harmony we find in the sound itself—indeed, in the cosmos itself. In this fallen world, even our “perfect” intervals don’t add up.<sup>65</sup> Pythagorean theories of music may be said to be guilty of a kind of over-realized eschatology.

At the same time, music may be said to be a *discovery*; a vision of the future of Creation, latent within the Creation itself. Moltmann writes, “The reality of the world that can be experienced conceals and shelters within itself traces of a creation-in-the-beginning. These traces are at the same time a reflection of the coming glory.”<sup>66</sup> Many have assigned music an illustrative or a parabolic role within theology<sup>67</sup>—this, we saw, is the function Francis Watson suggests.<sup>68</sup> And music may certainly play such a role; but it may *also* be linked to the truths it commends in a more substantive way. As Moltmann goes on to argue, the New Testament parables do not merely illustrate the kingdom, but bear witness to “*the hidden presence* of the future of the coming of the kingdom.”<sup>69</sup>

If we understand the parable as the hidden presence of a qualitatively new, redeeming future in the every day experiences of this world, then the parable becomes the promise. The parables are then anticipations of what is promised in the inadequate [sic] field of experience of this present time. What the kingdom of God itself is, certainly exceeds the boundaries of experience in the time of this world and our own comprehension. But it is like “a man who went out . . .” and like “a woman who has ten silver coins and loses one . . .” The future of the kingdom which is made present in the parable bursts apart everyday experience and through this “alienation effect” shocks us into a new awareness.

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<sup>65</sup> Cf. the discussion in Chapter 3, 149.

<sup>66</sup> Moltmann, 58-9.

<sup>67</sup> Cf. the discussion in Introduction, 18-19.

<sup>68</sup> Francis Watson, “Theology and Music,” *Scottish Journal of Theology* 51, no 4 (1998): 435-63.

<sup>69</sup> Moltmann, 62. My emphasis.

If we transfer this understanding of the parable to the experience of the natural world, we still experience individual things as they appear to us, but they then appear to us in the pre-reflection of their own true future. This is not due to our own ideas and hopes. It is a result of their real self-differentiation and their objective capacity for anticipation. Material structures and complex systems of life have scope for possibility, and in that context are capable of anticipation—and are also actually in need of anticipation, where communication with other living things is concerned.<sup>70</sup>

Music, we may say, has “scope for possibility” and is “capable of anticipation.”

This is not uniquely true of music, of course. But music, in its instantiation of differentiated unity in sound, would seem to offer us a uniquely powerful echo of Creation in the beginning, as well as a potent anticipation of the coming glory. We find evidence of this in the way musical concepts have been metaphorically applied.<sup>71</sup> For centuries, men and women have recognized music—in particular the musical concept of “harmony”—as an apt expression of this anticipated diversified unity. “Harmony” has been used as a metaphor of the *physical world* in right relationship:

Than shewed he him the litel erthe, that heer is,  
At regard of the hevenes quantite;  
And after shewed he him the nyne speres,  
And after that the melodye herde he  
That cometh of thilke speres thryes three,  
That welle is of musyk and melodye  
In this world heer, and cause of armonye.<sup>72</sup>

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<sup>70</sup> Ibid., 62-3.

<sup>71</sup> Most discussions of music and metaphor (for instance, Scruton in *The Aesthetics of Music*, or Bernstein in *The Unanswered Question*) consider how we use metaphors drawn from other domains to conceptualize our experience of music. (e.g. in terms of “tension and release,” “departure and return”). What I am suggesting here, is that we may also consider how music itself has been metaphorically extended to other experiences. Such an investigation may offer us insight into how we think about and categorize music. For more on this approach to metaphor, cf. George Lakoff, *Women, Fire, and Dangerous Things: What Categories Reveal about the Mind* (Chicago: University of Chicago Press, 1987).

<sup>72</sup> Geoffrey Chaucer, “The Parliament of Fowles,” lines 57-63 [text on-line, electronic edition ed. and prep. Douglas B. Killings], *The Complete Works of Geoffrey Chaucer*, ed. W.W. Skeat (Oxford, 1900), available at The Online Medieval and Classical Library:  
<http://sunsite.berkeley.edu/OMACL/Parliament/parliament.html>

The world in constant change  
Maintains a harmony  
And elements keep peace  
Whose nature is to clash<sup>73</sup>

How sweet the moonlight sleeps upon this bank!  
Here we will sit and let the sounds of music  
Creep in our ears; soft stillness and the night  
Become the touches of sweet harmony.<sup>74</sup>

It has been used to speak of the rightly ordered relationship *among people and societies*:

We—are we not formed, as notes of music are,  
For one another, though dissimilar;  
such difference without discord, as can make  
Those sweetest sounds, in which all spirits shake  
As trembling leaves in a continuous air?<sup>75</sup>

It is said in the Book of Poetry, “Happy union with wife and children is like the music of lutes and harps. When there is concord among brethren, the harmony is delightful and enduring. Thus may you regulate your family, and enjoy the pleasure of your wife and children.”<sup>76</sup>

Self-discipline literally spans the whole octaval spread of the community, and makes the weakest, the strongest, and the ones in between sing in unison. . . . We couldn’t go wrong if we claimed that self-discipline was this unanimity, a harmony between the naturally worse and naturally better elements of society.<sup>77</sup>

When music and courtesy are better understood and appreciated, there will be no war.<sup>78</sup>

Without music a State cannot exist. All the disorders, all the wars which we see in the world, only occur because of the neglect to learn music. Does not war result from a lack of union among men? . . . And were all men to learn music, would not

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<sup>73</sup> Boethius, *The Consolation of Philosophy*, II, vii tr. V. E. Watts (London: Penguin, 1969), 77.

<sup>74</sup> William Shakespeare, *The Merchant of Venice*, Act V, Sc 1 [text on-line], available at Internet Public Library: <http://tech-two.mit.edu/Shakespeare/Comedy/themerchantofvenice/themerchantofvenice.5.1.html>

<sup>75</sup> Percy Bysshe Shelly, *Epipsychidion*, IX [text on-line] (1820), available at the University of Puerto Rico, Mayaguez: <http://www.ece.uprm.edu/artssciences/ingles/nb-epipsychidion.htm>

<sup>76</sup> Confucius, *The Doctrine of the Mean*, [text on-line] (ca. 500 B. C. E. ), available at Internet Classics Archive, <http://classics.mit.edu/Confucius/doctmean.html#159>

<sup>77</sup> Plato, *Republic*, 432a, tr. Robin Waterfield (Oxford: Oxford University Press, 1993), 139.

<sup>78</sup> Confucius, *On Music*, as quoted in *The Wordsworth Dictionary of Musical Quotations*, compiled by Derek Watson (Ware, Hertfordshire: Wordsworth Editions, 1994), 36.

this be the means of agreeing together, and of seeing universal peace reign throughout the world?<sup>79</sup>

It is used in speaking of a rightly ordered relationship *within ourselves*.

Dust as we are, the immortal spirit grows  
Like harmony in music; there is a dark  
Inscrutable workmanship that reconciles  
Discordant elements, makes them cling together  
In one society<sup>80</sup>

It's the person who makes the best blend of physical exercise and culture, and who applies them to the mind in the right proportions, whom we should really describe as a virtuoso and as having the most harmony in his life.<sup>81</sup>

Do you know that our soul is composed of harmony?<sup>82</sup>

[Morality] is really a matter of oneself and the parts of oneself . . . once [a man] is his own ruler, and is well regulated, and has internal concord; once he has treated the three factors as if they were literally the three defining notes of an octave—low, high, and middle—and has created a harmony out of them and however many notes there may be in between. . .<sup>83</sup>

Music is what unifies<sup>84</sup>

Music was also used among the writers of the early Church to express this concept of “differentiated unity.” One scholar summarizes his survey of early Church references to music in this way: “The participation of the assembled Christians in singing

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<sup>79</sup> Moliere, *Le Bourgeois gentilhomme*, (1670) as quoted in Watson, 345.

<sup>80</sup> William Wordsworth, *The Prelude*, Book I, lines 340-344 [text on-line] *The Complete Poetical Works of William Wordsworth* (London: Macmillan, 1888), available at Bartleby.com: <http://www.bartelby.com/145/ww287.html>

<sup>81</sup> Plato, *Republic*, 412a, 114.

<sup>82</sup> Leonardo da Vinci, *Notebooks*, as quoted in Watson, 20.

<sup>83</sup> Plato, *Republic* 443d-e, 154.

<sup>84</sup> Seu-Ma Tsen (145-87 BC), quoted in Igor Stravinsky, *Poetics of Music: In the Form of Six Lessons*, tr. Arthur Knodel and Ingolf Dahl (Cambridge, Mass. : Harvard University Press, 1970), 185.

exemplified their spiritual unity with one another in the church and their ethical harmony within themselves and united them with the cosmological and angelical symphony.”<sup>85</sup>

McKinnon likewise notes that the bulk of the references to music in early Christian literature are metaphorical. “Perhaps the most popular of all musical figures invokes the harmony existing among the strings of the cithara.”<sup>86</sup> McKinnon collects nearly four hundred passages with references to music; hopefully a handful of examples will serve to make our point:

#### **Athenagoras (fl. c. 175)**

Now if the cosmos is an harmonious instrument set in rhythmic motion, I worship him who tuned it, who strikes its notes and sings its concordant melody, not the instrument.<sup>87</sup>

#### **Clement of Alexandria, (c. 150-c. 215)**

[The New Song (i.e. Christ)] ordered the universe concordantly and tuned the discord of the elements into an harmonious arrangement, so that the entire cosmos might become through its agency a consonance.<sup>88</sup>

#### **Athanasius (c. 296-373)**

Just as we make known and signify the thoughts of the soul through the words we express, so too the Lord wished the melody of the words to be a sign of the spiritual harmony of the soul.<sup>89</sup>

#### **Chrysostom (c. 347-407)**

Make of yourself a cithara, by mortifying the limbs of the flesh and creating full harmony between body and soul. For when the flesh does not

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<sup>85</sup> Everett Ferguson, “Toward a Patristic Theology of Music,” in *Studia Patristica 24: Papers Presented at the Eleventh Conference on Patristic Studies held in Oxford, 1991*, ed. Elizabeth A. Livingstone (Leuven: Peeters Press, 1993), 283.

<sup>86</sup> James McKinnon, ed. *Music in early Christian literature* (Cambridge: Cambridge University Press, 1987), 6.

<sup>87</sup> Athenagoras, *Supplication for the Christians* 16, in McKinnon, 22.

<sup>88</sup> Clement of Alexandria, *Protrepticus*, I, 5, I, in McKinnon, 30.

<sup>89</sup> Athanasius, *Epistula ad Marcellinum* 28, in McKinnon, 53.

lust against the spirit, but yields to its commands, and perseveres along the path that is noble and admirable, you thus produce a spiritual melody.<sup>90</sup>

### Ambrose (c. 339-397)

For this is a symphony (*symphonia*), when there resounds in the church a united concord (*indiscreta concordia*) of differing ages and abilities as if of diverse strings; the psalm is responded to (*psalmus respondetur*), the amen is said.<sup>91</sup>

What, if anything do these lists of metaphors prove? They demonstrate that for individuals spread over more than ten cultures, seven languages, and 2500 years, music has seemed an apt metaphor for the concept of “differentiated unity”—a well ordered and attractive arrangement of different elements. More remarkable still, ten thousand generations after Plato, these metaphors continue to *resonate* (to use a musical metaphor). A particular idea or arrangement *strikes a chord* with us. We feel that another is *in tune* with what we are saying. We seek *harmony* in our families, in our marriages, and in ourselves. And when two people do find that harmony, we may say that they make *beautiful music* together. The pervasiveness of musical metaphors for rightly ordered relation cannot easily be dismissed as coincidental. Even if we argue that they have been spread through cultural diffusion, rather than arising independently (a difficult argument to make), the fact remains that these continue to be “live” metaphors. They still “work” for us, still communicate, whether or not we have read Plato’s *Republic*.

In Chapter 4 I argued that the metaphorical extension of categories is a primary means for exploring the world. There is a wide consensus of scholarship concerning this heuristic potential of metaphor. Vanhoozer contends that

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<sup>90</sup> John Chrysostom, *In psalmum xli*, 2 in McKinnon, 81.

metaphors exercise a cognitive, as opposed to a merely aesthetic or decorative, function. To be precise, metaphors are indispensable cognitive instruments that enable thought to perceive resemblances between things that would not otherwise be observable.<sup>92</sup>

“Metaphor,” agrees Gunton, “is one of the ways, perhaps *the* way, in which the world as it exists ‘outside’ the mind of the observer is discovered and understood.”<sup>93</sup> (He goes on later to employ the metaphor of harmony in making this point: “‘imagery is a witness to the harmony between mind and matter’ . . . . Metaphor is a supreme instance of the harmony that can be attained between language and the world.”<sup>94</sup>) As I argued in Chapter 4, the metaphorical movement between music and the extra-musical world is two-way. We employ extra-musical concepts in mapping the sounds we hear. At the same time, music provides us with a unique conceptual vocabulary for articulating our extra-musical experience.

The widespread use of the “harmony” metaphor, is not accidental, nor is it merely decorative. Instead, it represents a genuine insight—into music, into what we hear in music, and into the kind of understanding of the world music opens up to us. This differentiated unity, this right ratio between mind, body, imagination and social norms, is what we hear in music. It is also the goal toward which the Creation strains, and the hallmark of the salvation which God has already begun working out. Music is not the New Jerusalem; but it draws together and orders with a kind of eschatological rhythm;<sup>95</sup> It

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<sup>91</sup> Ambrose, *Expositio euangelii secundum Lucam VII*, in McKinnon, 129.

<sup>92</sup> Kevin J. Vanhoozer, *Is There a Meaning in This Text? The Bible, The Reader, and the Morality of Literary Knowledge* (Grand Rapids: Zondervan, 1998), 129.

<sup>93</sup> Colin Gunton, *The Actuality of Atonement: A Study of Metaphor, Rationality and the Christian Tradition* (Edinburgh: T & T Clark, 1988), 40. See also the discussion of metaphor in art, in Jeremy S. Begbie, *Voicing Creation's Praise: Towards a Theology of the Arts* (Edinburgh: T & T Clark, 1991), 233-52.

<sup>94</sup> Gunton, *The Actuality of Atonement*, 37.

<sup>95</sup> Cf. Moltmann, “Nature does not shine of itself; it reflects the light of future glory.” 59.

suggests the kind of perichoretic movement toward which Creation aspires.<sup>96</sup> For this reason, music is the garment of worship and the companion of our passions. It sounds out something like the chords and rhythms of the home we long for; the Garden we have lost, and the City in whose streets flow the river of life.<sup>97</sup>

## Consonance and dissonance

Our discussion raises another question: Does music automatically and infallibly communicate this kind of unity in diversity? Does it in every instance sound out some sort of right relation? It would be hard to support such a position. Sadly, in our churches, music is as often the source of division as it is an expression of Christian harmony.<sup>98</sup> And what about the kids outside my office window that I mentioned earlier in the thesis—their corybantic music accompanying vulgarities and flying fists? Are they experiencing an eschatological inbreaking of the New Creation? Is their beer-soaked carousal a celebration of perichoretic unity?

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<sup>96</sup> Ibid. , 16-17.

<sup>97</sup> In a seminar presentation of this material, one of my colleagues asked whether in this regard music is any different from other experiences which seem to draw together different realms—(externally) physical, social, sensual, imaginative, and so on. Is music any different for instance than a day out in nature, or a deeply fulfilling family relationship? In one sense, the answer is, no, music is not different than these other experiences of differentiated unity. And, as with music, we may experience some sense of “spiritual transcendence” or “heaven on earth” on a mountain hike, or in the company of loved ones. In these cases as well, I would argue, we respond so powerfully because we discern some faint echo of the well ordered New Creation for which we have been made. In another sense, however, music is different, in two ways. First of all, music necessarily engages us at the level of the social, the physical, the sensual, and the imaginative. This may not be as true of every other arena. For instance, we may live in a house with other people to whom we are biologically related without being in right relation, and without our bodies, affections and imaginations being fully (and health-fully) engaged. Secondly, music is different in the *kind* of harmony it can model (I suggested this in Chapter 4); different in its capacity to reflect the fundamentally perichoretic motion of relationship (cf. Moltmann, 16-17). In musical sound we can encounter tones “different in place and position, . . . dynamic states, different in direction and tension, each separately (and all together) extending through all space; present simultaneously, but not in the mode of juxtaposition: simultaneously in the same place, an interpenetration.” (Victor Zuckerkandl, *Sound and Symbol: Music and the External World*, tr. Willard R. Trask (Princeton, N. J. : Princeton University Press, 1956), 306.)

<sup>98</sup> See for instance Michael Hamilton, “The triumph of the Praise Songs: How guitars beat out the organ in the worship wars,” Cover story in *Christianity Today*, 43, no. 8 July 12, 1999, 29-35. Hamilton observes: “Music has become a divisive and fractionalizing force, Balkanizing Western culture into an ever-expanding array of subcultures—each with its own stylistic national anthem.” (30) And “Increasingly, we are grouping

In some ways, I suppose, it is. The music still does its work of unifying and drawing together. The boys on the lawn gather, literally and figuratively, *around* the music. To what end the music unifies is another question. Even in hell, the poet claims, the rebel spirits join in “union, and firm Faith, and firm accord”<sup>99</sup>—against heaven. The music may be “We Shall Overcome,” unifying civil rights marchers against oppression, or it may be the strains of Wagner, binding the participants of a Hitler Youth rally in a pact of racial superiority.

*De Musica* acknowledges both the unificatory power of music, and the perverse ends to which this potential may be put. We saw earlier that in Book VI master and student conclude that sensible numbers shape and influence the soul (this, remember, was what so disturbed the student, and led to the discussion of body and soul). Later, the master notes that such numbers—the numbers associated with singing a verse, for instance—do not influence only the soul of the one singing. “It is by sensible signs that souls act toward souls,”<sup>100</sup> he observes. In the sinful soul, this power to influence others manifests itself in a nightmarish ambition to enslave and imprison. Just as the fallen soul rebels against order, turning its attention away from higher to lower things, so this perversion of the Universal Song extends to its fellow beings. Sinners exploit the unificatory power of music to attach souls to themselves:

The appetite of the soul is to have under it other souls; not of beasts as conceded by divine law, but rational ones, that is, your neighbors, fellows and companions under the same law. But the proud soul desires to operate on them.<sup>101</sup>

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ourselves with the musically like-minded. This is the root, stem, and branch of the new sectarianism that is flowering in American church life.” (34)

<sup>99</sup> Milton, *Paradise Lost*, Book II, 36 (London: Penguin, 1968), 29.

<sup>100</sup> *De Musica*, VI, xiii, 42, tr. 366.

<sup>101</sup> *Ibid.*, VI, xiii, 41, tr. 365.

This is the sin of the actor or singer at the theater, who sings out of a desire for praise, honor and influence. Such ambition is violence, and the master uses language evocative of robbery, kidnapping, rape and cannibalism to portray it. The corrupt soul has an “appetite” for other souls, and “thrusts out, wishing to attach some to itself or to enslave;”<sup>102</sup> “forcing a thing . . . outside of it to become one with it.”<sup>103</sup> “With these numbers and motions” the master says sadly, “souls set upon souls.”<sup>104</sup>

Aware that sensible numbers bind soul to soul,<sup>105</sup> the person of virtue gives careful thought to whom his songs touch, and ensures that these numbers are not applied “to his own proud excelling, but to the usefulness of those souls themselves.”<sup>106</sup> Such a person “refers all those actions to the good of that neighbor he has been bidden to love as himself.”<sup>107</sup> It is this the master concludes (rather than reason, or some ladder of the liberal arts) which is the true means of rising toward God our Father: “the love of our neighbor commanded us is our most certain ascent to inhere in God.”<sup>108</sup>

The ethical use of music requires an awareness that one’s “sensible signs” influence other souls. It further requires an understanding of how deep and powerful that influence is—that it binds soul to soul. Most of all, the ethical use of music demands Christian charity, the love of one’s neighbor, and the recognition that our fellow human beings do not belong to us, but to God. Our society gives ample testimony to the power of music to bind and unite; but the bonds are often the shackles of celebrity culture rather

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<sup>102</sup> *Ibid.* , VI, xiii, 42, tr. 365-6.

<sup>103</sup> *Ibid.*

<sup>104</sup> *Ibid.* , VI, xiii, 41, tr. 365.

<sup>105</sup> *Ibid.* , VI, xiv, 45, tr. 368.

<sup>106</sup> *Ibid.*

<sup>107</sup> *Ibid.*

<sup>108</sup> *Ibid.* , VI, xiv, 46, tr. 369.

than a human embrace. It is with dismay that we note the movement of many Christian churches in the same direction. The collective voice of the worshipping community is replaced by the packaged presentation of the “trained” soloist (often supported by taped accompaniment).

What is conspicuously absent from *De Musica*’s discussion of music and ethics is any sort of psycho-acoustical account of music and morality. Plato’s *Republic* (as we saw earlier) contends that the various musical modes correspond to different character traits. When we listen to music, our souls move in harmony to the sound of the music, and are corrupted or ennobled to the extent that the music is base or noble. This is a common feature of Platonic thought—indeed most of Classical thought—on music, and it is notable that Augustine makes no mention of it here.<sup>109</sup> Music does not override our moral will, for good or evil.<sup>110</sup> Our earlier study as well, confirms that music involves an exercise of the will; an act of intentional perception. The power of music (ethically or otherwise) is not a matter of the physical sound alone, but involves the imagination—a kind of hearing-as. In music as in other domains, it is possible for us to miss the metaphor; to fail to hear the harmony.

### **Deus creator omnium**

We have been considering the differentiated unity which music embodies, and I have proposed that here we have a key element in explaining the ubiquity of music. There is a second theological conclusion suggested by the unitive character of music, one which

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<sup>109</sup> Although it makes a brief appearance in the *Confessions*: “All the diverse emotions of our spirit have their various modes in voice and chant appropriate in each case, and are stirred by a mysterious inner kinship.” X. , xxxiii. , 49, tr. 207-208.

Augustine himself hints at in the last chapter of his work. According to *De Musica*, music is a matter of ratio and relation, and of maintaining right ratio between its physical, ethical and intentional components. Relation however, must be predicated upon something.

There must be something which binds together not only different things of the same class (although this itself is extraordinary enough), but things of different classes. If all of the numbers of music—society, mind, body and sound—stand in measured order, there must be some rule against which they are measured. There must be some denominator against which all of this numerosity is marked out.

Throughout *De Musica*, the master has illustrated the discussion with one example after another in Latin verse. The first five books employ dozens of different verses as examples. However in Book VI only one verse is used as an example, and it is used several times; the hymn *Deus Creator Omnium*. This hymn, composed by Ambrose, is an important one for Augustine. He cites it at least four times in the *Confessions* (Books IV,x; IX, xii; X, xxxv; XI, xxvii). In the midst of “the bitterness of sorrow”<sup>111</sup> following his mother’s death, Augustine lay on his bed and finally found comfort in the verses of *Deus Creator Omnium*.<sup>112</sup>

It is this hymn that is used as the verse example throughout Book VI, and it is this hymn which student and master reflect on as they explore the different numbers of musical perception and their respective roles. And when in the very last chapter of the work, the master considers how it is that these various numbers and aspects of music can hold together, it is this hymn to which he appeals. He tells his student,

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<sup>110</sup> Cf. William Edgar, *Taking Note of Music* (London: SPCK, Third Way Books, 1986), 90-93; and the discussion in Chapter 2, 89-93.

<sup>111</sup> Augustine, *Confessions*, IX. xii, tr. 176.

that verse proposed by us, '*Deus creator omnium*' sounds with the harmony of number not only to the ears, but even more is most pleasing in truth and wholeness to the soul's sentiment.<sup>113</sup>

For every element of the cosmos "desires unity, and tries as much as it can to be like itself, and holds its salvation as a proper order in place or time or weight of body."<sup>114</sup>

And this very fact makes plain that "all things whatever and of any size are made from one beginning . . . by which they are joined together in charity as one and one gift from one."<sup>115</sup>

Our experience of music expresses, more than that, depends upon the harmony of (among other things) neurological structures, intentional imaginative perception, the physical stuff of musical sound, and the traditions and norms of individual cultures. And this harmony, says Augustine, this *ratio*-nality, is only possible in a certain sort of universe. God, the sovereign, God the creator of all, God, who has made all things "from nothing,"<sup>116</sup> is the guarantor and ground of the unity and relatedness of all creation. The Apostle Paul writes

By Him [Jesus Christ] all things were created: things in heaven and on earth, visible and invisible . . . all things were created by him and for him. He is before all things and in him all things hold together. (Colossians 1:16,17)

Because all things have Him as their source, and are ordered by Him in a unity which upholds particularity, we can speak of relationship, we can recognize likeness and analogy. Because all things have Him as their source, we further bear an ethical

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<sup>112</sup> Ibid.

<sup>113</sup> *De Musica*, VI, xvii, 56, tr. 375.

<sup>114</sup> Ibid.

<sup>115</sup> Ibid.

<sup>116</sup> Ibid. , VI, xvii, 57, tr. 377.

responsibility to the creation to which we are “joined together in charity as one.”<sup>117</sup>

Because “all things were created by Him and for Him,” every voice in Creation sings *Deus creator omnium*, each part fitting together in a glittering, ineffably complex harmony.

*“Among all things, however disparate  
there reigns an order, and this gives the form  
that makes the universe resemble God,”*

*she said; “therein God’s higher creatures see  
the imprint of Eternal Excellence—  
that goal for which the system is created,*

*and in this order all created things,  
according to their bent, maintain their place,  
disposed in proper distance from their Source;*

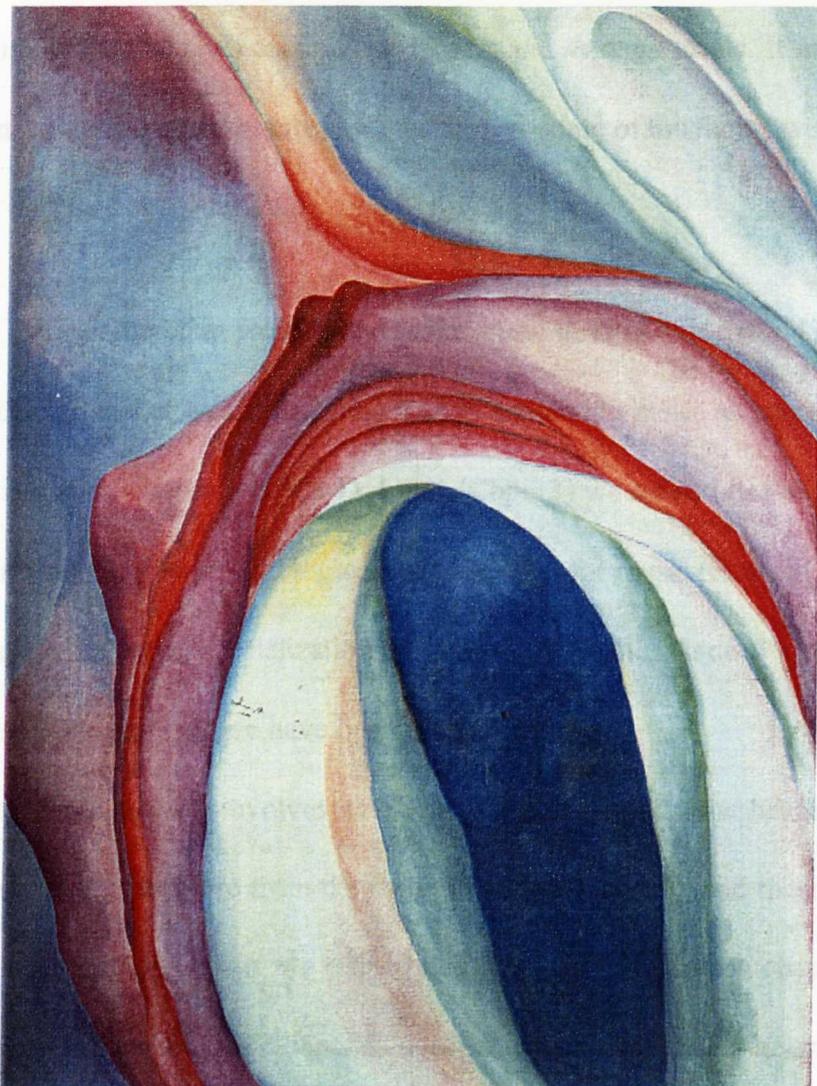
*therefore, they move, all to a different port,  
across the vast ocean of being, and each  
endowed with its own instinct as its guide.*

*This is what carries fire toward the moon,  
this is the moving force in mortal hearts,  
this is what binds the earth and makes it one.”<sup>118</sup>*

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<sup>117</sup> *Ibid.*, VI, xvii, 56, tr. 375.

<sup>118</sup> Dante, *The Divine Comedy*, vol. III, *Paradise*, Canto I, 104-117, tr. Mark Musa (London: Penguin, 1984), 4.



# The Resonant Veil



*How music possesses us is a question to which we know no credible, let alone materially examinable answer. All we have are further images. And the defiant self-evidence of human experience.*

- George Steiner,  
*Real Presences*

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## A Summary

We began by asking why this particular activity of music should so permeate human culture, and why we should we find it so consistently paired with Christian worship. Our investigation has yielded a number of insights, if not a single, conclusive answer. Nor would we expect to snare *music* in a verbal net. “When we try to speak of music, to speak music, language has us, resentfully, by the throat.”<sup>1</sup> Music, and how it “possesses us” in many ways remains a mystery. Yet an ancient and grand tradition of Christian thought teaches us that revelation and mystery may be wound together in a single event. If we cannot understand everything *about* music, there are nevertheless a

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<sup>1</sup> George Steiner, *Real Presences: Is there anything in what we say?* (London: Faber and Faber, 1989), 197.

number of things we can hope to understand *through* music. It may be helpful in these final pages to (very briefly) look back over some of the things we have learned.

## Why Music?

(1) We learned that we sing and make music because it is natural for us to do so.

Schleiermacher was entirely justified in presenting music as something which is innate and arises spontaneously (Chpt 1). Later (Chpt. 3) we refined this suggestion, arguing that human beings have a biological specialization for music (in much the same way that we have a biological specialization for language). Music is indeed a part of us, and we can justifiably say that we have been made for music.

(2) Music actively involves its listeners. Pike contends that hearing music entails actively abstracting structure from the material sound (Chpt. 2), and there is also some support for this contention. Again, we refined this claim in the following chapters. We determined that hearing sound as music depends upon going beyond what is given in the sound itself. Musical listening depends upon the ability to abstract patterns and relationships (Chpt 3 & 4), and an imaginative process of “hearing-as” (Chpt. 4). In hearing music, we not only *perceive* sound, but actively participate in reconstituting—re-composing—its musical structure.

(3) Some (i.e. many in the Orphean tradition) have suggested that music ushers us into another world (whether that be the world of the imagination, or the world of the emotions). Others (i.e. many in the Pythagorean tradition) have said that music reveals the fundamental patterns of *this* world. Again, there is something right and something wrong about both of these proposals.

I have argued that in listening to music we engage with the external world. First of all, our listening is shaped by material and social particularities (Chpt. 3). Second, we hear sounds under the description of categories drawn from other areas of our experience (Chpt. 4). Third, music makes categories available to us, by which we may understand and explore other aspects of our world (Chpt. 4, 6). At the same time, since musical hearing involves going beyond what is given, we do not simply hear the world as it is. We hear the world imaginatively. And, potentially, we hear the world as-creation; as an ordered place of meaning.

(4) Music captures our attention and accompanies our worship, because it enables certain kinds of embodied experience; ones which are not possible in the world of visual perception or in the world of physical mass (Chpt. 4, 6). In music, for instance, we find sounds occurring at the same time, in the same aural space, but without excluding or obstructing one another. Instead, in sounding together they enhance and fulfill one another. Similarly, tones and rhythms find their unique musical identity and quality in their relationship to one another (Chpt. 5). These musical experiences, I argued, provide us with a unique conceptual vocabulary which can be metaphorically extended to other spheres of experience. A prime instance of this is the metaphor of “harmony.” I also suggested that these qualities of music are uniquely suited to expressing the perichoretic and relational character of the Creation, and may act as a promise of the New Creation (Chpt. 6).

(5) Each of the first two theological explanations we considered (Chpt. 1, 2) relied upon a “*this-not-that*” sort of argument. Music was explained as *spontaneous-not-reflective*, or *reflective-not-spontaneous*. Its unique character was located in *feeling-not-knowing*, or

*knowing-not-feeling*. The alternate account I have developed is characterized by the logic of “this-and-that”. Music is spontaneous *and* reflective, feeling *and* knowing, universal *and* particular, sounds *and* other-than-sounds. This is not just a bit of diplomacy—a way of trying to keep everybody happy. Rather, I have argued, it is this precisely this relational, harmonic character of music which is its special virtue and power. Our experience of music depends upon holding together the material, social, physical, and the imaginative in a harmonious proportion and ratio (Chpt. 3-6). Music draws on and is shaped by each of these elements—more than that, is shaped by the way they harmonize and sound through one another. This too is a kind of eschatological promise. Music speaks to us of the recovery of *harmony*, conceived as rightly ordered relationships within a differentiated unity (Chpt. 6).

*Musica est scientia bene modulandi*. Music offers us the knowledge of maintaining right measure. At more than one level, and both musically and metaphorically, it gives us a sounding image of *modulation*, in which fragments of melody, distantly related chords, and incommensurable rhythms are woven together into a seamless fabric of sound and experience.

## **The world of music**

In addition to exploring music, I reasoned (Introduction) that music, (as a universal trait of humanity), might suggest something about how we are as human beings, and what the world is like. In listening closely to music, we’ve discerned overtones of the wider shape of reality. We cannot say of course that music *proves* the world is this way or that—one might answer that music is simply unlike this or that aspect of reality.

Nevertheless, in music we discern certain patterns of relationship which may suggest similar patterns in the wider world.

(1) Our experience of music suggests that we live in a world of both freedom and constraint; both contingency and restriction. What is more, we have seen that in music freedom and creativity are found, not in throwing off those constraints, but by dwelling within them imaginatively (Chpt. 3).

(2) Related to this, we have seen that God has given humanity a real role in imaginatively shaping reality. We bear a priestly role within creation, experiencing and articulating the shape of God's cosmos on behalf of that creation (Chpt. 4). This role carries tremendous responsibility. In naming and discerning the shape of reality, we may miss the metaphor—either failing to recognize or actively resisting the articulate voice of the inarticulate cosmos (cf. Rom. 1:20-23).

(3) Our exploration of music has suggested that a full and rich understanding of the world is not found in abstracting ourselves from the particulars of experience, but in immersing ourselves in them (Chpt 1-4).

(4) We recognize musical events according to a kind of a relational ontology. Notes and rhythms take on their unique shape and meaning according to the place and function they occupy within larger patterns (Chpt. 3, 4, 5). Music commends this relational motif as one way of acknowledging particularity while also attending to larger patterns.

## **Contributions to theology**

Our exploration has yielded a number of contributions to theological method—suggesting ways of bringing theology and music into conversation, and offering models for theological integration with other disciplines. It has also broadened our understanding of the resources for this sort of integration which reside within the Christian tradition.

(1) We have surveyed three very different theological interactions with music, and considered the strengths and weaknesses of each (Chpt. 1, 2, 5, 6). Each work (*Christmas Eve*, *A Theology of Music*, and *De Musica*) exemplifies a different methodology and draws different conclusions about music. Each may offer resources for further theological reflection on music.

(2) I have also presented my own model for theological interaction with music, one which draws upon music as we experience it, as well as insights from the psychology (Chpt. 3) and the philosophy of music (Chpt. 4).

(3) I have offered an analysis of two rarely discussed works by two of the central figures of Christian theology (Chpt. 1, 5, 6). I hope to have shown that both *Christmas Eve* and *De Musica* are worthy of the attention of the theological community.

(4) Our consideration of these works has hopefully also contributed to a fuller understanding of Schleiermacher and Augustine. In particular, Augustine is often caricatured as an opponent of the arts (cf. for example, the comments of Brand and Chaplin cited in Chpt. 5). *De Musica* offers us a picture of Augustine the artist.

(5) These two works (*Christmas Eve* and *De Musica*) also provide us with two examples of theology in the form of dialogue (admittedly, Schleiermacher's work is a much more successful and fully realized dialogue). This genre, once a relatively common means of exploring philosophical and theological issues, is now seldom employed by theologians. It would seem, however, to be a form with enormous potential; one which might be particularly effective in our increasingly narrative-oriented culture.

(6) This use of narrative suggests another methodological point. I have argued that metaphor, and imaginative forms such as music are valid means of exploring truth. If this is true, then it seems right for theology to employ these methods of discourse as well. Theological integration with the arts need not only be theology reflecting on the arts analytically, in effect, using a methodology borrowed from the sciences. (Indeed, in some ways I regret that this thesis did not attempt a more holistic and organic integration of theology and the arts. Instead, I have offered a primarily discursive reflection on artistic forms.)

(7) Again, I have argued that the nature of reality is necessarily perichoretic; that our understanding of the world depends in large part upon the application of metaphors

across domains of experience; that the completion for which the Creation longs is characterized by inter-relatedness and differentiated unity. If this is so, then theologians cannot afford to be academic “specialists” in the narrow sense of that term. Inter-disciplinary engagement is not some optional, intellectually lightweight, extra-curricular project. Rather, this bringing together of different domains mimics the dynamics of all our knowing and being in the world.

Life is communication in communion. And, conversely, isolation and lack of relationship means death for all living things, and dissolution even for elementary particles. So if we want to understand what is real *as* real, and what is living *as* living, we have to know it in its own primal and individual community, in its relationship, interconnections and surroundings.<sup>2</sup>

(8) In this particular integrative study, I have drawn upon several resources which theologians have not yet used, or have under-utilized. In particular, I have interacted with the fields of psychomusicology (Chpt. 3) and cognitive science (Chpt. 3, 4), and with Mark Johnson’s theory of embodied cognition (Chpt. 4).

## Why it matters

On a much more speculative note, let me propose some ways in which this material *matters*, and directions in which it might be developed. I believe that this sort of study may provide us with more than just a better understanding of music. My hope is that it may also help train our ears—to better discern the themes of our culture, and, like the wise musician in Augustine’s treatise, to judge the appropriate melody for each time and season.

(1) I believe that both Schleiermacher and Augustine are theologians of extraordinary contemporary significance, because of the attention they give to human experience, and the theological importance they attach to that experience. This is reflected in their treatment of music, but also in their works more generally. Our culture’s experience-orientation and fascination with “spirituality”<sup>3</sup> represents a real opportunity for the

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<sup>2</sup> Jürgen Moltmann, *God in Creation: An Ecological Doctrine of Creation*, tr. Margaret Kohl (London: SCM Press, 1985), 3.

<sup>3</sup> Cf. Cathy Lynn Grossman, “Spirituality losing church connection: Trend against organized religion grows,” *USA Today*, International edition, 23-26 December, 1999, 1A.

Christian church, if we will seize it—an opportunity to point to the theological ground of human experience, and to provide a Christian framework which makes sense of experiences of transcendence. Developing a biblically grounded, culturally conversant theology of human experience, seems to me one of the most important tasks now facing Christian theology.

(2) We have also explored the link between the body, experience, and reflective knowledge of the world. The model I have presented is significant, I believe, because of the way in which it draws attention to the *rationality* of the body and of experience. In our churches, rationality and emotion, or rationality and experience, are often set against one another. In music, it is sometimes suggested, we have emotional experiences; in the sermon, on the other hand, we are presented with rational truth. Recently, I was asked to preach to the St. Andrews University Christian Union. A week or so after the gathering, I was approached by an agitated undergraduate who had attended the meeting. He angrily accused me of “trying to appeal to everybody’s emotions” and “get people stirred up” with my sermon. (He’s right; I was.) I think I understand what he was saying, but the implication was that emotion and embodied participation necessarily cloud our apprehension of the truth.

Christianity, has solid biblical grounds for presenting a more holistic and complete picture of humanity. We can speak to a “sensate culture,”<sup>4</sup> fascinated by experience, without letting go of rationality. We can affirm that the boundaries of rationality extend far beyond the narrow limits imposed by modernity. Order and coherence are possible at multiple levels of experience and being, because the cosmos is held together by a Creator-Sustainer God.

(3) We have also considered the dynamic relationship between freedom and constraint in music. This also seems to me to be a vital insight which music can contribute to our cultural discourse. Freedom is often popularly construed as the absence of constraint; creativity is defined as the rejection of boundaries. Our discussion has suggested that there is a fruitful interaction of mutual dependency between these two poles.

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<sup>4</sup> Harold O. J. Brown, *The Sensate Culture* (Waco, Tex. : Word), 1996.

(4) The relational and perichoretic character of music argues powerfully that we live in a universe, not a multi-verse. We live in a world in which the material, the social, the experiential, and the imaginative all hang together and make sense of one another in a differentiated unity. This picture of the world fits well with a Christian understanding of reality; a cosmos of extraordinary complexity and simplicity, upheld by a Creator-Sustainer God, who is Himself characterized by plurality in unity.

### **Cause for singing**

Have we answered our question? Have we solved the mystery? Yes and no (of course). We know more than when we began. Yet, looking back over all we have said and considered—as I think through it all again—I feel nothing so much as a sense of amazement. How strange, how extraordinary and how wonderful it all seems. A child pushes air up through his larynx; a woman plucks a tightened wire; a young man strikes a skin stretched over a wooden frame. There is a vibration in the air. What should come of that? What effect should arise from these slender sources? And yet by such mundane agency we come to experience and feel and know; by such humble means, we are led to worship. For those with ears to hear, in this strange and familiar concord we find further reason to raise to Him our tuneful praise.

Praise the LORD  
Praise God in his sanctuary;  
praise him in his mighty heavens.  
Praise him for his acts of power;  
praise him for his surpassing greatness.  
Praise him with the sounding of the trumpet,  
Praise him with the harp and lyre,  
praise him with tambourine and dancing,  
praise him with the strings and flute,  
praise him with the clash of cymbals,  
praise him with resounding cymbals.  
Let everything that has breath praise the LORD.  
Praise the LORD.

—Psalm 150

# Bibliography



Adorno, Theodor W. *Philosophy of Modern Music*. Translated by Anne G. Mitchell and Wesley V. Boomster. London: Shedd and Ward, 1973.

Alighieri, Dante. *The Divine Comedy. Vol. III: Paradise*. Translated by Mark Musa. Vol. 3. 3 vols. New York, London: Penguin, 1986.

Allen, Diogenes. *Philosophy for Understanding Theology*. Atlanta: John Knox Press, 1985.

Alperson, Philip. "Introduction: The Philosophy of Music." In *What Is Music? An Introduction to the Philosophy of Music*, ed. Philip Alperson, 3-30. University Park, Penn.: The Pennsylvania State University Press, 1987.

\_\_\_\_\_. "Music as Philosophy." In *What Is Music? An Introduction to the Philosophy of Music*, ed. Philip Alperson, 193-210. University Park, Penn.: The Pennsylvania State University Press, 1987.

Apel, Willi, ed. *Harvard Dictionary of Music*. Cambridge, Mass.: Belknap Press of Harvard University Press, 1972.

Aristotle. *Metaphysics*. Translated by Hugh Lawson-Tancred. London: Penguin, 1998.

Aristoxenus. *The Harmonics of Aristoxenus*. Translated by Henry S. Macran. Oxford: The Clarendon Press, 1902.

Audi, Robert, ed. *The Cambridge Dictionary of Philosophy*. Cambridge: Cambridge University Press, 1995.

Augustine. *De Musica*. Patrologia Cursus Completus, Series Latina, ed. J. P. Migne, 221 vols. (Paris: Garnier, 1844-1904), 32:1081-1194. Text on-line. Available at Thesaurus Musicarum Latinarum <http://www.music.indiana.edu/tml/start.html>

\_\_\_\_\_. *On the Holy Trinity*. Translated by Arthur West Haddan, revised, Prof. W. G. T. Shedd. Series I, Vol. 3. A Select Library of the Nicene and Post-Nicene Fathers of the Christian Church. ed. Philip Schaff. Edinburgh: T & T Clark. Text on-line. Available at Christian Classics Ethereal Library: <http://www.ccel.org>

\_\_\_\_\_. *The Letters of Saint Augustine*. Translated by J. G. Cunningham. Vol. 1 Nicene and Post-Nicene Fathers of the Christian Church, ed. Philip Schaff. Edinburgh: T & T Clark. Text on-line. Available at Christian Classics Ethereal Library: <http://www.ccel.org>

\_\_\_\_\_. *On Music (De Musica)*. Translated by Robert Catesby Taliaferro. Vol. 4 The Fathers of the Church: A New Translation, ed. Roy Joseph Deferrari. New York: Fathers of the Church, Inc., 1947.

\_\_\_\_\_. *The Retractations*. Translated by Sister Mary Inez Bogan. Vol. 60 The Fathers of the Church. A New Translation. Washington, D. C.: The Catholic University of America Press, 1968.

\_\_\_\_\_. *On Christian Teaching*. Translated by R. P. H. Green. Oxford World's Classics ed. Oxford: Oxford University Press, 1997.

\_\_\_\_\_. *Confessions*. Translated by Henry Chadwick. Oxford World's Classics ed. Oxford: Oxford University Press, 1998.

\_\_\_\_\_. *The City of God against the Pagans*. Translated by R. W. Dyson Cambridge Texts in the History of Political Thought, ed. Raymond Geuss and Quentin Skinner. Cambridge: Cambridge University Press, 1998.

Avis, Paul. *God and the Creative Imagination*. London, New York: Routledge, 1999.

Ayres, Lewis. "Being (*esse/essentia*)." In *Augustine Through the Ages: An Encyclopedia*, ed. Allan D. Fitzgerald. Grand Rapids: Eerdmans, 1999.

\_\_\_\_\_. "Measure, Number, Weight." In *Augustine Through the Ages: An Encyclopedia*, ed. Allan D. Fitzgerald. Grand Rapids: Eerdmans, 1999.

Barker. "Reason and Perception in Ptolemy's *Harmonics*." In *Harmonia Mundi: Musica e Filosofia Nell'Antichita*, ed. Robert W. Wallace and Bonnie MacLachlan, 104-130. Rome: Edizioni dell'Ateneo, 1991.

Barrow, John D. *The Artful Universe: The Cosmic Source of Human Creativity*. Boston: Back Bay Books, Little Brown and Co., 1995.

Barth, Karl. *Theology and Church. Shorter Writings 1920-1928*. Translated by Louise Pettibone Smith. London: SCM Press, 1962.

\_\_\_\_\_. "Music For A Guest - A Radio Broadcast." In *Final Testimonies*, ed. Eberhard Busch, 19-30. Grand Rapids: Eerdmans, 1977.

- \_\_\_\_\_. *The Theology of Schleiermacher. Lectures at Göttingen, Winter Semester of 1923/24*. Translated by Geoffrey W. Bromiley, ed. Dietrich Ritschl. Grand Rapids: Eerdmans, 1982.
- \_\_\_\_\_. *Wolfgang Amadeus Mozart*. Translated by Clarence K. Pott. Grand Rapids: Wm. B. Eerdmans, 1986.
- Bartlett, James C., and W. Jay Dowling. "Recognition of Transposed melodies: A Key-Distance Effect in Developmental Perspective." *Journal of Experimental Psychology: Human Perception and Performance* 6, no. 3 (1980): 501-15.
- Beardsley, Monroe. *Aesthetics from Classical Greece to the Present: A Short History*. Tuscaloosa: University of Alabama Press, 1966.
- Begbie, Jeremy. *Music in God's Purposes*. Edinburgh: The Handsel Press, 1989.
- \_\_\_\_\_. *Voicing Creation's Praise: Towards A Theology of the Arts*. Edinburgh: T & T Clark, 1991.
- \_\_\_\_\_. "The Ambivalent Rainbow: Forsyth, Art and Creation." In *Justice and the True and Only Mercy: Essays on the Life and Theology of Peter Taylor Forsyth*, ed. Trevor Hart, 197-219. Edinburgh: T&T Clark, 1995.
- \_\_\_\_\_. "Theology through Music: Tavener, Time and Eternity." In *Essentials of Christian Community; Essays for Daniel W. Hardy*, ed. David F. Ford and Dennis L. Stamps, 23-34. Edinburgh: T & T Clark, 1996.
- \_\_\_\_\_. "Christ and the cultures: Christianity and the arts." In *Cambridge Companion to Christian Doctrine*, ed. Colin E. Gunton, 101-18. Cambridge: Cambridge University Press, 1997.
- \_\_\_\_\_. "Theology and the Arts: Music." In *The Modern Theologians: An introduction to Christian theology in the twentieth century*, ed. David F. Ford, 686-99. Oxford: Blackwell, 1997.
- \_\_\_\_\_. *Theology, Music and Time*. Cambridge: Cambridge University Press, Forthcoming.
- Berleant, Arnold. "Musical De-Composition." In *What Is Music? An Introduction to the Philosophy of Music*, ed. Philip Alperson, 239-254. University Park, Penn.: The Pennsylvania State University Press, 1987.
- Bernstein, Leonard. *The Unanswered Question: Six Talks at Harvard The Charles Eliot Norton Lectures 1972-1973*. Cambridge, Mass.: Harvard University Press, 1976.

- Best, Harold M. *Music Through the Eyes of Faith*. San Francisco: HarperSanFrancisco, HarperCollins, 1993.
- Blacking, John. *How Musical Is Man? The John Danz Lectures*. Seattle: University of Washington Press, 1973.
- Blackwell, Albert L. "The Role of Music in Schleiermacher's Writings." In *Internationaler Schleiermacher Kongress, Berlin, 1984*, 1, 439-48. Berlin: Walter de Gruyter, 1985.
- \_\_\_\_\_. "Schleiermacher on Musical Experience and Religious Experience." In *Friedrich Schleiermacher and the Founding of the University of Berlin*, ed. Herbert Richardson, 121-39. Lewiston, N. Y. : Edwin Mellen, 1991.
- Bloesch, Donald G. *Jesus Christ. Saviour & Lord*. Carlisle, U. K.: Paternoster, 1997.
- Boethius. *De institutione musica*. Translated by Calvin M. Bower. "The Principles of Music, An Introduction, Translation, and Commentary." Ph. D. diss. , School of Music, George Peabody College for Teachers, 1966.
- \_\_\_\_\_. *The Consolation of Philosophy*. Translated by V. E. Watts. London: Penguin, 1969.
- Bohlman, Philip V. "Is All Music Religious?" *Theomusicology. A Special Issue of Black Sacred Music: A Journal of Theomusicology* 8, no. 1 (1994): 3-12.
- Bornstein, Marc H., and Michael E. Lamb, eds. *Perceptual, Cognitive and Linguistic Development: Part II of Developmental Psychology: An Advanced Textbook (2nd Edn.)*. Hove, UK: Lawrence Erlbaum Associates, 1988.
- Bowen, William R. "St. Augustine in Medieval and Renaissance Musical Science." In *Augustine on Music: An Interdisciplinary Collection of Essays*, ed. Richard R. La Croix. Lewiston, N. Y.: The Edwin Mellen Press, 1988.
- Bowman, Wayne D. *Philosophical Perspectives on Music*. New York, Oxford: Oxford University Press, 1998.
- Brand, Hilary, and Adrienne Chaplin. *Art and Soul: Signposts for Christians in the Arts*. Carlisle, Cumbria: Solway, 1999.
- Brennan, Brian. "Augustine's *De Musica*." *Vigiliae Christianae* 42 (1988): 267-81.
- Brown, Peter. *Augustine of Hippo: A Biography*. London: Faber & Faber, 1967.

- Brown, Frank Burch. *Religious Aesthetics: A Theological Study of Making and Meaning*. London: Macmillan, 1990.
- Calvin. *Institutes of the Christian Religion. In Two Volumes*. Translated by Ford Lewis Battles. The Library of Christian Classics. Philadelphia: The Westminster Press, 1960.
- Caldwell, John. "The De Institutione Arithmetica and the De Institutione Musica." In *Boethius: His Life, Thought and Influence*, ed. Margaret Gilson, 135-54. Oxford: Basil Blackwell, 1981.
- Campling, Christopher R. *The Food of Love. Reflections on Music and Faith*. London: SCM Press, 1997.
- Capps, Walter H. "Theology as Art Form." *American Academy of Religion* 50, no. 1 (1982): 93-6.
- Carpenter, Patricia. "Musical Form and Musical Idea: Reflections on a Theme of Schoenberg, Hanslick and Kant." In *Music and Civilization. Essays in Honor of Paul Henry Lang*, ed. Edmund Stainchamps, Maria Rika Maniates, and Christopher Hatch (collaborator), 394-427. New York: Norton, 1984.
- Carroll-Phelan, Berenice, and Peter J. Hampson. "Multiple Components of the Perception of Musical Sequences: A Cognitive Neuroscience Analysis and Some Implications for Auditory Imagery." *Music Perception* 13, no. 4 (1996): 517-61.
- Cassiodorus. *An Introduction to Divine and Human Readings (Institutiones)*. Translated by Leslie Webber Jones. New York: Octagon Books, 1966.
- Cassirer, H. W. *A Commentary on Kant's Critique of Judgment*. London: Methuen & Co, 1938.
- Castellano, Mary A., J. J. Bharucha, and Carol L. Krumhansl. "Tonal hierarchies in the music of North India." *Journal of Experimental Psychology: General* 113, no. 3 (1984): 394-412.
- Chadwick, Henry. *Augustine. Past Masters*, ed. Keith Thomas. New York: Oxford University Press, 1986.
- \_\_\_\_\_. *Boethius: The Consolations of Music, Logic, Theology and Philosophy*. Oxford: Oxford University Press, 1990.
- Chamberlain, David S. "Philosophy of Music in the <Consolatio> of Boethius." *Speculum* 45 (1970): 80-97.

- Chia, Roland. "Theological Aesthetics or Aesthetic Theology? Some Reflections on the Theology of Hans Urs von Balthasar." *Scottish Journal of Theology* 49, no. 1 (1996): 75-95.
- Chidester, David. "Aesthetic Strategies in Western Religious Thought." *American Academy of Religion* 51, no. 1 (1983): 55-66.
- Clark, Stephen R. L. "Plotinus: Body and soul." In *The Cambridge Companion to Plotinus*, ed. Lloyd P. Gerson, 275-91. Cambridge: Cambridge University Press, 1996.
- Clements, Keith W. *Friedrich Schleiermacher: Pioneer of Modern Theology The Making of Modern Theology*, ed. John W. de Gruchy. Minneapolis, Minn.: Fortress Press, 1991.
- Cohen, Annable J., Leigh A. Thorpe, and Sandra E. Trehub. "Infants' Perception of Musical Relations in Short Transposed Tone Sequences." *Canadian Journal of Psychology* 41, no. 1 (1987): 33-47.
- Collingwood, R. G. *The Principles of Art*. Oxford: Oxford University Press, 1938.
- Comotti, Giovanni. *Music in Greek and Roman Culture*. Translated by Rosaria V. Munson. Baltimore: The Johns Hopkins University Press, 1989.
- Cook, Nicholas. *Music, Imagination, and Culture*. Oxford: Clarendon Press, 1990.
- Cooper, David E., ed. *A Companion to Aesthetics*. Blackwell Companions to Philosophy. Oxford: Blackwell, 1992.
- Copland, Aaron. *What to Listen for in Music*. New York: Mentor, 1939, 1988.
- \_\_\_\_\_. *Music and Imagination*. The Charles Eliot Norton Lectures, 1951-1952. Cambridge, Mass.: Harvard University Press, 1952.
- Copleston, Frederick. *A History of Philosophy. Volume II. Mediaeval Philosophy. Part I. Augustine to Bonaventure*. Vol. 2. 9 vols. Image Books ed. Garden City, N. Y.: Image Books, Doubleday, 1962.
- Covach, John. "The Quest of the Absolute: Schoenberg, Hauer, and the Twelve-Tone Idea." *Theomusicology. A Special Issue of Black Sacred Music: A Journal of Theomusicology* 8, no. 1 (1994): 178-201.
- Crain, William. *Theories of Development: Concepts and Applications*. Englewood Cliffs, N. J.: Prentice Hall, 1980.

- Critchley, Macdonald. "Ecstatic and Synaesthetic Experiences during Musical Perception." In *Music and the Brain: Studies in the Neurology of Music*, ed. Macdonald Critchley and R.A. Henson, 217-32. London: William Heinemann Medical Books, Ltd., 1977.
- Csikszentmihalyi, Mihaly. "Design and Order in Everyday Life." In *The Idea of Design*, ed. Victor Margolin and Richard Buchanan. Cambridge, Mass. : The MIT Press, 1996.
- Cuddy, Lola L., and Besy Badertscher. "Recovery of the tonal hierarchy: Some comparisons across age and levels of musical experience." *Perception & Psychophysics* 41, no. 6 (1987): 609-620.
- Darwin, Charles. *The Descent of Man, And Selection in Relation to Sex*. 2 Vols. 1871 ed. Reprint, Princeton, N. J. : Princeton University Press, 1981.
- Davies, Stephen. *Musical Meaning and Expression*. Ithaca, N.Y. : Cornell University Press, 1994.
- Davison, James E. "Can God Speak a Word to Man? Barth's Critique of Schleiermacher's Theology." *Scottish Journal of Theology* 37, no. 2 (1984): 189-211.
- Deliège, Irène, Marc Melen, Diana Stammers, and Ian Cross. "Musical Schemata in Real-Time Listening to a Piece of Music." *Music Perception* 14, no. 2 (1996): 117-61.
- Descartes, René. *Discourse on Method and The Meditations*. Translated by F. E. Sutcliffe. Penguin Classics ed. London: Penguin, 1968.
- Deusen, Nancy van. "Music, Rhythm." In *Augustine Through the Ages: An Encyclopedia*, ed. Allan D. Fitzgerald, 572-574. Cambridge: Eerdmans, 1999.
- \_\_\_\_\_. "Musica, De." In *Augustine Through the Ages: An Encyclopedia*, ed. Allan D. Fitzgerald, 574-576. Grand Rapids: Eerdmans, 1999.
- Deutsch, Diana, and John Feroe. "The internal representation of pitch sequences in tonal music." *Psychological Review* 88, no. 6 (1981): 503-22.
- Dibben, Nicola. "The Cognitive Reality of Hierarchic Structure in Tonal and Atonal Music." *Music Perception* 12, no. 1 (1994): 1-25.
- Dillard, Annie. *Pilgrim at Tinker Creek*. Book of the Month Club Edition ed. New York: Quality Paperback Book Club, 1990.

- Dissanayake, Ellen. *Homo Aestheticus*. Washington Press edition ed. Seattle: University of Washington Press, 1995.
- Dixon, John W. "Art as the Making of the World: Outline of Method in the Criticism of Religion and Art." *American Academy of Religion* 51, no. 1 (1983): 15-36.
- Dowling, W. Jay, and Dane L. Harwood. *Music Cognition*. Orlando, Fl.: Academic Press Harcourt Brace Jovanovich, 1986.
- Drake, Carolyn. "Psychological Processes Involved in the Temporal Organization of Complex Auditory Sequences: Universal and Acquired Processes." *Music Perception* 16, no. 1 (1998): 11-26.
- Duffy, Stephen J. "Anthropology." In *Augustine Through the Ages: An Encyclopedia*, ed. Allan D. Fitzgerald, 24-31. Grand Rapids: Eerdmans, 1999.
- Eades, J. S. "Dimensions of Meaning: western music and the anthropological study of symbolism." In *Religious Organization and Religious Experience*, ed. J. Davis. London: Academic Press, 1982.
- Eaton, J. H. "Music's Place in Worship: A Contribution from the Psalms." In *Prophets, Worship and Theodicy: Studies in Prophetism, Biblical Theology and Structural and Rhetorical Analysis and on the Place of Music in Worship. Oudtestamentische Studiën* 23, 85-107. Leiden: E. J. Brill, 1984.
- Edgar, William. *Taking Note of Music*. London: SPCK, Third Way Books, 1986.
- Ellsmere, P. K. "Augustine on Beauty, Art and God." In *Augustine on Music: An Interdisciplinary Collection of Essays*, ed. Richard R. La Croix. Lewiston, N. Y.: The Edwin Mellen Press, 1988.
- Farley, Edward. "Music and Human Existence: A Response." *Theological Education* 31, no. 1 (1994): 175-81.
- Fassbender, Christoph. "Infants' auditory sensitivity towards acoustic parameters of speech and music." In *Musical Beginnings: Origins and Development of Musical Competence*, ed. Irène Deliège and John Sloboda, 56-87. Oxford: Oxford University Press, 1996.
- Faulkner, Quentin. *Wiser than Despair: The Evolution of Ideas in the Relationship of Music and the Christian Church* Contributions to the Study of Music and Dance. Westport, Conn.: Greenwood Press, 1996.
- Ferguson, Everett. "Toward a Patristic Theology of Music." *Studia Patristica* 24 (1993): 266-83.

- Fitzgerald, Allan D. "Body." In *Augustine Through the Ages: An Encyclopedia*, ed. Allan D. Fitzgerald, 105-107. Grand Rapids: Eerdmans, 1999.
- Fleteren, Frederick Van. "Natural Place." In *Augustine Through the Ages: An Encyclopedia*, ed. Allan D. Fitzgerald. Grand Rapids: Eerdmans, 1999.
- Forman, Robert J. "Augustine's Music: "Keys" to the Logos." In *Augustine on Music: An Interdisciplinary Collection of Essays*, ed. Richard R. La Croix. Lewiston, N. Y.: The Edwin Mellen Press, 1988.
- Garside, Charles. "The Origins of Calvin's Theology of Music: 1536-1543." *Transactions of the American Philosophical Society* 69, no. 4 (1979): 4-35.
- Gerrish, B. A. *A Prince of the Church: Schleiermacher and the Beginnings of Modern Theology*. London: SCM Press, 1984.
- Gilbert, Katherine Everett, and Helmut Kuhn. *A History of Esthetics*. Revised and Enlarged ed. London: Thames and Hudson, 1956.
- Gill, Theodore A. "Barth and Mozart." *Theology Today* 43, no. 3 (1986): 403-411.
- Goeser, Robert. "Luther: Word of God, Language and Art." *Currents in Theology and Mission*, February (1991): 6-11.
- Gordon, Harold W. "Degree of Ear Asymmetries for Perception of Dichotic Chords and for Illusory Chord Localization in Musicians of Different Levels of Competence." *Journal of Experimental Psychology: Human Perception and Performance* 6, no. 3 (1980): 516-527.
- Green, Garrett. *Imagining God: Theology and the Religious Imagination*. Grand Rapids: Eerdmans, 1998/1989.
- Grenz, Stanley J., and Roger E. Olson. *20th-Century Theology: God & the World in a Transitional Age*. Downers Grove, Ill.: InterVarsity Press, 1992.
- Griffiths, Paul. "Serialism." In *The New Grove Dictionary of Music and Musicians*, ed. Stanley Sadie, 17. London: Macmillan, 1980.
- Grossman, Cathy Lynn. "Spirituality losing church connection: Trend against organized religion grows." *USA Today*, 23-26 December 1999, 1A-2A.
- Gunn, Giles. "On the Relation Between Theology and Art In the Work of Gordon D. Kaufman." *American Academy of Religion* 50, no. 1 (1982): 87-91.
- Gunton, Colin. "Creation and Re-Creation: An Exploration of Some Themes in Aesthetics and Theology." *Modern Theology* 2, no. 1 (1985): 1-19.

- \_\_\_\_\_. *The Actuality of Atonement*. Edinburgh: T & T Clark, 1988.
- \_\_\_\_\_. "Mozart the Theologian." *Theology* 94 (1991): 346-49.
- \_\_\_\_\_. *The One, The Three and The Many: God, Creation and the Culture of Modernity. The Bampton Lectures 1992*. Cambridge: Cambridge University Press, 1993.
- Guthrie, W. K. C. *The Greek Philosophers. From Thales to Aristotle*. London: Methuen & Co., 1950.
- Halpern, Andrea R., James C. Bartlett, and W. Jay Dowling. "Perception of Mode, Rhythm, and Contour in Unfamiliar Melodies: Effects of Age and Experience." *Music Perception* 15, no. 4 (1997): 335-56.
- Hamilton, Michael S. "The Triumph of the Praise Songs: How guitars beat out the organ in the worship wars." *Christianity Today*, July 12 1999, 29-35.
- Harré, Rom, and Roger Lamb, eds. *The Dictionary of Developmental and Educational Psychology*. Oxford: Blackwell Reference, 1986.
- Harrison, Carol. *Beauty and Revelation in the Thought of Saint Augustine*. Oxford: Clarendon Press, 1992.
- Hart, Trevor A. *Faith Thinking: The Dynamics of Christian Theology*. Downers Grove, Ill.: InterVarsity Press, 1995.
- \_\_\_\_\_. *Theology and Imagination*. Lecture notes produced for Honours Module DI 4/3424, St. Mary's College, University of St. Andrews, Candlemas Semester, 2000.
- Hasker, William. *Metaphysics: Constructing a World View* Contours of Christian Philosophy, ed. C. Stephen Evans. Downers Grove, Ill. : InterVarsity Press, 1983.
- Hendry, George S. *Theology of Nature*. Philadelphia: The Westminster Press, 1980.
- Henson, R. A. "Neurological Aspects of Musical Experience." In *Music and the Brain: Studies in the Neurology of Music*, ed. Macdonald Critchley and R.A. Henson, 1-21. London: William Heinemann Medical Books Ltd., 1977.
- Hepburn, R. W. "Time-Transcendence and Some Related Phenomena in the Arts." In *Contemporary British Philosophy: Personal Statements*, ed. H. D. Lewis, 152-73. London: George Allen & Unwin, 1976.

- \_\_\_\_\_. "Religious Imagination." In *Philosophy, Religion and the Spiritual Life*, ed. Michael McGhee, 127-43. Cambridge: Cambridge University Press, 1992.
- Higgins, Kathleen Marie. *The Music of Our Lives*. Philadelphia: Temple University Press, 1991.
- Hill, David S., Stuart B. Kamenetsky, and Sandra E. Trehub. "Relations Among Text, Mode, and Medium: Historical and Empirical Perspectives." *Music Perception* 14, no. 1 (1996): 3-22.
- Hindemith, Paul. *A Composer's World: Horizon's and Limitations*. The Charles Eliot Norton Lectures 1949-1950. Gloucester, Mass.: Peter Smith, 1969.
- Honderich, Ted, ed. *The Oxford Companion to Philosophy*. Oxford: Oxford University Press, 1995.
- Horne, B. L. "A *Civitas* of Sound: On Luther and Music." *Theology* 88 (1985): 21-28.
- Imberty, Michel. "Linguistic and musical development in preschool and school-age children." In *Musical Beginnings: Origins and Development of Musical Competence*, ed. Irène Deliège and John Sloboda, 191-213. Oxford: Oxford University Press, 1996.
- Jackendoff, Ray. *Patterns in the Mind. Language and Human Nature*. New York: BasicBooks, HarperCollins, 1994.
- James, Jamie. *The Music of the Spheres: Music, Science and The Natural Order of the Universe*. New York: Copernicus Springer Verlag, 1993.
- Jarvinen, Topi. "Tonal Hierarchies in Jazz Improvisation." *Music Perception* 12, no. 4 (1995): 415-37.
- Johnson, Mark. *The Body in the Mind: The Bodily Basis of Meaning, Imagination, and Reason*. Chicago: University of Chicago Press, 1987.
- Jones, Douglas, and Douglas Wilson. *Angels in the Architecture: A Protestant Vision for Middle Earth*. Moscow, Idaho: Canon Press, 1998.
- Jordan, Daniel S., and Roger N. Shepard. "Tonal schemas: Evidence obtained by probing distorted musical scales." *Perception & Psychophysics* 41, no. 6 (1987): 489-504.
- Jordan, Daniel S. "Influence of the diatonic tonal hierarchy at microtonal intervals." *Perception & Psychophysics* 41, no. 6 (1987): 482-88.

- Jordan, William. "Augustine on Music." In *Grace, Politics & Desire: Essays on Augustine*, ed. Hugo A. Meynell, 123-34. Calgary: University of Calgary Press, 1990.
- Jusczyk, Peter W., and Carol L. Krumhansl. "Pitch and Rhythmic Patterns Affecting Infants' Sensitivity to Musical Phrase Structure." *Journal of Experimental Psychology: Human Perception and Performance* 19, no. 3 (1993): 627-40.
- Juslin, Patrik N. "Emotional Communication in Music Performance: A Functionalist Perspective and Some Data." *Music Perception* 14, no. 4 (1997): 383-418.
- Kant, Immanuel. *Critique of Pure Reason*. Translated by Norman Kemp Smith. New York: St. Martin's Press, 1965/1929.
- \_\_\_\_\_. *The Critique of Judgement*. Translated by James Creed Meredith. Oxford: Clarendon Press, 1980/1928.
- Kaufman, Gordon D. "Theology as Imaginative Construction." *American Academy of Religion* 50, no. 1 (1982): 73-9.
- Kelsey, David H. "'Religious Aesthetics: A Theological Study of Making and Meaning' by Frank Burch Brown; and 'Beauty and Holiness: The Dialogue Between Aesthetics and Religion' by James Alfred Martin, Jr. (review article)." *Religious Studies Review* 19, no. 4 (1993): 312-15.
- Kierkegaard, Soren. *Philosophical Fragments or A Fragment of Philosophy*. Translated by David F. Swenson, rev. tr. Howard V. Hong. Princeton, N. J.: Princeton University Press, 1936.
- Kivy, Peter. "How Music Moves." In *What Is Music? An Introduction to the Philosophy of Music*, ed. Philip Alperson, 147-163. University Park, Penn.: The Pennsylvania State University Press, 1987.
- \_\_\_\_\_. *The Fine Art of Repetition. Essays in the Philosophy of Music*. Cambridge: Cambridge University Press, 1993.
- \_\_\_\_\_. *Philosophies of Arts. An Essay in Differences*. Cambridge: Cambridge University Press, 1997.
- Knight, W. F. Jackson. *St. Augustine's De Musica. A Synopsis*. London: The Orthological Institute, 1949.
- Küng, Hans. *Art and the Question of Meaning*. Translated by Edward Quinn. London: SCM Press, 1981.

- \_\_\_\_\_. *Mozart: Traces of Transcendence*. Translated by John Bowden. Grand Rapids: Eerdmans, 1993.
- Lakoff, George, and Mark Johnson. *Metaphors We Live By*. Chicago: University of Chicago Press, 1980.
- Lakoff, George. *Women, Fire, and Dangerous Things. What Categories Reveal about the Mind*. Chicago: University of Chicago Press, 1987.
- Landels, John G. *Music in Ancient Greece and Rome*. London, New York: Routledge, 1999.
- Leaver, Robin A. "Review of *Neither Voice nor Heart Alone: German Lutheran Theology of Music in the Age of the Baroque*." *Sixteenth Century Journal* 25, no. 2 (1994): 471-72.
- Leman, Marc. "A Model of Retroactive Tone-Center Perception." *Music Perception* 12, no. 4 (1995): 439-71.
- Leppert, Richard, and Susan McClary, eds. *Music and Society: The politics of composition, performance and reception*. Cambridge: Cambridge University Press, 1987.
- Lerdahl, Fred, and Ray Jackendoff. *A Generative Theory of Tonal Music*. Cambridge, Mass. ; London: The MIT Press, 1983, reprint 1996.
- Lerhdahl, Fred. "Calculating Tonal Tension." *Music Perception* 13, no. 3 (1996): 319-64.
- Levinson, Jerrold. *Music, Art and Metaphysics*. Ithaca, N. Y. , London: Cornell University Press, 1990.
- Levinson, Jerrold, and Philip Alperson. "What Is a Temporal Art?" *Midwest Studies in Philosophy* 16, no. Philosophy and the Arts (1991): 439-50.
- Lewis, C. S. *The Discarded Image: An Introduction to Medieval and Renaissance Literature*. Canto edition ed. Cambridge: Cambridge University Press, 1995/1964.
- MacDonald, Malcolm. *Schoenberg* The Master Musician Series. London: J.M. Dent & Sons, 1976.
- MacLachlan, Bonnie. "The harmony of the spheres: *dulcis sonus*." In *Harmonia Mundi: Musica e Filosofia Nell'Antichita*, ed. Robert W. Wallace and Bonnie MacLachlan, 7-19. Rome: Edizioni dell'Ateneo, 1991.

- Maritain, Jacques. *Art and Scholasticism*. Translated by J. F. Scanlan. London: Sheed & Ward, 1934.
- Martin, Alfred J. "The Significance of Aesthetics for Theology As Imaginative Construction." *American Academy of Religion* 50, no. 1 (1982): 81-5.
- Martin, David A. "Music and Religion: Ambivalence Towards "The Aesthetic"." *Religion* 14 (1984): 269-92.
- May, Elizabeth, ed. *Music of Many Cultures: An Introduction*. Berkeley, Los Angeles: University of California Press, 1980.
- McClendon, James W. "Charles Edward Ives: Theologian in Music." *Theomusicology. A Special Issue of Black Sacred Music: A Journal of Theomusicology* 8, no. 1 (1994): 109-34.
- McKinnon, James. "Christian Antiquity." In *Antiquity and the Middel Ages*, ed. James McKinnon, 1, 80-87. Houndmills, Hampshire: The MacMillan Press, 1990.
- \_\_\_\_\_. *Music in Early Christian Literature*. reprint ed. Cambridge Readings in the Literature of Music. Cambridge: Cambridge University Press, 1993.
- Michaelides, Solon. *The Music of Ancient Greece: An Encyclopaedia*. London: Faber and Faber, 1978.
- Miles, Margaret R. "The Body and Human Values in Augustine of Hippo." In *Grace, Politics and Desire: Essays on Augustine*, ed. H. A. Meynell, 55-67. Calgary: University of Calgary Press, 1990.
- Mitchell, Barry. "Metaphorical key to the meaning of music: A review of *The Aesthetics of Music*, by Roger Scruton." *The Times Higher Educational Supplement*, March 26, 1999.
- Moltmann, Jürgen. *God in Creation: An Ecological Doctrine of Creation*. Translated by Margaret Kohl. London: SCM Press, 1985.
- Moore, Brian C. J. *An Introduction to the Psychology of Hearing*. Fourth Edition ed. San Diego: Academic Press, 1997.
- Mullen, Peter. "Serial Theology." *Theology* 86 (1983): 25-29.
- Nam, Unjung. "Pitch Distributions in Korean Court Music: Evidence Consistent With Tonal Hierarchies." *Music Perception* 16, no. 2 (1998).
- Neighbour, O.W. "Schoenberg, Arnold." In *The New Grove Dictionary of Music and Musicians*, ed. Stanley Sadie, 16. London: Macmillan, 1980.

- Newlin, Dika. "Schoenberg, Arnold." In *The New Encyclopedia Britannica*, 10. Chicago: Encyclopedia Britannica, 1993.
- Niebuhr, Richard R. *Schleiermacher on Christ and Religion* The Library of Philosophy and Theology, ed. John McIntyre and Ian T. Ramsey. London: SCM Press, 1964.
- O'Connell, Robert J. *Art and the Christian Intelligence in St. Augustine*. Oxford: Basil Blackwell, 1978.
- O'Donnell, James J. *Cassiodorus*. Berkeley: University of California Press, 1979.
- O'Hear, Anthony. *The Element of Fire: Science, Art and the Human World*. London and New York: Routledge, 1988.
- \_\_\_\_\_. "The real or the Real? Chardin or Rothko." In *Philosophy, Religion and the Spiritual Life*, ed. Michael McGhee, 32, 47-58. Cambridge: Cambridge University Press, 1992.
- \_\_\_\_\_. *Beyond Evolution: Human Nature and the Limits of Evolutionary Explanation*. Oxford: Clarendon Press, 1997.
- O'Loughlin, Thomas. "Boethius." In *Dictionary of Historical Theology*, ed. Trevor Hart. Carlisle, UK: Paternoster, Forthcoming.
- O'Meara, Dominic J. "The hierarchical ordering of reality in Plotinus." In *The Cambridge Companion to Plotinus*, ed. Lloyd P. Gerson, 66-81. Cambridge: Cambridge University Press, 1996.
- O'Siadhail, Micheal. *A Fragile City*. Newcastle upon Tyne: Bloodaxe Books, 1995.
- Panksepp, Jaak. "The Emotional Sources of "Chills" Induced by Music." *Music Perception* 13, no. 2 (1995): 171-208.
- Papousek, Hanus. "Musicality in infancy research: biological and cultural origins of early musicality." In *Musical Beginnings: Origins and Development of Musical Competence*, ed. Irène Deliège and John Sloboda, 37-55. Oxford: Oxford University Press, 1996.
- Papousek, Mechthild. "Intuitive parenting: a hidden source of musical stimulation in infancy." In *Musical Beginnings: Origins and Development of Musical Competence*, ed. Irène Deliège and John Sloboda, 88-112. Oxford: Oxford University Press, 1996.

- Partch, Harry. *Genesis of a Music: An Account of a Creative Work, its Roots and its Fulfillments*. Second Edition ed. New York: Da Capo Press, 1974.
- Perl, Carl Johann. "Augustine and Music." *The Musical Quarterly* 41, no. 4 (1955): 496-510.
- Perle, George, and Paul Lansky. "Twelve-note composition." In *The New Grove Dictionary of Music and Musicians*, ed. Stanley Sadie, 19. London: MacMillan, 1980.
- Perlman, Marc, and Carol L. Krumhansl. "An Experimental Study of Internal Interval Standards in Javanese and Western Musicians." *Music Perception* 14, no. 2 (1996): 95-116.
- Pickstock, Catherine. "Ascending numbers: Augustine's *De Musica* and the Western tradition." In *Christian Origins: Theology, Rhetoric and Community*, ed. Lewis Ayres and Gareth Jones. London: Routledge, 1998.
- Pike, Alfred. *A Theology of Music*. Toledo, Oh.: The Gregorian Institute of America, 1953.
- Pinker, Steven. *How the Mind Works*. London: Allen Lane, The Penguin Press, 1997.
- Piston, Walter. *Harmony*. Fifth Edition, Revised and Expanded by Mark Devoto New York: W. W. Norton, 1987.
- Plato. *Timaeus*. Translated by Benjamin Jowett. Text on-line. Available at The Internet Classics Archive: <http://classics.mit.edu/Plato/timaeus.html>
- \_\_\_\_\_. *Republic*. Translated by Robin Waterfield. Oxford: Oxford University Press, 1993.
- Polanyi, Michael. *Personal Knowledge: Towards a Post-Critical Philosophy*. London: Routledge & Kegan Paul, 1958.
- \_\_\_\_\_. *The Tacit Dimension*. London: Routledge & Kegan Paul, 1966.
- Poole, Thomas Daryl. "Towards An Integration of Music and Theology: Suggestions for the Construction of a Theological Definition of Music." D. M. A., The Southern Baptist Theological Seminary, 1988.
- Potok, Chaim. *My Name is Asher Lev*. London: Penguin, 1973.
- Radford, Colin. "How Can Music Be Moral?" *Midwest Studies in Philosophy* 16, no. Philosophy and the Arts (1991): 421-38.

- Raffman, Diana. "Toward a Cognitive Theory of Musical Ineffability." *The Review of Metaphysics* 41, no. 4 (1988): 685-706.
- \_\_\_\_\_. "The Meaning of Music." *Midwest Studies in Philosophy*. 16, no. Philosophy and the Arts (1991): 360-77.
- \_\_\_\_\_. *Language, Music and Mind*. Cambridge, Mass. : Bradford Books, MIT Press, 1993.
- Reese, Gustave. *Music in the Middle Ages*. London: J. M. Dent & Sons LTD., 1941.
- Reich, Willi. *Schoenberg. A Critical Biography*. Translated by Leo Black. London: Longman, 1971.
- Repp, Bruno H. "Review of 'The Aesthetics of Music' by Roger Scruton." *Music Perception* 15, no. 4 (1998): 412-22.
- Rilke, Rainer Maria. *Sonnets to Orpheus. Written as a monument for Wera Ouckama Knoop*. Translated by J. B. Leishman. London: Hogarth Press, 1946.
- Rist, John. "Plotinus and Christian philosophy." In *The Cambridge Companion to Plotinus*, ed. Lloyd P. Gerson, 386-413. Cambridge: University of Cambridge Press, 1996.
- Rognoni, Luigi. *The Second Vienna School: Expressionism and Dodecaphony*. Translated by Robert W. Mann. London: John Calder, 1977.
- Rosen, Charles. *Schoenberg*. Glasgow: Fontana/Collins, 1976.
- Rosensteil, Leonie, ed. *Schirmer History of Music*. New York: Schirmer, Macmillan Collier Macmillan, 1982.
- Rothstein, Edward. *Emblems of Mind: The Inner Life of Music and Mathematics*. New York: Avon Books, 1995.
- Rouget, Gilbert. *Music and Trance: A Theory of the Relations between Music and Possession*. Translated by Brunhilde Biebuyck and Gilbert Rouget. rev. ed. Chicago: University of Chicago Press, 1985.
- Rowell, Lewis. *Thinking About Music: An Introduction to the Philosophy of Music*. Amherst, Mass.: University of Massachusetts Press, 1983.
- Sacks, Oliver. *The Man Who Mistook His Wife for a Hat. And Other Clinical Tales*. HarperPerennial edition ed. New York: HarperPerennial, HarperCollins, 1970.

- Sandell, Gregory J. "Roles for Spectral Centroid and Other Factors in Determining 'Blended' Instrument Pairings in Orchestration." *Music Perception* 13, no. 2 (1995): 209-46.
- Schaeffer, Francis A. *How Should We Then Live? The Rise and Decline of Western Thought and Culture*. Westchester, Ill.: Crossway Books, Good News, 1976.
- Schleiermacher, F. D. E. *The Life Of Schleiermacher, as unfolded in his Autobiography and Letters*. Translated by Frederica Rowan. 2 vols. London: Smith, Elder and Co., 1860.
- \_\_\_\_\_. *Christmas Eve: A Dialogue on the Celebration of Christmas*. Translated by W. Hastie. Edinburgh: T & T Clark, 1890.
- \_\_\_\_\_. *On Religion: Speeches to its Cultured Despisers*. Translated by John Oman. New York: Harper & Row, 1958.
- \_\_\_\_\_. *On Religion: Addresses in Response to Its Cultured Despisers*. Translated by Terrence N. Tice. Richmond, Va.: John Knox Press, 1969.
- \_\_\_\_\_. *Christmas Eve: Dialogue on the Incarnation*. Translated by Terrence N. Tice. San Francisco: EM Texts, 1990.
- Schoenberg, Arnold. *Style and Idea: Selected Writings of Arnold Schoenberg*. Translated by Leo Black, ed. Leonard Stein. Berkeley, Los Angeles: University of California Press, 1975.
- Schrade, Leo. "Music in the Philosophy of Boethius." *The Musical Quarterly* 33, no. 2 (1947):188-200.
- Schwarze, Bernd. "Religion, Rock and Research." *Theomusicology. A Special Issue of Black Sacred Music: A Journal of Theomusicology* 8, no. 1 (1994): 78-91.
- Scillia, Charles E. "Meaning and the Cluny Capitals: Music as Metaphor." *Gesta* XXVII, no. 1 and 2 (1988): 133-48.
- Scott, Drusilla. *Everyman Revived: The Common Sense of Michael Polanyi*. Lewes, Sussex: The Book Guild Limited, 1985.
- Scruton, Roger. *Art and Imagination: A Study in the Philosophy of Mind*. London: Methuen & Co, 1974.
- \_\_\_\_\_. "Musical Understanding and Musical Culture." In *What Is Music? An Introduction to the Philosophy of Music*, ed. Philip Alperson, 349-58. University Park, Penn.: The Pennsylvania State University Press, 1987.

- \_\_\_\_\_. *The Aesthetics of Music*. Oxford: Clarendon Press, 1997.
- Seay, Albert. *Music in the Medieval World* Prentice-Hall History of Music Series, ed. H. Wiley Hitchcock. Englewood Cliffs, N. J.: Prentice-Hall, 1965.
- Seel, Thomas Allen. *A Theology of Music for Worship Derived from the Book of Revelation* Studies in Liturgical Musicology, ed. Dr. Robin A. Leaver. Metuchen, N.J. : The Scarecrow Press, Inc., 1995.
- Shelton, Robert M. "Doing Theology with Willie Nelson." *Theomusicology. A Special Issue of Black Sacred Music: A Journal of Theomusicology* 8, no. 1 (1994): 254-64.
- Shepard, Roger N., and Daniel S. Jordan. "Auditory illusions demonstrating that tones are assimilated to an internalized musical scale." *Science* 226 (1984): 1333-334.
- Shepherd, John. *Music as Social Text*. Cambridge: Polity Press, 1991.
- Sheppard, Anne. *Aesthetics: An introduction to the philosophy of art*. Oxford: Oxford University Press, 1987.
- Siegel, Jane A., and William Siegel. "Categorical perception of tonal intervals: Musicians can't tell *sharp* from *flat*." *Perception & Psychophysics* 21, no. 5 (1977): 399-407.
- Sirota, Victoria A. "An Exploration of Music as Theology." *Theological Education* 31, no. 1 (1994): 165-73.
- Sloboda, John A. *The Musical Mind: The cognitive psychology of music* Oxford Psychology Series. Oxford: Clarendon Press, 1985.
- Söhngen, Oskar. "Music and Theology: A Systematic Approach." *Journal of the American Academy of Religion Thematic Studies* 50, no. 1 (1983): 1-19.
- Sommerville, C. John. "The Religious Music of the Twentieth and Twenty-First Centuries." *Religion* 14 (1984): 245-67.
- Soskice, Janet Martin. *Metaphor and Religious Language*. Oxford: Clarendon Press, 1985.
- Sparshott, Francis. "Aesthetics of Music: Limits and Grounds." In *What Is Music? An Introduction to the Philosophy of Music*, ed. Philip Alperson, 33-98. University Park, Penn.: The Pennsylvania State University Press, 1987.
- Spencer, Jon Michael. *Theological Music: Introduction to Theomusicology*. New York: Greenwood Publishing, 1991.

- \_\_\_\_\_. "Musicology as Theologically Informed Discipline." *Theomusicology. A Special Issue of Black Sacred Music: A Journal of Theomusicology* 8, no. 1 (1994): 36-63.
- \_\_\_\_\_. "William Grant Still: Eclectic Religionist." *Theomusicology. A Special Issue of Black Sacred Music: A Journal of Theomusicology* 8, no. 1 (1994): 135-56.
- \_\_\_\_\_. "Overview of American Popular Music in a Theological Perspective." *Theomusicology. A Special Issue of Black Sacred Music: A Journal of Theomusicology* 8, no. 1 (1994): 205-17.
- Steckel, Clyde J. "How Can Music Have Theological Significance?" *Theomusicology. A Special Issue of Black Sacred Music: A Journal of Theomusicology* 8, no. 1 (1994): 13-35.
- Steiner, George. *In Bluebeard's Castle: Some Notes Towards a Re-definition of Culture*. London: Faber and Faber, 1971.
- \_\_\_\_\_. *Real Presences. Is There Anything In What We Say?* London: Faber and Faber, 1989.
- Storr, Anthony. *Music and the Mind*. New York: Ballantine Books, 1992.
- Stravinsky, Igor. *Poetics of Music: In the Form of Six Lessons*. The Charles Eliot Norton Lectures 1939-1940. Translated by Arthur Knodel and Ingolf Dahl. Cambridge, Mass. : Harvard University Press, 1970.
- Tavener, John. "Towards a Sacred Art." In *The Sense of the Sacramental: Movement and Measure in Art and Music, Place and Time*, ed. David Brown and Ann Loades, 172-8. London: SPCK, 1995.
- Thorp, John. "The harmony of the spheres: *dulcis sonus*." In *Harmonia Mundi: Musica e Filosofia Nell'Antichita*, ed. Robert W. Wallace and Bonnie MacLachlan, 54-68. Rome: Edizioni dell'Anteneo, 1991.
- Tice, Terrence N. "Schleiermacher's Interpretation of Christmas: 'Christmas Eve,' 'The Christian Faith,' and the Christmas Sermons." *The Journal of Religion* 47, no. 2 (1967): 100-26.
- Toivianen, Petri. "Modeling the Target-Note Technique of Bebop-Style Jazz Improvisation: As Artificial Neural Network Approach." *Music Perception* 12, no. 4 (1995): 399-413.
- Torrance, T. F. *Reality and Evangelical Theology. The Realism of Christian Revelation*. Downers Grove, Ill.: InterVarsity Press, 1982.

- Trehub, S. E., D. Bull, and L. Thorpe. "Developmental changes in infants' sensitivity to octave-band noises." *Journal of Experimental Child Psychology* 29 (1980): 283-93.
- \_\_\_\_\_. "Infants' perception of musical patterns." *Perception & Psychophysics* 41, no. 6 (1987): 635-41.
- Vanhoozer, Kevin J. *Is There a Meaning in This Text? The Bible, The Reader, and the Morality of Literary Knowledge*. Grand Rapids: Zondervan, 1998.
- Vries, Dawn De. "Schleiermacher's *Christmas Eve Dialogue*: Bourgeois Ideology or Feminist Theology?" *The Journal of Religion* 69, no. 2 (1989): 169-83.
- Waite, William G. "Augustine of Hippo." In *The New Grove Dictionary of Music and Musicians*, ed. Stanley Sadie, Vol. 1, 695-96. London: Macmillan, 1980.
- Walhout, Donald. "Augustine on the Transcendent in Music." *Philosophy & Theology* 3, Spring (1989): 283-92.
- Warnock, Mary. "Imagination—Aesthetic and Religious." *Theology* 83 (1980): 403-9.
- \_\_\_\_\_. "Imagination and Knowledge." *Theology* 92 (1989): 363-5.
- Watson, Derek, ed. *The Wordsworth Dictionary of Musical Quotations*. Ware, Hertfordshire: Wordsworth Reference, 1994.
- Watson, Francis. "Theology and Music." *Scottish Journal of Theology* 51, no. 4 (1998): 435-63.
- Weiss, Piero, and Richard Taruskin, eds. *Music in the Western World: A History in Documents*. New York: Schirmer, Collier Macmillan, 1984.
- West, M. L. *Ancient Greek Music*. Clarendon Paperbacks ed. Oxford: Clarendon Press, 1994.
- Westermeyer, Paul. "Reflections on Music and Theology." *Theological Education* 31, no. 1 (1994): 183-89.
- Westermeyer, Paul. *Te Deum: The Church and Music*. Minneapolis: Fortress Press, 1998.
- Westfield, H. Lynn, and Harold Dean Trulear. "Theomusicology and Christian Education: Spirituality and the Ethics of Control in the Rap of Hammer." *Theomusicology. A Special Issue of Black Sacred Music: A Journal of Theomusicology* 8, no. 1 (1994): 218-38.

- Wilde, Oscar. *The Picture of Dorian Gray*. Penguin Classics ed. London: Penguin, 1985.
- Wilson-Dickson, Andrew. *A Brief History of Christian Music. From Biblical Times to the Present*. Oxford: Lion, 1997.
- Wolterstorff, Nicholas. *Art in Action. Toward a Christian Aesthetic*. Grand Rapids: William B. Eerdmans, 1980.
- \_\_\_\_\_. "The Work of Making a Work of Music." In *What Is Music? An Introduction to the Philosophy of Music*, ed. Philip Alperson, 101-29. University Park, Penn.: The Pennsylvania State University Press, 1987.
- Wren, Malcolm. "A Piece for our Time: Theological Reflections on Sir Michael Tippett's *The Mask of Time*." *Theology* 88 (1985): 209-15.
- Zelechow, Bernard. "The Enigmatic Odyssey of Arnold Schoenberg: The Quest for God and Musical Perfection." *Journal of Literature & Theology* 6, no. 4 (1992): 356-68.
- Zuckerkandl, Victor. *Sound and Symbol. Music and the External World*. Translated by Willard R. Trask Bollingen Series XLIV. Princeton, N. J.: Princeton University Press, 1956.
- \_\_\_\_\_. *Man the Musician. Sound and Symbol: Volume 2*. Translated by Norbert Guterman Bollingen Series XLIV-2. Princeton, N. J.: Princeton University Press, 1973.