MICHAEL SPITZER

# Metaphor and Musical Thought



The University of Chicago Press, Chicago 60637
The University of Chicago Press, Ltd., London
© 2004 by The University of Chicago
All rights reserved. Published 2004.
Paperback edition 2015
Printed in the United States of America
22 21 20 19 18 17 16 15 2 3 4 5 6

ISBN-13: 978-0-226-76972-1 (cloth)
ISBN-13: 978-0-226-27313-6 (paper)
ISBN-13: 978-0-226-27943-5 (e-book)
10.7208/chicago/9780226279435.001.0001

A publishing subvention from the American Musicological Society is gratefully acknowledged.

Library of Congress Cataloging-in-Publication Data

Spitzer, Michael.
Metaphor and musical thought / Michael Spitzer.
p. cm.
Includes bibliographical references (p. ) and index.
ISBN 0-226-76972-0 (alk. paper)
1. Music—Philosophy and aesthetics. 2. Music—History and criticism. I. Title.
ML3845 .S684 2004
781.1'7—dc21

2003012634

This paper meets the requirements of ANSI/NISO Z39.48-1992 (Permanence of Paper).

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# *Metaphor and Musical Thought*

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*For Karen*

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# *Acknowledgments*

Inspiration for writing a book about musical metaphor came from a conversation I had with Richmond Browne at a UK Music Analysis conference in Lancaster in 1994, continued a couple of days later during a car journey from Durham to Whitby in Yorkshire. Richmond called Durham Cathedral "the best building in the world," and it was in the adjoining music department of Durham University that I have had the privilege of trying out my ideas on generations of unsuspecting students and staff. Thanks, and apologies, to you all! I have particularly benefited from sharing innumerable, and enlightening, conversations with my colleague Max Paddison in the various coffee houses of Durham. I have also sought his advice on some knotty details of seventeenth-century German syntax. Several people found the time to read and comment on my chapters, for which I'm very grateful: Peter Burt, Ian Cross, Robert Hatten, Adam Krims, Raymond Monelle, Carl Erik Kühl, and Eero Tarasti. My thanks to Richard Bruce for his tips on *Märchen* and Novalis, and to Carl Humphries, who read the entire manuscript and labored, probably in vain, to keep me philosophically honest. Long-overdue thanks also to Bill Drabkin, for teaching me how to hear. Thomas Christensen and an anonymous reader made invaluable comments on my first draft. I am most grateful to Barbara Norton for her careful copyediting and many helpful suggestions. The music examples were expertly set by Jürgen Selk of Music Graphics International. Production of this book was facilitated by a generous subvention from the Dragan Plamenac Publication Endowment Fund of the American Musicological Society, which helped defray the cost of the many plates and music examples.

I would like, finally, to express my profound gratitude to Kathleen K. Hansell of the University of Chicago Press for her encouragement and expert guidance at every stage of this project's completion. I have been patiently supported in the writing by two families: the Spitzers and the Irwins, and in particular my mum and dad, John and Angela. This book would not even have been possible without the faith and love of my wife, Karen, to whom it is dedicated.

# METAPHOR AND MUSICAL THOUGHT




Frontispiece engraving from Emanuele Tesauro, *Il cannocchiale aristotelico, o sia Idea delle argvtezze heroiche vulgarmente chiamate imprese. Et di tvtta l'arte simbolica, et lapidaria contenente ogni genere di figure* (1st ed., Turin, 1654). Metaphor, defined by Aristotle as a "an eye for resemblance," is depicted by Tesauro as an optical device—an Aristotelian telescope.

# *Part I*
# *The Metaphorical Present*

## *The Aristotelian Telescope*

To think, talk, or write about music is to engage with it in terms of something else, metaphorically. Music "moves," "speaks," paints an "image," or fights a "battle." It may have a beginning, middle and end, like a story, or have line and color, like a picture. Music can even be a "language," with a lexicon and syntax. Are these metaphors mere figments of our imagination, or do they really bring us closer to music in itself?

The seventeenth-century literary theorist Emanuele Tesauro likened metaphor to a telescope, in particular an Aristotelian telescope, after the philosopher who coined the most influential definition of the term.[1] The frontispiece of *Il cannocchiale aristotelico* (see facing page) shows a telescope pointed at the sun. Tesauro's engraving is somewhat surprising, since he would surely have known that we cannot stare at the sun, on pain of blindness. Yet the figure peering through the telescope steadied for her by Aristotle is not a real person but an allegorical image of Poesis, or metaphor. As stated in the Latin tag at the bottom, she is examining the spots on the sun: "she reproves the blemishes on a perfect body." Since we cannot look at the sun for ourselves, Poesis looks for us. Piling layer upon layer, Tesauro's picture is a metaphor for the epistemological workings of metaphor. His conceit assumes frankness about the mediated character of all representation; the metaphor is basically a model or a picture of something to which we can never have direct access. The metaphorical telescope seems to me a rather good analogy for the uses of music theory.

Calling discourse about music "metaphorical" inevitably suggests that there is a more literal mode of engagement, one generally associated with technical music theory. And yet an argument that music theory brings us closer to music would cut little ice with the overwhelming majority of listeners, who actually find arcane categories such as "tonics" and "dominants," "voice leading," "retransition," "hemiola," and so on, rather alienating, and for whom such metalanguage interferes with the cherished immediacy of the musical experience. Disbelief, already suspended, is stretched to incredulity when we climb from the foothills of basic terminology to the mountain peaks of analytical systems such as Schenkerian analysis, the most important music-theoretical approach of the twentieth century. Heinrich Schenker is to modern musical thought roughly what Noam Chomsky is to linguistics and Claude Lévi-Strauss and Jean Piaget were to structuralism. Schenkerian reduction is essentially a transformational theory of musical structure worked out in terms of contrapuntal level. While most people have no problem with the idea of generative models in social science, they may find their application to aesthetics, especially to an art form that elicits such a high degree of personal emotional investment as music does, rather offensive. Yet music theory only makes it worse when it claims for itself the status of a science, for how then can it justify its interest in history? Work on historical theorists such as Zarlino, Jean-Philippe Rameau, Heinrich Koch, and Hugo Riemann is currently resurgent, in the teeth of the established view, based on the work of Karl Popper, of scientific progress, where models continuously supersede one another. Why resort to Galileo's instrument when we have the Hubble telescope?

We do not look through the Aristotelian telescope for ourselves; we gaze at an image of Poesis. Music theory is admittedly poor at describing how music is composed or heard, and even more

suspect when it attempts to prescribe these practices. But it has a third dimension, in addition to the descriptive and prescriptive: the imaginary. We can look at music theory as a picture of an imaginative act that is, in some ways, just as creative as a work of composition. Theorists build models by drawing on domains of human experience—a knowledge of language and culture, but also the experience of what it is like to have a body that is contained, that can move through a landscape, that can grasp and manipulate objects, and so on. In short, music theory is human, just as to create and receive music is human. Theorists have one advantage over composers and listeners, however: they are in the business of blending tones, concepts, and words, and do so more articulately than most musicians, and more expertly than nearly all philosophers. In this respect, they really do bring us closer to the "meaning" of music.

I call this activity of projecting from the domain of human experience onto the domain of concepts "metaphorical mapping," after the cognitive scientists George Lakoff and Mark Johnson. Metaphor dropped out of fashionable literary criticism in the 1970s, at the precise moment when it was discovered by sciences such as cognitive linguistics, developmental psychology, creativity theory, education theory, and ethnology. One could even pinpoint this date to 1979, the year which saw both the epoch-making collection of cognitivist writings edited by Andrew Ortony, and Paul De Man's *Allegories of Reading*, a book that tarred metaphor with the brush of romantic ideology. Nevertheless, in the 1980s metaphor was returned to the humanities with interest—with what one might call an enhanced "cognitive capital." That is, from having been mostly a matter of rhetoric, metaphor became recognized as an agent of thought, of conceptualization. Cognitive theories of metaphor entered musicology about ten years ago and quickly came to be appreciated for their rich interdisciplinary potential. Because metaphorical mapping is common to all walks of life—including composing, listening, and theorizing—it suggests the possibility of building bridges between many critical approaches that have drifted increasingly further apart: between musicology, music theory, and music psychology; between the history of theory and present-day analytical methods; and between hermeneutic and technical engagements with musical structure. My book is written in the spirit of rapprochement and under the umbrella of a particularly broad concept of metaphor. I am aware that in my use of the word "metaphor" I am conflating a range of terms that have traditionally been given individual names: simile, analogy, model, trope, figure, metonym, image, allegory, myth, symbol, schema, and probably many more. Metaphor is actually as difficult to define as imagination, perhaps because it is also an expression of creativity. Before I present the theory and outline of my book, it would be helpful to quickly dispose of metaphor's traditional definition.

# 1. WHAT IS METAPHOR?

Metaphor has always been a composite or portmanteau category. Wellek and Warren's *Theory of Literature*, a key text of literary theory in the 1950s, lists four defining features:

> The four basic elements in our whole conception of metaphor would appear to be that of analogy; that of double vision; that of sensuous image, revelatory of the imperceptible; that of animistic projection. (1956, 187)

Gerhard Kurz's *Metapher, Allegorie, Symbol* (1993) presents an admirably concise survey of the many additional meanings metaphor has accrued since its cognitive turn in the 1970s. At the same time, Kurz's handbook inadvertently demonstrates the hopelessness of any attempt to demarcate metaphor's boundaries. After conceding that "one can give no necessary and general rules for the identification of metaphors" (14), Kurz nonetheless seeks to differentiate metaphor from allegory and symbol—the other two "central concepts of literary studies" (5). And yet the definition of metaphor is so all-embracing that there remains little distinctive for allegory and symbol to do. Kurz's survey begins with theories of metaphorical substitution, by which "the 'literal' word is replaced (substituted) by a foreign word" (7). Comparison theories are also types of metaphorical substitution, on the basis of similarity (simile). Kurz moves on to theories of interaction, according to which a word's metaphorical extension is defined by a systemic context, such as discourse. Interaction

theories turn metaphor on its head, so it becomes not the exception but the norm: an expression of language's inherently creative and imaginative character. From the systemic and the creative, it is a small step to the cognitive. Kurz ends with "metaphoric fields," as when science weaves together metaphors into conceptual models such as "wave," "force," "resistance," and "current" (21). Metaphor as model catches up with the cognitive projection theory of Lakoff and Johnson.

The trajectory of Kurz's survey is thus from the lexical to the conceptual, from the individual word to the systemic field, from the static grammatical rule to the dynamic and imaginative production of meaning—in brief, from the linguistic to the human. All the same, it is not clear how these many attributes of metaphor hang together, or whether a coherent single definition is at all possible. In particular, such a definition would need to coordinate the extreme poles of the series, the aesthetic and the conceptual: metaphor as rhetorical trope, and metaphor as cognitive model. My theory attempts to do exactly that, in the context, moreover, of the additional dimension of applying the theory to music. *Applying metaphor theory to music is itself a metaphorical act*. Furthermore, a theory of musical metaphor must reckon with the fact that theories of metaphor are historical. Accordingly, my book also takes account of metaphorical thought through the ages.

## 2. METAPHORICAL THOUGHT

I define musical metaphor as the relationship between the physical, proximate, and familiar, and the abstract, distal, and unfamiliar. This relationship flows in opposite directions within the two realms of musical reception and production, and involves opposite concepts of "the body." With reception, theorists and listeners conceptualize musical structure by metaphorically mapping from physical bodily experience. With production, the illusion of a musical body emerges through compositional poetics—the rhetorical manipulation of grammatical norms. Because musical metaphor flows from both conceptualization and poetics (the rubrics, respectively, of chapters 2 and 3), I call my theory "bidirectional."

I have structured my book in two parts, titled "The Metaphorical Present" and "The Metaphorical Tradition." This reflects my bidirectional view of metaphor's history, in which modern, cognitivist, Anglo-American orientations supervene upon and cross-pollinate an older, hermeneutic, European tradition. (I trope this vegetal imagery rather pointedly in the introduction to part II, "Sunflowers"). Part I comprises a preliminary overview (chapter 1) followed by a conceptual subject (chapter 2) and a poetic countersubject (chapter 3). To avoid overwhelming the reader, I have sought to feed in the theoretical exposition as gently as possible. But you may wish to consult the various diagrams of chapters 2 and 3 as you go along (also the "map" in the "Sunflowers" section). Part II of my book (chapters 4–6) elaborates my model with three historical variations in the baroque, classical, and romantic styles. My historical work draws on primary texts that are often overlooked. All translations from the German and French are mine, unless otherwise indicated.

A few words about the scope of my book. Part I is predominantly Anglo-American (albeit with increasingly French accents). The most interesting recent developments in metaphor theory stem from the work of linguists, philosophers, and cognitive scientists such as Lakoff, Johnson, Ronald Langacker, Andrew Ortony, and Eve Sweetser. Part II focuses on Austro-Germany. Why? To be perfectly frank, it is simply a fact that composers of the German-speaking lands—Schütz, Bach, Haydn, Mozart, Beethoven, Schubert, Brahms, and Wagner—happen to have been central to the formation of the canon and to our conceptualization of musical thought. I am not interested in arguing for the superiority of one national or historical repertory over another, only in using the fact of canonicity as a methodological control. What I mean by "center" (and, it follows, by "radial structures") will emerge presently. Enough to say, for now, that it is a technical rather than ideological criterion, and one that makes no judgment whatsoever on the aesthetic worth of a Monteverdi or a Rameau (or, indeed, the Kaluli of Papua New Guinea).

So much for the music. On a theoretical level, my purview is defensible also in that metaphor has particularly deep roots in the German intellectual tradition. The cognitivism of Lakoff and Johnson, as well as the hermeneutic theory of Paul Ricoeur, emerges from the German phenomenological horizon of Edmund Husserl and Martin Heidegger. Historically, this German heritage is even stronger. Italy and France had no rhetorical school to match seventeenth-century German *Figurenlehre*. In the eighteenth, nineteenth, and twentieth centuries, theories of metaphor and symbol became most powerful in German critical thought from Immanuel Kant and Friedrich Schelling right through to Walter Benjamin and Theodor Adorno. Furthermore, there are good holistic reasons for studying German music in the context of German intellectual history, and vice versa. This integralist approach pays dividends in illuminating problems that are arguably occluded by Italian and French perspectives. For example, the prevailingly French view of the Enlightenment (Descartes to Rousseau) distorts our image of Bach and promotes the misleading impression that the Austro-German Classical style was melodic, whereas it was actually rhythmic. My German bias is thus a useful corrective. It also provides disciplinary focus, since a book covering all the traditions would of course be unwieldy. Actually, I do draw on a multitude of non-German theorists: Zarlino, Dolce, Artusi, L'Ottuso, Mersenne, Lamy, Dubos, Batteux, Rameau, Rousseau, Momigny, and many others. It is the perspective of my book, not the content, that is "German." I could perfectly well imagine books written from a French or Italian standpoint (and that of every other national, political, and gendered grouping). But this is the first history of musical metaphor written from *any* perspective, and I would hope that its ideas can, in any case, be profitably exported to a variety of contexts.

Lest talk of "centers" and "canons" enmire me in the debates of exclusivity engendered by books such as Harold Bloom's *The Western Canon* (1995), with its tirade against the so-called School of Resentment—"the academic-journalistic network . . . who wish to overthrow the Canon in order to advance their supposed (and nonexistent) programs of social change" (4)—I hasten to add that it is not my plan to rail, Canute-like, against the rising tide of postmodern theory. Nothing in my book actually conflicts with the accepted fact that our subjectivities are mediated by the objective contexts of gender, race, desire, capital, and various social and political forces: quite the reverse. That these contexts do not figure in the discussion simply indicates my intention, in the Chomskyan parlance, to nudge pragmatics back into syntax; to find a new place for formalizing musical meaning; to rethink the processes of categorization underpinning these discourses; and to speak of metaphor properly and rigorously, rather than just "metaphorically." I do in fact address New Musicology more directly in my forthcoming book on late Beethoven and Adorno. Adorno's line that withstanding postmodernity can be a mark of enlightened resistance, rather than conservative reaction, serves me equally well in this book on music and metaphorical thought.

"History," as some British wag put it, "is the new rock and roll." One of its most compelling practitioners is Simon Schama, whose extraordinary *Landscape and Memory* (1995) shows us how human history is interwoven with the natural elements of wood, water, and rock—trees, rivers, and mountains. History is all around us, if we only care to look and listen. Music's natural history is not wood, water, and rock, but harmony, rhythm, and melody. This is their biography.

# *1*

# *New Orientations in Metaphor*

## 1. “HEARING AS” AND DUAL-ASPECT PERCEPTION

Consider these two notes (ex. 1.1a):

Example 1.1a

a.



Imagine that the F is the main note, and that the E decorates it. Perhaps the E will return to the F; perhaps it will continue its descent to the note below. Even though the notation suggests that F hands over to E, the “F-ness” of F can be heard to persist “behind” the E, as can be seen when we sketch out a possible harmony (ex. 1.1b):

Example 1.1b

b.



But this realization is not necessary; the primacy of F may easily be inferred from just a couple of notes—as might, by contrast, the primacy of E, if the listener decides to hear the F as an appoggiatura within a C harmony (ex. 1.1c):

Example 1.1c

c.



Whichever interpretation is preferred—and, with nothing else to go on, a listener can flip from one to the other at will—to hear musical tones related in this way is to engage an extremely common listening type. The chief entailment of this listening type is that the note which is judged to be tonally more stable is heard as being “behind” or “underneath” the less stable note, by analogy to objects in physical space. The note is ascribed a physical extension in vertical space. In the phenomenal space

of musical listening, we experience this effect most typically in contrapuntal textures, when a "structural" note is elaborated by "surface" decoration.

This time imagine that the F and the E constitute two halves of a symmetrical musical shape. The F is "balanced" by the E, like the facing sides of a spatial form. And, just as in physical space, the two notes are united as parts to a whole. To interpret this simple musical utterance in this way is to eliminate certain characteristics that had featured in the previous listening type, and to observe new ones. First and foremost is the element of time. F is no longer behind or beneath the E, but temporally contiguous with it: the notes follow each other. Tonal stability fades from our consideration, and metrical grouping comes to the fore. The notes can be heard by analogy to the pairing of a strong beat with a weak beat (one might interpret the F as the headnote, or, alternatively, as an upbeat to the E). If counterpoint epitomized the previous listening type, the present type is associated most strongly with the concept of rhythm.

There is a further way to understand our notes: F leads on to E. The pitches are united within a goal-orientated continuum. As before, changing the interpretation throws up new aspects of the figure. The sense of structure, be it vertical or linear, disappears, and the aspect of temporal, linear unfolding becomes much stronger. Moreover, the tones' identity as discrete units becomes subsumed within a sense of a continuous dynamic flow. The tones are not situated or formed, as earlier: now, they *move* from one coordinate of "musical space" to another. Whereas the previous listening types had suggested, respectively, the layering of a contrapuntal texture and the grouping of a metrical pattern, the present hearing is melodic.

We can switch between these three interpretations with little effort. First the E is an ornament, then a formal unit, then a goal. We can be prompted, or decide ourselves, how to hear the little phrase. We bring to bear, in turn, a different interpretational frame, since musical listening, even at this minimal level, is never an act of unmediated perception. Rather, it is perception informed with knowledge, and hence a skill. That perception might be based on the ability to execute a technique was the burden of Wittgenstein's famous rabbit/duck illusion. The viewer can choose to see the pair of protuberances jutting from a circle either as the ears of a rabbit or as the beak of a duck. The illusion exemplifies Wittgenstein's distinction between "seeing" and "seeing as." "Seeing an aspect and imagining are subject to the will. There is such an order as 'Imagine *this*,' and also: 'Now see the figure like *this*'; but not: 'Now see this leaf green'" (1960, 213). Wittgenstein means that seeing (as in seeing that a leaf is green) is a perceptual act, which is not susceptible to voluntary control. Seeing *as*, however, as in imagining that the drawing represents a duck rather than a rabbit, is a technical procedure that can be prompted. One can decide, or be instructed, to see the drawing in a particular way.

Seeing (or hearing) something as something else suggests the device of metaphorical comparison, a link made in Marcus Hester's seminal book *The Meaning of Poetic Metaphor* (1967). Hester adapted Wittgenstein's concepts of aspect perception and "seeing as" to explain the cognition of poetic metaphor. In one example, Hester considers a well-known metaphor from *Troilus and Cressida*, by which Shakespeare compares time to a beggar: "time hath, my lord, a wallet at his back wherein he puts alms for oblivion" (164). In seeing time as a beggar, we must suspend its normal reference to physical reality in order to understand it in an imaginary poetic context. We consequently hold together two aspects of time, its physical and imaginary senses. The "seeing as" effect in Shakespeare's metaphor engages our cognitive ability to switch between two aspects of time: real, physical time, and the image of time as a beggar.

Hester clarifies a popular confusion about "seeing as" effects. At first reading, it seems as if Wittgenstein is talking about the relationship between the two aspects themselves; seeing a duck as a rabbit. In fact, what he really means is the relationship between the material trace, the drawing, and the image in the imagination of the viewer (be it a duck or a rabbit). Roger Scruton grasps this when he applies Wittgenstein and Hester's ideas to a metaphorical theory of music. For Scruton, metaphorical "hearing as" denotes the relationship between the sonic material of music and the

"intentional object of musical perception"—"hearing sounds as music" (1999, 78). Scruton assimilates "hearing as" to what he terms the "double intentionality" of metaphor (87). In listening to music,

> 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, organised, as is the phenomenal space of our own experience, in terms of "up" and "down," "rising" and "falling," "high" and "low." (96)

It is often said that music behaves like the body in motion, and that listeners project their experience of bodily movement onto their audition of musical processes, which are heard as "rising" and "falling," "traversing physical space," "leaping," and so on. Scruton's insight that music's embodied qualities constitute its metaphorical dimension is excellent. But, as I shall later show at greater depth (chapter 2), it is peculiarly constrained. First, Scruton makes no allowance for choice. By his lights, a listener has no choice but to ascribe effects of space, motion, and purposive activity to tones, because not to experience music in this way is not to experience music at all. Second, it is not clear how the "phenomenal space" of music, which Scruton celebrates, informs the way we conceptualize musical structure. Could it be said that to hear the same phrase as, alternatively, layered, balanced, and dynamic, or contrapuntal, rhythmic, and melodic, might also entail an act of the metaphorical imagination? As we saw with our two little notes, we can choose how to interpret the structure of even the most impoverished of musical materials. This is because the "meaning" of the music, to a large extent, inheres not within the notes themselves (the information, in this particular case, is too scant for that) but within a concept we apply to them. "Hearing as," like "seeing as," mixes knowledge with perception. What might a musical equivalent of a concept such as a rabbit or a duck look like?

To be at all knowledgeable about Western music is to carry in the mind a lexicon of basic categories of musical structure, such as harmony, rhythm, and melody. Moreover, it is to use them in a simple, workaday form cognitive semantics calls "prototypes" or "basic-level categories," corresponding to gross patterns of experience. Furthermore, these categories supervene on structures we draw from the interaction of our bodies with the world: our firsthand knowledge that our bodies are contained, have a front and a back, comprise parts and a whole, can balance in a gravitational field, and can walk along a path. Cognitive semantics calls such structures "image schemata," and it argues that we project these schemata onto concepts, which are in turn projected onto other domains of human activity, such as language and, in this case, music. "Metaphorical mapping" defines the process by which we get from bodily experience to the structure of thought and language. The novelty of this approach is that it holds that experience is structured preconceptually, and that it is kinesthetic—in short, that we "think" with our bodies. Two forms of preconceptual structure exist, basic-level structures and image-schematic structures. According to George Lakoff, the most influential writer on cognitive semantics, these constitute the "dual foundations" of "meaningfulness" (1987, 269). To interpret a musical phrase as "contrapuntal" is to invoke a basic-level category of musical structure; to hear it as "layered" is to project from a kinesthetic image schema. There is a third way of constructing meaningfulness, one associated with Lakoff's collaborator, Mark Johnson: to map from one field of experience to another. Conceptual systems are regularly structured by people in their everyday lives by metaphorically projecting the attributes of one domain onto other, typically less familiar, domains. The choice of source domain will influence the comprehension of the target domain. For example, consider the two metaphors typically projected onto the idea of electricity: an electric current is often understood either as water flowing through a pipe, or "as the movement of a crowd of individuals through passageways and narrow gates" (1987, 110). Since the water-flow and the moving-crowd metaphors comprise distinct fields of structural relations, their use enables people to draw different inferences about the nature of electricity. The metaphor of water flow suggests the dynamics of a hydraulic system, whereby pipe maps onto wire, pump onto battery, water pressure onto voltage, and rate of flow onto current. With the metaphor of the moving crowd, "current corresponds to the number of entities moving past a point per unit of time, voltage

corresponds to the force with which the entities push their way along, resistors correspond to narrow gates which slow the movement of the entities," and so on (110). Our understanding of electricity changes, therefore, depending on which metaphorical model we deploy, and this is also true of much more homely concepts, such as "life." The common metaphors "life is a journey" and "life is a tree" set up very different patterns of inference (see Lakoff and Turner 1989, 3–6). In one, the course from birth to death is imagined as a progression of a traveler from point of departure to destination along a pathway, with possible obstacles in between. In the other, life germinates, grows, blossoms, decays, and dies; rather than overcoming obstacles in a linear trajectory, vegetal life traverses the cycle of the seasons, with the promise of renewal. Our understanding of music is permeated with cross-domain mappings, as witness concepts such as "tone painting," "tone poem," and "character piece." Let us return to our little phrase.

## *The Dual Aspect of Musical Material*

Now imagine the two notes as an image. E ornaments F not just in a structural sense, but like a decoration in a painting. To hear a phrase as a visual image is to objectify it into a quasi-plastic material. An ornamental figure, as the word suggests, bestows figurality upon a concept—gives it a physical presence, a body. Imagining music as painting, as *tone* painting, is to attend more to the qualities of its material than to the logic of its structure. What the musical "picture" happens to represent (if anything) is not the issue. The point is that the metaphor of music as painting predicates a mode of listening, a listening type.

Next imagine the notes as a vocal utterance. E completes F, not just as a weak beat to a strong beat, but like grammatical predicate to a subject. With its tonally open phrase ending, the utterance unfolds the intonational curve of a question. The formal arrangement of the notes suggests a linguistic syntax, and their expressive intonation, a semantics. Who exactly is speaking, and what they are saying, is moot. The metaphor of "music as language," like that of "music as painting," is simply a way of hearing.

Finally, imagine the phrase as a living being. Like a person moving through space, it traverses two coordinates of the pitch spectrum, F and E. Alternatively, the phrase is compounded of two living cells, F and E. Or perhaps a seed, F, grows into a two-note cell. The phrase might even be heard to objectify a life force disembodied from any agency—a force of will or desire, perhaps. Regardless of the problem of individuation, the metaphor of "music as life" is a compelling one. It can even determine how one may relate to a musical work—as if it were an actual person. To anthropomorphize a tone is the first step to thinking of a concerto as an emperor, or an orchestral suite as a carnival of the animals.

To comprehend the phrase as an image, an utterance, or an organism is to allow one's hearing of musical structure to be shaped by a knowledge of different spheres of human activity: representation, language, life. This can happen because a concept such as "language" is not a monolithic entity, but a system of relationships. Since it is highly structured itself, it will impose this structure upon the domain onto which it is projected. Thus when we hear music as a language, we organize the system of notes, rhythms, and chords according to the system of morphology, syntax, and semantics. What is interesting about mappings in music is that they are not only relational but also ontological: they appear to engage the very being of a phrase, such that the notes seem to be "alive," to "speak," or to "move." The illusion that music can embody human qualities is irreducible from our musical experience; it is what Scruton calls music's "indispensable metaphor" (76). Scruton believes that the fact that this metaphor is indispensable means that it cannot be the result of conscious choice, of mapping. I argue otherwise. To be sure, we may have no choice but to hear music as human. But we certainly have plenty of latitude in *how* to hear its human aspects. Representation, language, and embodiment comprise three distinct and richly organized domains of human experience. It is astonishing that a listener can decide, at will, to hear the same phrase as a living tableau, a vocal utterance, or a person. One of my aims is to explore the implications of this phenomenon, and I

address a number of questions. Is there anything special or closed about this set of three metaphors, or could the set be indefinitely extended to include, for example, hearing music as architecture, as a world, or as a novel? Are these metaphors mutually exclusive, or do they interpenetrate? (Surely an utterance moves, just like a person?) How are these three modes of hearing constrained by historical and stylistic factors? So far we have looked at a two-note phrase virtually empty of intrinsic meaning. But what happens when we attend to more sophisticated material, shaped by compositional strategies, stylistic limitations, and historical and cultural contexts? More specifically, how do these three cross-domain metaphors relate to the three technical, or "intramusical," metaphors with which we began—music as harmony, as rhythm, and as melody? I will argue, in fact, that these two sets of metaphors line up with each other in stable couples, so that there is a natural fit, or isomorphism, between harmony and painting, rhythm and language, and melody and life. And this, as I will show, will open up a fresh perspective on the age-old debate on the relationship between the musical and the so-called extramusical. Let me begin by stating more forcefully the issues implicit in the latter two questions.

The cognitive theory of metaphor, as a branch of the broad discipline of cognitive science, is concerned with the formation of the categories and concepts of perception and thought. With its interest in the mechanisms and processes of the mind, it would seem to be orientated toward natural absolutes, toward universals. How do we square this with the orientation of modern critical approaches to meaning in the arts, which are overwhelmingly directed toward the social and historical groundedness, particularity, and contingency of human thought? The gap between the natural and social sciences (sometimes called *Naturwissenschaft* and *Geisteswissenschaft*) is often claimed to be unbridgeable; the latter have traditionally been suspicious of what the philosopher Richard Rorty has called "the 'naturalization' of epistemology by psychology" (1980, 165). In fact, the attempt to translate the critical examination of reason (typically after Kant) into terms of empirical psychology forms part of a venerable tradition called "psychologism." Music theory, which has many fingers in the acoustic and mathematical sciences, has long had a propensity to naturalize its categories and is regularly cautioned for its psychologism by critics on both sides of the fence. On the side of musicology, Carl Dahlhaus has argued that the search for psychologizing grounds usually serves some ideological purpose, as when the primacy of a particular theoretical system or musical style is being defended (1984, 93). On the other side, the music psychologist Eric Clarke has criticized "a tendency to confuse *cultural norms* (such as the norms of formal design) which are established by convention, with *perceptual norms* which are the consequence of the characteristics and limitation of perceptual systems" (1989, 11). Both these critiques are, nevertheless, predicated on a narrow definition of music psychology based on the perception of the sonic materials of music, such as the recognition and memory of melodic "probe tones" or rhythmic patterns. But cognition, in contrast to perception, involves thought, and so cuts across rigid demarcations of nature and culture.

The second question—which is very much a complement to the first—pertains to the relationship between musical material and its "meaning." The most sophisticated attempts to formalize this relationship have modeled themselves on linguistics and semiotics, drawing chiefly on the ideas of Ferdinand de Saussure (1916; 1966) and Charles Sanders Peirce (1931). Saussure's argument that the correlation between signifier and signified is essentially arbitrary has been taken up by the music-semiotic mainstream. Since the musical "sign vehicle" (the "neutral level" of the score) is held to share no properties with either expressive topics or cultural units, a semiotic analysis amounts to little more than a survey of the segmentation and distribution of distinctive features—a kind of glorified motive-spotting. Peirce's theories have borne richer fruit, particularly in the distinguished writings of Robert Hatten. The emphasis of Peirce's work is on the interpretational context (or "interpretant"), which mediates the signifying process, and on the typology of signs. Especially important is Peirce's insight that the link between signs and their referents is not uniformly arbitrary but actually graded, and that, at one extreme, it can bear toward a condition of iconism, whereby the signifier can look like, or have a similar structure to, the signified. An example of iconism in

language is onomatopoeia, where words sound like what they mean (as in the word "bleat"). Similarly, Hatten cites Ernst Gombrich's demonstration that most people, given a choice between the words "ping" and "pong" as names for an elephant and a cat, are liable to choose "ping" for the cat and "pong" for the elephant (1994, 167). Hatten calls this effect "structural iconism," because the correlation is built on an analogy between two oppositional structures. The correlation is not strictly arbitrary, since it is "constrained by the culturally ingrained tendency to equate high (as in high vowel) with small, and low with large" (167). Iconic correlations, according to Hatten, are "motivated," and motivation operates as a kind of gravitational pull, stopping the conventional aspects of (musical) language from drifting too far away from their moorings in culture and biology. In Hatten's music semiotics, motivation is present in the correlations between the levels of musical interpretation. These are motivated, in the main, by a system of "marked" asymmetrical oppositions. Hatten's markedness denotes "the valuation given to difference" (34). The two terms of any opposition may have unequal value, with the marked term being used less frequently and having a narrower range of reference. This term might thus be considered as a feature against a semantic, rather than a perceptual, ground. Hence, in the opposition between major and minor, minor is marked because it has a narrower range of meaning: it consistently conveys the tragic, whereas major encompasses "more widely ranging modes of expression such as the heroic, the pastoral, and the genuinely comic, or *buffa*" (36). Hatten shows how asymmetrical oppositions at the level of syntax and form (e.g., between stable and unstable structures) can be correlated with expressive, dramatic, and narratological oppositions.

It is important to emphasize that Hatten's brand of structural semantics, for all its sophistication and musicality, still keeps faith with the basic tenets of linguistic theory: that meaning is oppositional, and that signs are arbitrary. Motivation, for Hatten, mitigates rather than abolishes arbitrariness, and he remains committed to the belief that sign use is decreed by artificial convention —that signs are symbols, even if they originate as icons or indexes.[1] Both tenets, oppositionality and arbitrariness, diminish in importance from the standpoint of metaphor theory. In the first case, metaphorical systems are structured in richer and more varied ways than simple oppositions. In the second, since the categories of language are grounded in preconceptual bodily meaning, metaphor theory does not recognize a split between signs and their referents.

The cognitive theory of metaphor, then, questions the conventionally posited gap between nature and culture, and between the signifier and the signified. Its central beliefs are that (cultural) knowledge is (biologically) embodied, and that knowledge shapes perception. It must be said, however, that a healthy tradition upholds the contrary claims, namely, that the mind processes information like a computer (and is hence independent of its biological medium), and that knowledge and perception are encapsulated in separate mental modules. This position, which is associated with philosophers such as Jerry Fodor (see 1983), is often called "functionalist," and it is a descendent of a broad tradition known as objectivism. Lakoff and Johnson's theory of metaphor measures itself against what they term the objectivist theory of truth. Many of the problems that beset current disputes about the perception and signification of musical material are revealed to be residues of an outmoded paradigm of knowledge. So what is objectivism?

Objectivism describes the traditional view that there exists an objective reality whose ultimate structure can be reflected in language, science, and other forms of human discourse. The classical theory of semantics is objectivist, since it sees meaning as emerging from the manipulation of empty signs (like processing bits of computer code). So are traditional theories of reason that identify "truth" with a formal logic independent of human understanding.[2] Against this view, the modern cognitivist position holds, in Andrew Ortony's words, "that the objective world is not directly accessible but is constructed on the basis of the constraining influences of human knowledge and language" (1994, 2). From this it follows that objectivism's rigid separation between scientific language and other kinds of discourse is no longer tenable—hence cognitive science's remarkable requisition of topics previously the preserve of literary theory, such as figural expression and

narrativity. The very title of Andrew Ortony's seminal *Metaphor and Thought*—a collection of twenty-seven essays by the pioneers of this new discipline—serves notice that "metaphor plays a central role in the way in which we think and talk about the world" (7). In the past, metaphor had occupied a modest position as a rhetorical trope, with no bearing on the scientific or literal apprehension of reality. Lakoff, the most influential of Ortony's contributors, expresses metaphor's new status succinctly: "in short, the locus of metaphor is not in language at all, but in the way we conceptualize one mental domain in terms of another" (203). A metaphor, therefore, is a kind of model.

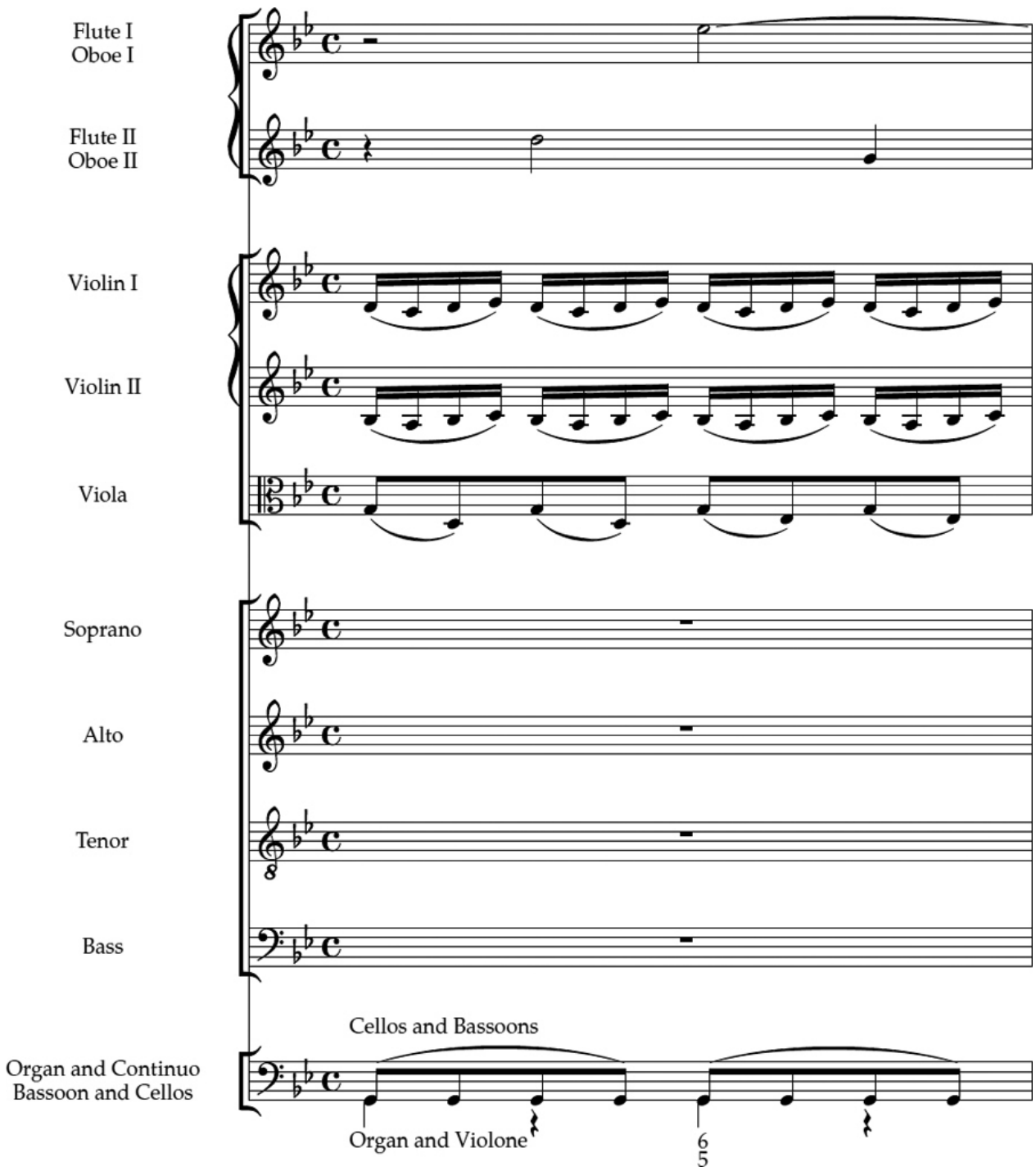
Thinking of metaphor as a model helps to counter two varieties of musical objectivism, implicit in two common attitudes to musical structure: that it cannot be heard, and that it is abstract. In the first respect, it is often doubted that the type of formal sophistication discovered in music by expert analysts can actually be perceived by the lay listener. The argument may follow, therefore, that musical structure (e.g., the long-range tonal balance of a sonata-form recapitulation) has only a limited aural significance. There is an opposite argument, however, that one can *learn* how to hear—that a listener's perceptual faculties are plastic, and permeable to cultural and historical knowledge. The domain of such learning is music pedagogy, or compositional training. Much of my book looks at the architecture of teaching regimes in the history of music theory, and I show that the pedagogical pathway from simple to complex, or concrete to abstract, unfolds a pathway from literal to metaphorical musical knowledge. Musical metaphor thus entails a course of pedagogical mapping.

In the second respect, musical objectivism denies that music has any "meaning" outside the play of tones that constitute what Hanslick characterized as "forms moved in sounding" (1986). Recent attempts to correlate musical signs with stylistic topics, cultural units, or hermeneutic tropes does not, in fact, alter this claim: the pattern of sound, abstract in itself, still receives its signification solely by virtue of association with something outside. A symptom of this milder brand of objectivism is a comparative indifference to the human values that inform analytical methods themselves, or, to put it in a different way, a forgetfulness that the categories we apply to music—harmony, melody, rhythm, form, tonality—are made by people; they are not universal absolutes. Therefore, signification may be discovered within musical structure, in the processes through which we conceptualize it, rather than just bolted on from without. In other words, the way we conceptualize music is not, in principle, different from the way we conceptualize the world. To illustrate, I examine systems of music-theoretical belief in several historical periods and explore how these overlap with systems of cultural values. It is time now to make the leap from notes to music.

## 2. THE BASIC LEVEL

Regard the opening tableau from Bach's *St. John Passion* (ex. 1.2). The pulsing bass ostinato and the swirling figures in the violins capture the forward progress of the Calvary procession. The biting, interlocking suspensions of the winds—each one a crux—well express the agony of crucifixion. Attend to these suspensions more closely and you will see that Bach's dissonance treatment infringes certain principles of contrapuntal technique. The D, suspended against the E♭, should properly resolve down by step to a C. But instead it falls a fifth to a G, which then leaps up to the C in the next measure. This C sounds a perfect fourth against the tonic pedal, and Bach attenuates the dissonance to a measure and a half. Above the C, the E♭ avoids a stepwise resolution, dropping down to C and then a diminished fifth to an F♯. Bach's counterpoint is broken, and the breaches in the texture compound the prevailing image of pain. But look closer still and you will notice the care with which Bach supports each apparent solecism with an underlying voice leading. Although the winds' D drops to a G, it is still carried (an octave below) in the violins. The E♭ is sustained throughout measure 2 in the violas and violins, connecting with their D in measure 3. There is even an explanation for the F♯ in measure 2. It represents the resolution of the G of measure 1, after its suspension against the violins' A in the following measure.

Example 1.2. Bach, *St. John Passion*, opening






What we are doing is interpreting Bach's broken texture against a regular contrapuntal model implicit in his harmony. We are inferring the existence of voices that are not actually there, a procedure dependent on our ability to abstract pitch from voicing and register. For example, the implied wind D we infer above the G of measure 1, in order to connect with the subsequent C, is borrowed from a different instrument (violins) and a lower octave. The voice leading results from an act of imagination. To link the G with the F♯ of measure 2 demands even greater imagination, for we are required to identify a melodic pitch in the wind with a bass note G in the continuo (notwithstanding the further problem that the bass is a pedal, and thus participates only indirectly with the harmony).

It would not do to exaggerate the novelty of Bach's practice here. To most intents and purposes, it reflects the increasingly harmonic perspective on counterpoint of late baroque style in general. But nor should we take for granted the imaginative leap we make each time we interpret voice leading as counterpoint. Counterpoint and voice leading represent two distinct orders of musical logic. Counterpoint corresponds to an actual compositional practice, albeit an old-fashioned one. Its

principles were institutionalized into a doctrine by Renaissance theorists such as Zarlino and handed down from teacher to student throughout subsequent centuries. Voice leading, by contrast, is an abstraction, an interpretational model. It denotes a way of rationalizing the apparently free surface of the music by uncovering an underlying contrapuntal order. In short, voice leading is imaginary, metaphorical counterpoint. This understanding helps us unpick a popular misconception about the relationship between order and complexity in contrapuntal textures. It is often assumed that one gets from surface figuration to a contrapuntal skeleton via a process of reduction, or, vice versa, a generative process of elaboration. Yet a moment's reflection shows us that this cannot be the case. For how can we turn a concrete compositional texture (counterpoint) into an abstract imaginary idiom simply by multiplying the number of notes? Voice leading is not more-complex counterpoint; the two phenomena are noncommensurable—they occupy entirely different domains. Rather, in hearing voice leading as counterpoint, we are mapping from a concrete domain (the concept of counterpoint) onto an abstract domain—a mysterious realm that theorists sometimes call "tonal space." Because such mapping actually operates within a single domain, that of the musical structure, rather than between music and something else, cognitive semantics terms it "metonymic mapping": mapping from part to whole. Metonymic mapping also works in tandem with a mapping between two types of category: from a basic-level category to a superordinate category. In what sense does counterpoint occupy a basic level of cognition?

Cognitive semantics approaches the issue of categorization from the standpoint of how people acquire and develop knowledge. The basic level defines the level at which children's cognitive development starts, affording an optimum balance between generality and specificity. For example, a child will first relate to a canine house pet as a "dog," before learning the general (superordinate) category of "animal," or the particular (subordinate) category of "retriever." According to Lakoff, knowledge acquisition follows a path from basic level through superordinate level to subordinate level, so that "children work up the hierarchy generalizing, and down the hierarchy specializing" (34). Basic-level categories are primary because they represent a level of concrete interaction with the external environment. Interaction may take the form of gestalt perception, mental imagery, and motor movements. It is easier for people to recognize, understand, and remember objects that can be touched and perceived as wholes. Lakoff draws a distinction between a general and a functional type of basic-level categorization. The latter takes account of factors "having to do with culture and specialized training" (37). Thus rural populations may be expected to achieve a more finely honed gestalt perception for trees than urban populations. By the same token, communities of experts in various academic disciplines will develop more-sophisticated basic-level categories than will outsiders. The basic level is thus culturally and developmentally relative, not a fixed point. In the specialized field of music composition, the student often begins at the basic level of second-species counterpoint. As I shall show in chapter four, baroque music theorists used this simple contrapuntal genus as a tool to explain more advanced compositional idioms. Like a basic-level category in the world of objects, simple counterpoint affords a balance between generality and particularity. In this case, generality denotes the abstraction of mathematical proportions, of which the consonances were instantiations, while particularity refers to the reality of performance practice. The basic level thus mediates between the theoretical and the practical. Indeed, the most productive developments in the history of music theory turn on the dialectic between *musica theoretica* and *musica practica*.

Basic-level categories are closely related to so-called prototype effects. Prototype theory originates in the work of the psychologist Eleanor Rosch on color perception (see Rosch and Miller 1976). When Rosch presented three-year-old children with an array of color chips and asked them to show her a color, the children picked "focal" colors overwhelmingly over nonfocal colors (Lakoff 1987, 41). She discovered that subjects judged certain members of color categories as being more representative of that category than other members. Rosch's findings extended also to physical objects, such as categories of birds or furniture. For example, robins were judged to be more prototypical of the category "bird" than chickens or penguins; desk chairs more representative of the

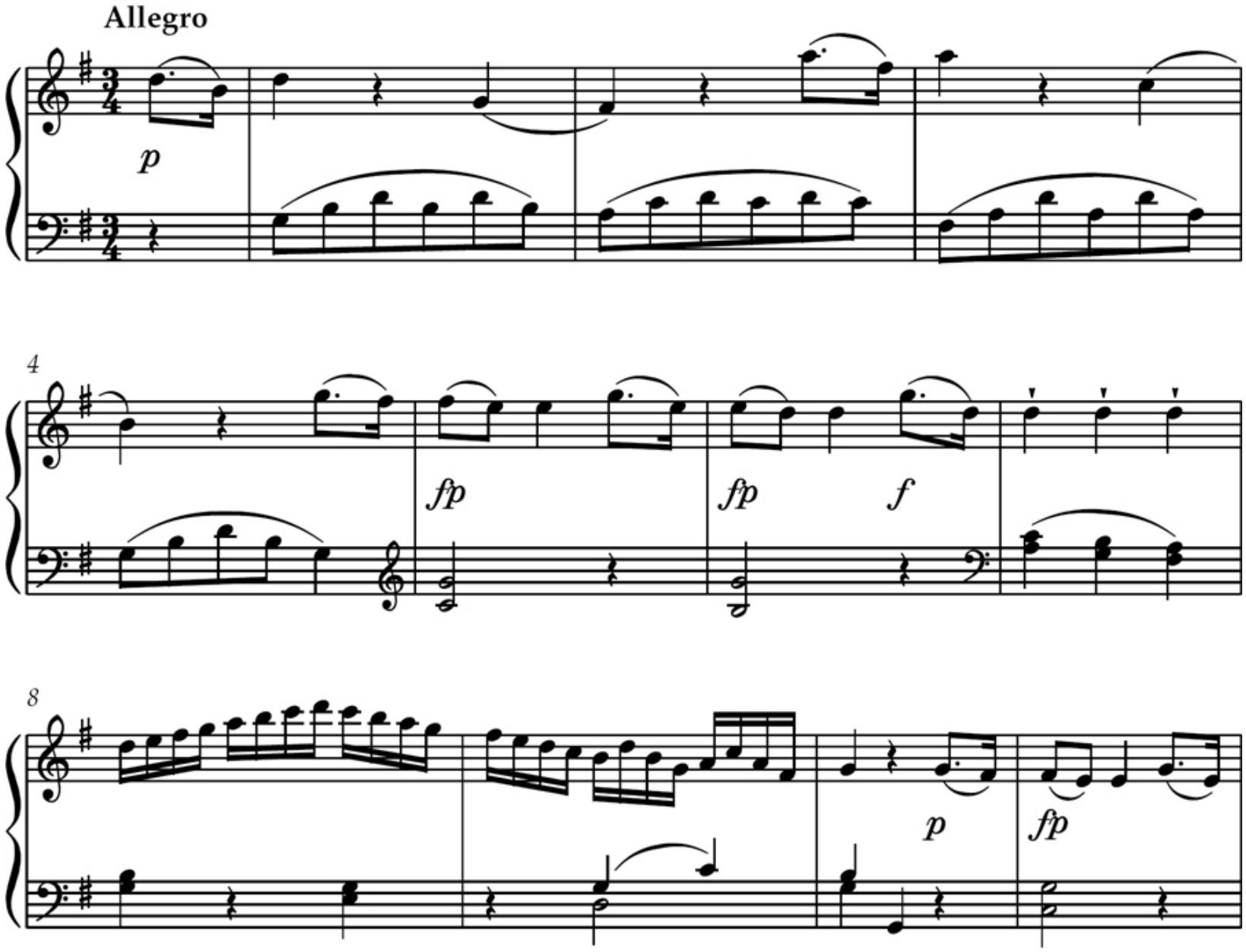
category "chair" than rocking chairs or electric chairs. The significance of Rosch's experiments is that they provide overwhelming evidence that the classical, objectivist theory of categorization was wrong. The traditional view is that categories are classified according to shared properties. But this view fails to account for even seemingly unproblematic concepts such as "mother." There are various models of the mother concept—the "birth model," the "genetic model," the "nurturance model," the "marital model," the "genealogical model"—and they do not have any set of features in common (75). There are no necessary and sufficient conditions for motherhood shared by normal biological mothers, donor mothers (who donate an egg), and adoptive mothers. Rather, the concept "mother" comprises a cluster of individual models radiating around a central prototypical category. People conventionally think of "mother" according to the social stereotype of "mother as housewife" (79). Here, a subcategory ("housewife") is used to comprehend the category ("mother") as a whole. Prototype theory, then, attends to people's habit of making an ideal exemplar represent the whole category.

Categories are therefore defined not by set membership, a common array of features, but according to radial structures. A radial structure comprises a central case plus conventionalized variations on it. Crucially, the relationship between the central and peripheral members is not generative, predictive, or transformational. Instead, it is based on a scale of motivation or "goodness of fit" (goodness of example). The nearer a category approaches the center, the greater its motivation. We now see the connection between prototype effects and metaphor theory. There is nothing necessary, predictable, or logical (in the objectivist sense) in the relationship between a central category and a peripheral variant; the link between source and target is created via an imaginative act of metaphorical mapping.

When we hear the figured textures of Bach's passion as counterpoint, we are mapping from a basic level of musical experience—the familiar realm of conventional contrapuntal technique—onto a level that is more distant from firsthand experience, Bach's ostensibly "free" dissonance treatment. In one sense, we are staying within music theory's traditional brief—that is, explaining the order and normalcy of compositions that seem wayward or idiosyncratic on the surface. From a semiotic perspective, the grammatical impertinences that characterize poetic or figurative expression are accommodated into higher-order interpretational contexts. The interpretational context in question is a more generalized concept of counterpoint, capacious enough to comprehend Bach's figures. But this is to get away from the central insight afforded by a cognitivist approach. Viewing counterpoint as a basic-level category turns traditional ideas of the concrete and the abstract on their head. By the lights of conventional harmonic analysis, the abstraction comprises the contrapuntal model to which Bach's foreground textures (concrete) are reduced. From this standpoint, it is the model that is imaginary. Yet the model is *not* imaginary: it represents concrete knowledge of musical style, derived from the theorist's personal study and practice of counterpoint exercises. The knowledge that anchors the analysis is drawn from basic-level contrapuntal categories. The confusion is partly about whether the model is inside or outside the piece. As we saw earlier with "hearing as" effects, concrete knowledge of counterpoint is very much something trained listeners carry around in their heads. The same, of course, applies to other basic-level categories: in particular, rhythm and melody. Basic-level mappings from rhythm and melody guide our conceptualization of musical form.

Let us now look at the opening phrase of one of Mozart's most familiar works, the Piano Sonata in G Major, K. 283 (ex. 1.3):

Example 1.3. Mozart, Piano Sonata in G Major K. 283, first movement




Stylistically, this music could not be more different than Bach's chorus, although, in fact, Bach's basic pitches and harmonies are present in Mozart's first four measures (Bach's skeleton D–G–F♯–C–B, with the B naturalized; the harmonic progression I–V–I, profiling G and A in the bass). Despite this shared component, the texture has been scrubbed clean of suspensions and overlapping voices and the phrasing straightened out into nested symmetries. Measure 2 balances measure 1; measures 3–4 answer measures 1–2; measures 5–10 complement measures 1–4. Such symmetry has led many theorists, both in Mozart's day and in our own, to talk of classical form in terms of large-scale rhythm. Hence, if we were to pursue this metrical reduction into the level of the measure, we would end up with pairs of complementary beats: a strong beat and a weak beat. Such a reduction would beg the question, of course, of whether we hear low-level (i.e., literal) rhythm the same way as large-scale rhythm, and the consensus is that we do not. A rhythmic impulse, a beat, represents what Christopher Hasty calls "a durationless instant" (7); paradoxically, it marks time, while existing outside of time. Hence the difficulty of hearing Mozart's first measure as a "prolonged" strong beat, or the second as an extended weak beat. Further, if the paradigm is a strong-weak symmetry, what are we to make of the "tonal rhythm" of measures 3–4? Because the harmony of measure 3 is a dominant, it is experienced as weaker than measure 4, which returns to the tonic. The third measure's harmonic dissonance seems to override its strong metrical placement, as the head of a pair of measures. The dynamic of the phrase is that of a departure from and return to the tonic; this ebb and flow, this tensing-and-relaxing motion, suggests a fluid process at odds with the conception of meter as a succession of discrete impulses. Another problem is the fact that the listener's perception of periodicity progressively fades at higher levels of structure. Consider how Mozart's consequent

phrase, measures 5–10, is felt to balance his opening phrase, even though it is two measures too long (six instead of four). Yes, measures 7–8, a miniature cadenza, are heard as an interpolation within the four-measure formal norm, yet this perception does not detract from the sense of overall balance across the two phrases. The reason must be because mechanical periodicity—that is, exact proportional symmetry—is overridden by broader factors, such as tonal and thematic process. What holds at the level of the phrase is even more true at the architectonic level: the "rhyme" between first and second groups, between exposition and recapitulation. To call form "rhythmic" is thus to speak metaphorically.

That is not to say, however, that the metaphor of rhythm serves no purpose. In fact, for over two hundred years, it has provided listeners with an entry point into the realm of large-scale form. Navigating a musical structure lasting many minutes requires the listener to hold in the mind impressions that are widely separated in time: grasping time as form. A rhythmic pattern, with its predictability and closure, affords a basic-level category of this experience. More than any other parameter, the categorization of rhythm has attracted much research from psychologically orientated music theorists. Most agree that basic-level rhythmic perception keeps close to the tactus of the music, involves binary or quadratic grouping ratios, and may even relate to the human pulse. For example, Candace Brower suggests that "over the history of Western music the pulse has stayed within a fairly narrow range, . . . a relatively fixed value, corresponding to the human pulse at rest" (1993, 25). The pulse represents a cognitive threshold, and Brower cites experimental studies indicating that "listeners do not perceive individual durations below the level of the pulse, but only the rhythmic pattern created by those durations" (25). Brower's work is interesting because it seeks to ground levels of rhythmic structure in levels of memory, "a set of nested horizons" of echoic, short-term, and long-term memories (23). Short-term memory marks a basic level of music perception, similar to William James's "psychological present," and attends to metrical patterns. Meter affords a simple, recursive means of organizing rhythmic perceptions. A metrical hierarchy "provides a cognitive basis for the interpretation of the durational patterns created by large- and small-scale events" (26). Brower postulates that the (subordinate) level below short-term memory, echoic, attends to small-scale rhythmic groups, or motives, and that the (superordinate) level above, long-term memory, takes care of large-scale formal patterns.

Musical form can also be conceptualized as melody. Even more than counterpoint and rhythm, the concept of melody inhabits a basic level of popular consciousness, often reflected in the idiom of concert program notes. These are rather more likely to speak of tunes and themes than of motives or modulations (or, for that matter, of hexachordal combinatoriality). A tune, perhaps, is something a lay enthusiast can sing or whistle, with a manageable range and duration. What might the "tune" be in this string quartet by Beethoven (ex. 1.4)?

Example 1.4. Beethoven, String Quartet in A Minor, Op. 132, first movement






After a mysterious introduction, capped by a cascade of sixteenth notes, the movement settles into a melody reminiscent of measures 1–4 of the Mozart. As with Mozart's melody, each two-measure segment is punctuated with an appoggiatura, respectively, on the leading note (A–G♯) and the mediant (D–C). This melodic type is actually a cliché of classical music, corresponding to what Leonard Ratner terms a "basic structural melody" (1980, 89). Basic structural melodies are usually elaborated, but a plain version of this particular type can be found in a sister work of the present quartet, Beethoven's String Quartet in C♯ Minor, Op. 131 (ex. 1.5).

So far so good; the A minor tune of example 1.4 can be grounded in a stylistic norm. But its definition is open-ended at either side: on the subordinate level, it dissolves into the particularity of a semitone; on the superordinate level, it merges into the generality of a tonal shape. In the first respect, the tune is really an elaboration of a cantus firmus and comprises the semitone motives that feature in the introduction (the pair G♯–A and F–E, plus their dominant transposition D♯–E and C–B). In the second respect, the melody is subsumed within a broad arch contour, which flexes from tonic stability (measures 11–13) to an apex on the submediant (measure 18), before tipping down in a descending Neapolitan fanfare to a caesura on a dominant (measure 21). Paradoxically, this arch contour is actually implicit within the semitone pair themselves, which rise from A to F, then fall to E (cello, measures 1–2). The motive seems to encapsulate the shape of the introductory ten measures as a whole, a shape that crosses the musical parameters—pitch, register, harmony, rhythm, and dynamics. Hence the rise in pitch (from A to F) is matched by a rise in register, a rise in harmonic tension (to the diminished-seventh chord of measure 9), an acceleration of harmonic rhythm, and a diminution of note values, as well as a crescendo. This same pan-parametric arch is also operative across the first statement of the Allegro, measures 11–22.

Example 1.5. Beethoven, String Quartet in C♯ Minor, Op. 131, fourth movement




To interpret the tonic group of Beethoven's quartet as an archlike melody is of course to move some way beyond a basic-level category of melody. Not only is the melody rather long (twelve measures), but it also incorporates elements conventionally considered as being distinct from melody, such as harmony and rhythm. Furthermore, it is extraordinarily difficult to pin down the defining characteristics of this melody. If the arch proceeds from an initial point of stability, why then does it begin on a G♯ (notice the ambiguity in measures 11–12, which suggests that the tune really starts on its second measure, with the metrically accented appoggiatura A–G♯)? Does the arch peak on an F or an E? There are at least three peaks in the introduction: the dominant harmony of the fugal answer at measure 7 (marked by the highest note, C), the dominant-type chord of measure 9 (marked by the rhythmic climax), and the F pitch of measure 9 (the expressive crux). These ambiguities are in fact intricately contrived by Beethoven: the elements are scattered across the surface of the music so that its "archness" emerges from the total unfolding. The arch is an outcome of the process, not a starting point (i.e., it is not a well-formed theme or motive). In other words, to hear Beethoven's quartet as melody is to engage the metaphorical imagination.

The metaphor of melody is extremely common in nineteenth- and early-twentieth-century writings on music. Richard Wagner, responding to the sense of elemental drive in Beethoven, wrote: "everything becomes melody, every voice in the accompaniment, every rhythmic note, even the pauses" (1995, 87). Theorists such as A. B. Marx and Heinrich Schenker taught us to hear long-range structure by mapping the qualities of basic-level melody onto representations of large-scale form. The concept of a formal process, in which the piece is imagined to move from a source to a goal, is modeled on an essentially melodic dynamic. The role metaphor plays in theory-building will come into focus in my next section. For the moment, I want to draw together three strands of my argument so far.

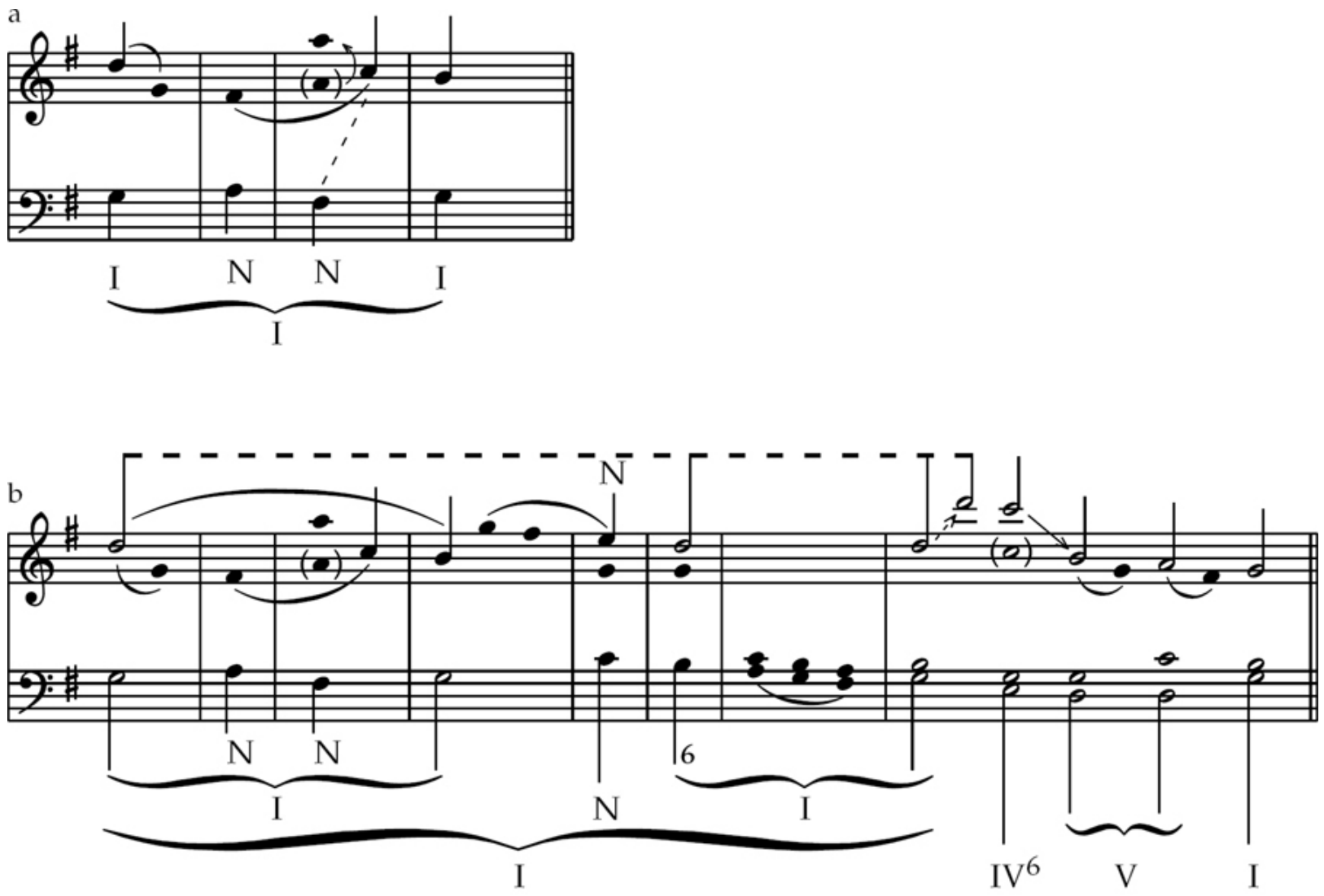
Three passages by Bach, Mozart and Beethoven have exemplified two classes of "hearing as" effects. First, as with our experience of the "little phrase" earlier, our hearing of a single scale-step progression ($\hat{1}$–$\hat{7}$ . . . $\hat{4}$–$\hat{3}$) is shaped by its context. It is heard as, respectively, counterpoint, rhythm, and melody (with the two-note phrase, we decide; with the three music examples, Bach, Mozart, and Beethoven's contrasting styles constrain our choice). Second, the three examples show us three distinct ways of conceptualizing the space and form of music, by mapping from basic-level categories of counterpoint, rhythm, and melody. Hence we hear each metaphor working in two directions. Our understanding of notes is regulated by concepts or stylistic contexts. Our

understanding of higher-level (or more-abstract) categories of these concepts is regulated by basic-level (or more-concrete) categories. I have so far neglected metaphor's third dimension—that of cross-domain mapping. The scale-step progression is heard in the Bach example in the context of tone painting. The textural figures paint the contrapuntal outline. Mozart's squarer, more metrical discourse bestows the progression with the conventionality of linguistic syntax. If the scale steps are heard here as formal syntactic markers, they take on a life of their own in the Beethoven quartet—as organic motives. Beethoven's motivic cells seem to generate a life force that flows like blood or spirit through the living work. Counterpoint, rhythm, and melody line up, then, with painting, language, and life. The question remains whether these correlations are truly motivated. If they are somehow "necessary," would this not infringe upon the imaginative freedom essential to "hearing as" effects? Surely one can choose to hear material any way one likes; but only up to a point. In the next section, we will see that the people who are in the business of teaching us how to hear—music theorists and pedagogues—do enjoy a freedom to internalize, mix, and impose values in seemingly infinite permutations.

## 3. ANALYTICAL METAPHORS

Compare these two analytical graphs of the opening phrase of Mozart's sonata from example 1.3. The first was made by Felix Salzer (1904–1986), a theorist who helped popularize the ideas of his teacher, Heinrich Schenker, in the United States (ex. 1.6):

Example 1.6. Salzer's graph of Mozart's K. 283

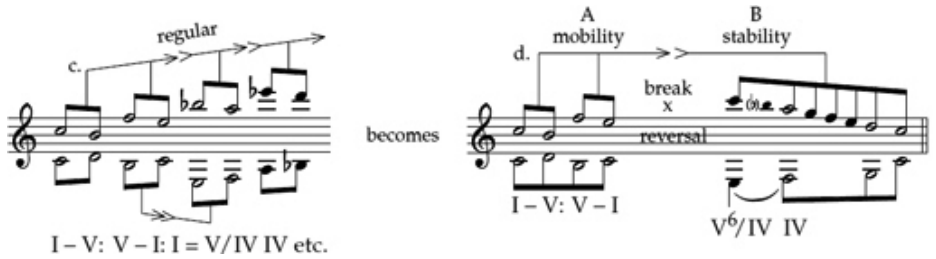



The second graph is by Leonard B. Meyer (1918–), next to Schenker the premier theorist of the twentieth century. It is taken from Meyer's 1980 article (in Meyer 2000, 200) "Exploiting Limits" (ex. 1.7):

Example 1.7a. Meyer's graph of Mozart's K. 283




Example 1.7b.




Each graph represents a different system of beliefs, and by projecting this system onto the score, it seeks to persuade the listener to hear the music in a particular way. Implicit within this procedure are the three classes of metaphoricity we explored in the previous section. An analytical graph induces a "hearing as" effect, changing how we perceive the music. A second class of metaphor obtains in the construction of the analytical model itself. Salzer's and Meyer's graphs employ the notation of, respectively, contrapuntal texture and metrical grouping patterns. But counterpoint and meter are used metaphorically; the original, basic-level categories are mapped onto the imaginary domain of a theoretical abstraction. The third class of metaphor pertains to the projection onto these technical categories of extrinsic value systems. Salzer's Schenkerism is shaped by nineteenth-century organicist aesthetics. Meyer's theory is influenced by American pragmatist philosophy. These nineteenth- and twentieth-century perspectives are transmitted to Mozart's eighteenth-century sonata via the vehicle of an analytical graph. Over and above the differences between Salzer's and Meyer's "lenses," the crucial question is the extent to which such an intrinsically anachronistic exercise can be warranted by properties of the music. The issue turns on the problem of motivation: whether a musical style or work can motivate the tools of its own analysis and, consequently, whether one lens can be truer than another. In short, the argument concerns the complex interaction of analysis, cognition, and history. We will find "history" waiting for us at the end of this line of thought. On the way, I want to consider, in turn, each of these three metaphorical types.

## *Analytical "Hearing As"*

Following Schenker, Salzer believed the structure of all "masterworks" in the tonal common-practice period (roughly from Bach to Brahms) to be guided by the unfolding of a fundamental structure (*Ursatz*). The course of this unfolding was simultaneously lateral and linear, regulating the background-to-foreground elaboration of a contrapuntal skeleton, as well as the left-to-right motion of voice-leading progressions. By means of this double trajectory, Schenker's theory coordinates a sense of a piece's structural levels with a vision of its temporal process—the space and the time of the music. A Schenkerian graph presents this double trajectory as a hierarchical table of voice-leading progressions, beginning with the abstract *Ursatz* (the background) and working its way down

to the detailed reality of the score (the foreground). One reads the graph both from left to right and up and down (to read down is to follow a *generative* process of diminution and prolongation; to read up is to track an opposite process of *reduction*).

Salzer interprets the first four measures of the Mozart movement as an expansion of a descending-third progression, D–C–B, supported by a tonic bass (level C). The C passes from the *Ursatz*'s primary note, D, to B, an inner voice of the opening tonic triad. In this way, the piece's opening is heard as an expansion of a single chord (G) and as a prolongation of a single scale step (D). Notating the bass line in measures 1–4 as a prolonged G certainly accords with one's intuition that these measures basically sit on the tonic; namely, that the A and F♯ constitute neighbor-note decorations of a quasi-pedal. Nevertheless, Salzer's descending third conflicts with the passage's sense of symmetry, the "rhyme" between measures 1–2 and 3–4—its aspect of departure and return. Looking up the table to level A, we can see why Salzer has done this. The F♯ of measure 2 connects with the A and the C to outline an arpeggiation of $V^7$, a harmony that is sustained in the bass across measures 2–3. For this reason, level C nudges the F♯ forward so that it lies directly under the C. Despite the elegance and internal coherence of this interpretation, we might still worry that it cuts across the perceived grammatical break between measures 2 and 3. Yes, the $V^7$ is continuous across these two measures, but this is to discount the experiential difference between a dominant as a departure ("tensing" away from the tonic) and a dominant as a return ("relaxing" toward the tonic). Salzer/Schenker's explication of the texture's implied contrapuntal logic thus pushes forward one kind of experience over another. It promotes an interpretation of continuity over an alternative hearing of discontinuity.

Discontinuity, rather than continuity, is the burden of Meyer's theory of music. He believes that musical meaning emerges from the subversion of pattern (or the inhibition of a "tendency to respond"). Echoing the double trajectory of Schenker's theory, Meyer's conception of pattern is dual. It can be a sequence of external stimuli, which the mind perceives subconsciously, or it can be a habit of expectation formed of experience, as in a knowledge of convention. This opposition is akin to the difference psychologists draw between data-driven and concept-driven processes, or bottom-up and top-down perception. In practice, these principles interpenetrate in all aspects of our interaction with the world, but Meyer elaborates them into two distinct analytical levels. Meyer illustrates the interplay between these two principles in a pair of graphs appended to his Mozart analysis. At a bottom-up level, a sequence of events or notes can imply either continuation or closure. Graph c (see example 1.7b above) shows how the pattern C–B, F–E implies continuation as a chain of fourths (B♭–A, E♭–D), and Meyer indicates this with interlocking arrows. Graph d demonstrates an opposite phenomenon, whereby an intervallic gap implies a countervailing stepwise descent, a fill. At a top-down level, Meyer argues that a listener perceives music in terms of learned stylistic archetypes, such as conventional melodic types and formal genres. Graph 2, as a whole, represents an archetypal melodic pattern that is extremely prevalent in classical music. From a top-down viewpoint, to understand Mozart's theme is to compare it with a representation in the mind formed by memories of themes like it—imposing a learned conceptual template. We see, therefore, that Meyer's system situates musical structure in a very different space from Schenker's. A Schenkerian structure exists in the space between a lateral and linear dimension of counterpoint (diminution and voice leading). Structure, for Meyer, lies in the space between a listener and the source of sound; between knowledge and perception, culture and nature.

Salzer's descending-third progression (D–B–C) plays no part in Meyer's graph. Instead, the annotated braces above the music (level b) indicate the symmetrical rhyme of "conformant" subphrases, m and m′—the question-and-answer aspect suppressed in Salzer's interpretation. Also, the D of measure 1—the "primary" tone prolonged across the phrase—fades from view as Meyer brings out the "cue" scale steps that punctuate the subphrases, G and F♯ ($\hat{1}$ and $\hat{7}$), and C and B ($\hat{4}$ and $\hat{3}$). Conversely, scale step $\hat{6}$, the E of measure 5, a note Salzer graphs as an upper neighbor subordinate to the D, is in the lower graph raised in status to a structural tone (symbolized by a void

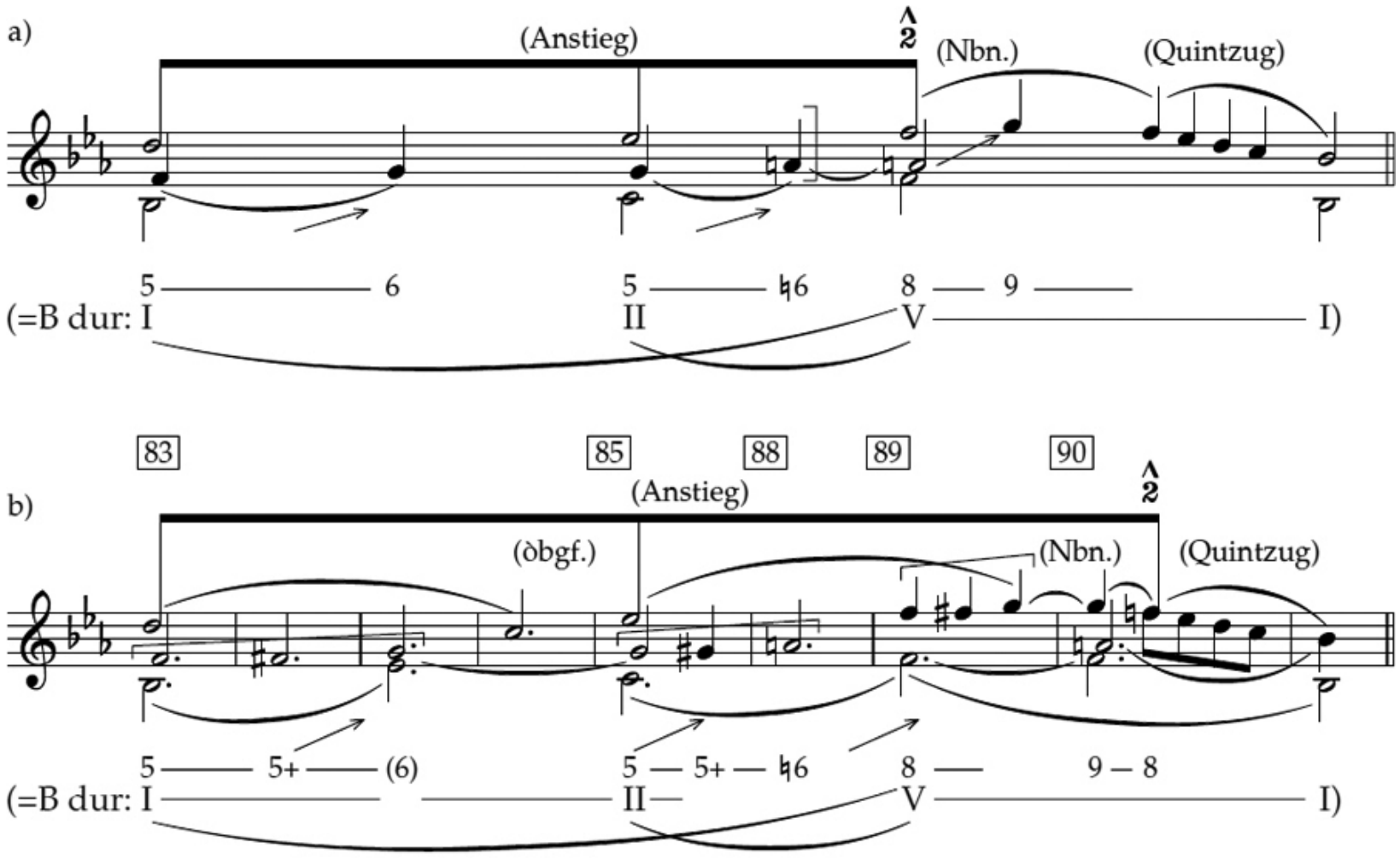
note-head). E is structural because it represents a continuation of the fourth cycle, albeit a slightly adapted one (the expected F♮–E is changed to G–[F]–E). This E initiates the fill descent that resolves the phrase; the descending scale fills the gap opened up by the leap from B to G (measure 4) and, in its course, also fills the previous gap between F♯ and C (mm. 2–3). Meyer and Salzer, then, view musical process from opposite standpoints. For Meyer, a process is generated by events (such as a leap); for Salzer, events assimilate into an overarching process (such as a prolonged primary tone).

### *Basic-level Mapping*

A metaphorical transaction obtains not only between an analytical model and the music it represents ("hearing as"), but between aspects of the model itself. The elision of these two distinct dimensions lies behind much of the confusion about the nature of music analysis. For example, it is currently fashionable to decry analysis's seeming preoccupation with hierarchical structures.[3] The objection is that music is not organized according to the same principles at different structural levels, and, conversely, that these levels are not perceived in the same way. Another complaint is that analytical reduction perpetuates a false account of musical generativity, which in no way corresponds to the little we know about the creative process.[4] Yet the reader is led to believe, it is contended, that a piece "grows," develops from, or is consequent upon seminal, fundamental, or implicative structures immanent within the actual music. It is light work for the critics of music analysis (who generally advocate criticism as an antidote to analysis) to "out" such reifications.[5] But many of these alleged difficulties disappear once it is realized that the relationship between simplicity and complexity in a graph is not generative but metaphorical. Both Schenker's and Meyer's systems are predicated on metaphorical mappings from basic-level categories of musical logic, respectively contrapuntal texture and melodic pattern.

The layout of a Schenkerian graph encourages two misconceptions about its method that are equally wrongheaded yet mutually supporting. The first is that surface complexity reduces to or is generated from a simple structural unit. All sorts of problems are associated with this fallacy. It is often believed, falsely, that an *Ursatz* is more "real" than the foreground, because it is more "structural"; or that it is a precompositional premise in the mind of the composer, akin to a theme that is elaborated; or that it represents real music that can be played. The second misconception is that the *Ursatz* is a purely imaginary construct, an abstraction, not a unit or a structure in itself so much as a vantage point affording a conceptual perspective on the musical foreground. It is thus believed, again falsely, that the resemblance of Schenker's analytical notation to real musical notation is to be regretted. Misconception 2's hermeneutic outlook thus corrects Misconception 1's structuralism. The *Ursatz* is not an object inside the piece but simply a way of hearing. However, this (admittedly) more nuanced view is again wrong, because it discounts the middleground's concrete reality. A middleground progression is expressly *not* an abstraction; it corresponds to experientially real contrapuntal progressions in the "real world" of composition. This is where the peculiarity of basic-level categories comes into its own. A basic-level category is a little piece of knowledge that has been enshrined as a concept. It is an amalgam of the abstract (thought) and the concrete (experience). We can see this amalgam at work in one of Schenker's most celebrated graphs, that of the first movement of Beethoven's *Eroica* Symphony (ex. 1.8):

Example 1.8. Schenker's graph of Beethoven's Symphony No. 3, first movement, mm. 83–91




The harmony of Beethoven's second group is enriched by passing chords and suspensions, which Schenker reveals to be elaborations of a simple contrapuntal model. Schenker's middleground (his

Fig. b) comprises a pair of 5–6 figured-bass progressions, climbing in parallel tenths (D–B♭, E♭–C) from tonic to dominant. Now, Schenker asks us to hear a harmony that is nowhere stated in Beethoven's theme: a first-inversion G minor triad (the second half of the first 5–6 progression). To be sure, measure 86 does contain the pitches G, B♭, and D, which are even prepared by an F♯ in the previous measure. But the bass has leapt from its B♭ to an E♭, forcing the clarinet's D to resolve down to C as a suspension. The most stable harmony in measure 86, then, is a C minor triad. Schenker's 5–6 progression only makes sense if one agrees to bracket out the bass E♭ and extensively realign the voices.

This is not to say, however, that hearing Beethoven's tonal progression contrapuntally makes no sense. On the contrary, doing so illuminates a parallelism between the two subphrases that is obscured by proportional asymmetries. The first "5–6" (F–[F♯]–G) occupies four measures; the second (G–[G♯–A) is squeezed into just two. A more robust reason for metaphorically hearing the harmony as counterpoint is that, paradoxical as it may seem, Schenker's 6–5 progressions are, to my way of thinking, more concrete than Beethoven's music. What this claim does *not* mean is that Schenker's model is more "real," or has more value, than the *Eroica*—that is manifestly absurd. Rather, the type of knowledge utilized by a contrapuntal analysis is, in certain specific respects, more concrete and better defined than the aesthetic experience of the symphony. Lakoff defines a basic-level category according to the four determinants, respectively, of "perception," "function," "communication," and "knowledge" (47). Once we make the interpretational leap from cognitive theory to music, a contrapuntal progression can be understood as complying with each of the prerequisites as Lakoff describes them:

1. *Perception*. A contrapuntal model is the highest level at which categorical discontinuities can be represented. Distinctions between contrapuntal models can be made more easily, and more clearly, than those between superordinate categories, such as musical forms and genres.

2. *Function*. A contrapuntal model is grounded in both compositional practice and keyboard technique (a continuo player literally grasps it with the hands).

3. *Communication*. A contrapuntal model consists of a neutral and conventionalized level of knowledge. It engages rules that can be easily codified, institutionalized, and handed down.

4. *Knowledge*. Counterpoint is taken as the most efficient exemplar and determinant of coherence and grammaticality in Western art music.

If criticism of Schenkerian theory turns on its alleged reductionism, then Meyer's detractors focus on his theory's claims of psychological empiricism.[6] Can music analysis really be grounded in testable gestalt principles of "good" continuation, "good" completion, common direction, similarity, proximity, and so on? Up to a point, thinks Meyer's disciple and critic Eugene Narmour (1992), but not in the way Meyer has argued. Virtually everything Meyer adduces as evidence of "natural," bottom-up processing, Narmour ascribes to "cultural," top-down learning—the activation of what he calls "style structures" or "schemata." The pattern C–D–E implies continuation just as much to F♯–G♯ as to F–G♮, and we prefer the latter inference only when we invoke harmonic and contrapuntal knowledge (that a diatonic scale is more grammatical in the common-practice period than is a whole-tone scale). From Narmour's perspective, the chief deficiency in Meyer's theory is that he defines "pattern" holistically, as the interaction of the three "primary pattern-forming parameters of pitch, duration, and harmony" (46). To be sure, whether a pitch is structural depends on its rhythmic profile and harmonic support. But insofar as his book concerns the perception and cognition of *melody*, Narmour accords true primacy only to pitch, in terms of interval and register, and regards rhythm and harmony as parameters that interact or interfere with pitch patterns from above, as top-down elements of style. Narmour believes, then, that gestalt laws apply only in the perception of intervallic motion and registral direction, principles he submits to an analysis far more rigorous and systematic than Meyer's. In this light, Meyer's key notion of "reversal," as when a skip is followed by a stepwise gap-fill progression in the opposite direction, is entirely transformed (119). As we see in Meyer's graph of the Mozart sonata, reversal occurs with the E of measure 5, where the leap from the preceding B is plugged with a descending line. For Meyer, reversal is achieved by the fill progression

as a whole. For Narmour, by contrast, reversal is accomplished with the very first step—the first onset of difference, without the need to continue with a full scale. Narmour's reversal can even take the form of an interval larger than a step, such as a third or a fourth, as long as this interval is new. For example, a fifth followed by a third is still a reversal (two successive fifths would be a "process"). Unlike Meyer, Narmour measures his parameters of interval and register separately. He is thus able to conceive of a structure that changes interval but continues in the same direction ("intervallic reversal"), or, conversely, of one that changes direction but repeats the same interval ("registral reversal"). Compared to these nuanced criteria, Meyer's definition of gap-fill melody appears rather broad, and this is why Narmour relegates it to the same realm of top-down schemata as Schenkerian scale steps, voice-leading structures, cadential types, and high-level formal genres (9), all categories that belong on the far right of the nature-culture spectrum. In short, Meyer's mistake, by Narmour's lights, is to confuse aspects of style with principles of perception: he psychologizes culture as nature—the cardinal sin of so much music theory. "Contrary to current opinion in musicology and music theory," Narmour demurs, "style structures are an extremely problematic source from which to divine the constants of a cognitive theory of melodic implication. . . . For the definition of style's domain is too variable to enable the discovery of consistent cognitive rules of analysis" (8).

Narmour is right, but he draws the wrong conclusions. Certainly, the trajectory of Meyer's analytical system is not from perceptual principles to musical categories, but from musical categories to perceptual principles. The gestalt laws that are held to drive musical structure are themselves extrapolated from musical structure—that is, from syntactic utterances in their full harmonic and rhythmic contexts, rather than from atomized parameters. Whereas, in Narmour's eyes, this invalidates their claims to psychological reality, the fact that Meyer's theory is grounded in basic-level categories is actually a strength. It is easy to expose Narmour's critique as quintessentially objectivist. "Just as there is no such philosophical thing as *a* language," contends Narmour, "so there is no such cognitive thing as *a* style" (8). Equally contentious is his objection that "the notion of an 'ideal' listener with an 'ideal' structural knowledge of any given style is hopelessly rationalistic" (8), since "hopeless rationalism" is the very thing prototype theory and basic-level categorization are designed to counteract. Meyer's later work has continued to develop the idea that gap-fill progressions represent stylistically constrained melodic types, rather than psychological universals. For example, his 1982 article "Melodic Processes and the Perception of Music" (reprinted in Meyer 2000, 157–85) considers the opposition between gap-fill and changing-note melodies as two varieties of archetype. The fact that Mozart's sonata chains together a four-measure $\hat{1}$–$\hat{7}$ . . . $\hat{4}$–$\hat{3}$ changing-note schema with a gap-fill melody may indeed suggests that the linear descent is a resolution of an implication. But this is only an attractive fiction, a metaphor. Most instantiations of the $\hat{1}$–$\hat{7}$ . . . $\hat{4}$–$\hat{3}$ pattern in fact are *not* followed by such a descent, as is shown by Robert Gjerdingen's (1988) exhaustive survey of this schema (it is crucial, in this regard, that Gjerdingen's schema comprises only the first four measures of Mozart's theme, not the gap-fill portion).

Meyer's analytical procedure, like Schenker's, is grounded in basic-level categories rather than abstractions—in this case, melodic archetypes. Also like Schenker, Meyer conceptualizes the form of the music (in this case, the antecedent-consequent relationship between measures 1–4 and 5–10) by mapping from the properties of these basic-level categories. He projects from melody to form.

## *Cross-domain Mapping*

Analytical systems also project value systems from domains outside of music. This is the third class of metaphorical mapping, the cross-domain. Virtually any passage from Schenker's and Meyer's writings will show such projection, but the following seem particularly apt.

> Schenker: (a) music as movement; (b) music as organism.
>
> a. In the art of music, as in life, motion toward the goal encounters obstacles, reverses, disappointments, and involves great distances, detours, expansions, interpolations, and, in short, retardations of all kinds. (1979, 5)

> b. The hands, legs, and ears of the human body do not begin to grow after birth; they are present at the time of birth. Similarly, in a composition, a limb which was not somehow born with the middle and background cannot grow to be a diminution. (1979, 6)

Meyer: (a) music as natural process; (b) music as language.

> a. Musical suspense seems to have direct analogies in experience in general; it makes us feel something of the insignificance and powerlessness of man in the face of the inscrutable workings of destiny. The low, foreboding rumble of distant thunder on an oppressive summer afternoon, its growing intensity as it approaches, the crescendo of the gradually rising wind, the ominous darkening of the sky, all give rise to an emotional experience in which expectation is fraught with powerful uncertainty—the primordial and poignant uncertainty of human existence in the face of the inexorable forces of nature. (1956, 28)
>
> b. Paradoxical though it may seem, the expectations based upon learning are, in a sense, prior to the natural modes of thought. For we perceive and think in terms of a specific musical language just as we think in terms of a specific vocabulary and grammar; and the possibilities presented to us by a particular musical vocabulary and grammar condition the operation of our mental processes and hence of the expectations which are entertained on the basis of those processes. (1956, 43–44)

Both pairs of quotations engage, in turn, with musical movement and form. Movement is imagined, respectively, as a living organism's motion toward a goal (Schenker) and as the unfolding of a natural process, such as the approach of thunder (Meyer). Form is compared to the organic structure of the human body (Schenker) and to the system of rules that regulates a language (Meyer). Rather than representing isolated figures, Schenker's and Meyer's analogies are actually embedded in complex networks of ideas, which have been elucidated by scholars such as Robert Snarrenberg and Naomi Cumming. Before I consider Schenker's organicism and Meyer's pragmatism in greater detail, I want to stake out two possible ways we can understand a music theorist's intellectual contexts. First, we must ask how seriously we should take these contexts. After all, it is possible to find Schenker's analytical tools useful today without necessarily subscribing to the values of German idealism that ostensibly underwrite them. Indeed, Snarrenberg has shown (1994) that Schenker was received in the postwar United States as a positivist, quasi-scientific writer, as is seen in the way he is represented by Milton Babbitt and Allan Forte. Yet one could argue that this attitude constitutes not a blindness on the part of American theory, but, on the contrary, a virtue on the part of Schenker's ideas. Schenkerism is powerful precisely because it can adapt itself to differing intellectual environments. From this perspective, analytical tools transcend context.

Second, we must ask whether comparing a musical structure to an organism or a language really does comprise an act of metaphorical mapping. An opposing view would hold that the linguistic verbalizations and the musical symbols are equally expressions of a common underlying conceptual scheme. In this case, we could suppose a three-tier arrangement of analytical structure—conceptual scheme—verbalization (or analysis–idea–text), with conceptual scheme effecting a mediating role between tones and words. This move devolves the investigation to the nature of the conceptual scheme itself and to the workings of conceptual metaphor. Let us return to the two sets of quotations above. The two passages from Schenker's *Der freie Satz*, a page apart, compare musical progression to two types of human progression: purposive motion and biological development. A tone is directed in time toward a goal, just like an individual intent on accomplishing a task or traversing a path. An analogy is also drawn between the way a tone in the background is elaborated into foreground diminution and the way an embryonic human limb grows toward maturity. The crucial point I am making is this: if Schenker compares music to motion and growth, *he also draws an analogy between motion and growth themselves*. Schenker's conceptual metaphor MOTION IS GROWTH is an expression of the stock romantic conceit of viewing spiritual development as a kind of journey. But it is also in line with the far more familiar, garden-variety metaphors inventoried by Lakoff, Johnson, and Turner, such as PEOPLE ARE PLANTS, which compares human and vegetal life cycles (see Lakoff and Turner 1989, 6), and STATES ARE LOCATIONS, by which people routinely conceptualize both mental and physical states as stages on a path (Lakoff and Turner 1989, 3).

The metaphor STATES ARE LOCATIONS underlies common metaphors such as LIFE IS A JOURNEY. The essential normalcy of this conceptual metaphor is described in an article by Steven L. Winter, a philosopher of law:

> The LIFE IS A JOURNEY metaphor enables many different metaphorical expressions and patterns of inference. Thus, we try to give our children an education so they will get "*a good start*" in life. If they act out, we hope that they are "*just going through a stage*" and that they will "*get over it*." As adults, we hope they won't be "*burdened*" (or "*saddled*") with financial worries or ill

> health and, if they face such difficulties, that they will be able to "*overcome*" them. We hope they will have a "*long lifespan*" and that they will "*go far in life*." We know that, as mortals, they will "*go to their final resting place*." (1995, 235)

My second point is equally important: Schenker's metaphor MOTION IS GROWTH also underlies the double trajectory discussed earlier, the identification in his system between the left-to-right voice-leading progression and the background-to-foreground elaboration of the *Ursatz*. In other words, Schenker is essentially doing the same thing in imagining counterpoint as melody and growth as motion. Ultimately, the analogy turns on an identification of the categories of space and time—hardly a surprise, in view of our liking for describing the temporal art of music in terms of form.

Discovering the conceptual metaphor at the heart of an analytical system can, by the same token, reveal commonalities between theorists whose intellectual contexts are outwardly dissimilar. Let us turn, this time, to the two quotations from Meyer's *Emotion and Meaning in Music*. Unlike Schenker, Meyer assumes the viewpoint not of the active, evolving creature, but of a creature cognizant of ambient information: a switch from a third- to first-person perspective. Meyer converges with Schenker, however, in metaphorically eliding the diachronic and synchronic dimensions of musical structure—in this case, the unfolding of pattern in real time (an approaching storm) and the evolution of language (the relative priority of natural and learned modes of thought). If, as Meyer claims, "the frustration of expectation" (1956, 43) is the basis of musical cognition, then this device applies in his work both to the subversion of temporal process and to the deviation from a grammatical rule or archetype—as much to process as to structure, to time as to space. At a deep level, that is, at the level where STATES ARE LOCATIONS, Schenker and Meyer's individual theories can be interpreted as elaborations of an identical conceptual metaphor. This claim in no way conflicts with the observation that the interest of these elaborations lies in the detail. It is to these surface metaphors that I now turn.

# SCHENKER

Snarrenberg's exemplary study of Schenker's "interpretive practice" (1997) is disposed in three main sections dedicated, respectively, to effects, intentions, and synthesis: the technical categories of Schenker's system, their conceptual underpinnings, and the programmatic language of Schenker's commentaries. At no stage does Snarrenberg consider Schenker as a metaphorical thinker. Nevertheless, his book throws up a wealth of evidence to support such an interpretation.

Chapter 1, "Effects," explores the evolution of Schenker's metaphorical conception of counterpoint: the blending of contrapuntal categories of consonance and passing note with the dynamics of melody and their projection onto the dimensions of large-scale form. Although Schenker's metaphorical thought appears to us ready-made in his mature graphs, Snarrenberg's study reveals the steps by which it was unfolded, roughly at ten-year intervals. Step 1 was the effect of "passing." Schenker's *Kontrapunkt* (1910) defines consonance contextually. Whereas strict species counterpoint had defined consonance absolutely, in terms of the intervallic relationship between two tones, Schenker extends the definition to include configurations of many tones. These would now be understood in relation to a triad reconceived on a more conceptual footing, accommodating broader time spans. A note that is consonant within the measure may thus be heard as passing in the context of the piece. In this way, both the triad and the passing note—the two constituents of counterpoint—are transformed from absolute categories into metaphorical concepts, opening the way for Step 2: the effect of *Zug*. Schenker developed the notion of *Zug* in his commentary (1921) on Beethoven's Piano Sonata op. 101, and in the volumes of *Das Meisterwerk in der Musik* (1925–30). By merging directed tonal motion with a teleological effect of striving and fulfillment, Schenker saw how motion between two consonances could be generalized into directed motion across the whole composition. Technically, *Zug* refers to a linear progression that passes between lines or triadic voices. But Snarrenberg also unpacks many other connotations of *Zug*, such as trait or characteristic (as in a motive), a linear configuration, the action of pulling, a dynamic progression, and "the complex motion of a train, departing, traversing intermediate points, arriving at a destination" (Snarrenberg

1997, 130). The traversal of a *Zug* is the execution of an intention, even in the face of resistance, delay, or diversion. Step 3 was the effect of *Ursatz*. Finally, in *Der freie Satz* (1935), Schenker imagines the entire piece as an elaboration of a single *Zug*—an *Urlinie-Zug*—in counterpoint with a bass arpeggiation. Hence the piece as a whole, coterminous with a single conceptual triad, becomes the ultimate context for the effect of passing, the dynamic of striving and fulfillment from departure to goal.

In chapter 2, "Intentions," Snarrenberg ascribes Schenker's philosophical presuppositions to the influence of Hegel. He discovers the same tension between phenomenological and conceptual chronologies underlying the systems of both thinkers. According to Hegel, the conceptual development of spirit is actualized in history. This dialectic is worked out by Schenker in "the tension between the chronological unfolding of the artwork's presentation and the conceptual chronology from the earlier background to the later foreground" (Snarrenberg 1997, 68).

Chapter 3, "Synthesis," moves on to examine the stories Schenker tells about musical structure, the figurative language that explicates the graphs. One of Schenker's most inventive narratives is found in his essay on Beethoven's Third Symphony, and tells the story of a tone's procreative urge and desire for emancipation. He writes, concerning Beethoven's second group:

> And yet, despite all this undeniable enrichment of the bass's counterpoint, the falling fifth-*Zug* in measures 78–83 still does not have a counterpoint that would render the individual tones [of the *Zug*] independent. . . . This ought to be looked upon perhaps as something programmatic: it is as if the arpeggiations are used to express a seizing done at first without consideration, to express a youthful unaffectedness and lack of concern. (Snarrenberg 1997, 125)

Schenker is careful to anchor his programmatic interpretation very firmly in the music's technical aspect. The "seizing done at first without consideration" expresses a perceived lack of cadential solidity; the individual tones of the falling fifth–*Zug* are not given the harmonic support they require to achieve contrapuntal independence. The tones' contrapuntal emancipation is only reached at measure 109, where, in Schenker's words, "the initiating tone of the fifth-*Zug* appears for the first time on the I *Stufe*" (Snarrenberg 1997, 129). In the three previous descents of the fifth-*Zug* (measures 45–91), the head-tone had been supported by an F in the bass, a dominant. Schenker thereby coordinates a technical narrative of repeatedly deferred cadential closure with a dramatic plot of "the callowness of youth [giving] way to maturity" (129). Although this heroic plot has an obvious resonance with the rhetoric of the *Eroica*, its guiding metaphors inform Schenker's theory as a whole. The narrative of procreation, whereby a head-tone generates lower-order notes, which then leads to emancipation when these notes achieve an independence from their parent, is at the heart of Schenker's concept of tonicization. Tonicization happens when passing notes "grow up" and displace the original tonic. The procreation metaphor thus intertwines a dynamic process with a spatial one, as a tone passes from the foreground to the middleground. It blends motion and growth: it elaborates the conceptual metaphors "motion is growth" and "states are locations."

## MEYER

Meyer's intellectual influences are much more apparent than Schenker's; his texts are filled with citations from pragmatist philosophers (Mead and Dewey), gestalt psychologists (Wertheimer and Koffka) and, of late, even cognitive scientists (Schank and Abelson). The search for scientific authentication would seem to leave little room for the type of figurative language that colors Schenker's heroic narratives. Yet the posture of experimental objectivity entails a rhetorical style just as pronounced as Schenker's romanticism, only different. Meyer's language, with his typical references to musical material as "data," subject to "inspection" and "verification" (e.g., see Meyer 2000, 168), is all of a piece with his empiricist outlook. It even predicates a narrative, which Naomi Cumming (1991) has traced to Mead and Dewey's biological behaviorism—a kind of scientific update of organicism. George Mead's *Mind, Self and Society* (1934) explains human meaning as a dialogue between gesturing and perceiving organisms: "A gesture performed by an organism indicates the action which will follow. This sign is perceived by another organism, who modifies his

action in accordance with it, and the consequent action of the first organism (signatum) then occurs. Mead says that this relationship 'constitutes the matrix within which meaning arises, or which develops into a field of meaning'" (Cumming 1991, 180). The basic steps of this narrative are a stage of biological tension, initiated by an organism's unexpected gesture, followed by an adaptive action between the organism that perceives this gesture and its environment, restoring equilibrium. It is hard to miss the stereotypical dramatic plot of tension and resolution behind this scheme. The analogy between the behavioral and aesthetic spheres was suggested to Meyer by the work of John Dewey, particularly his *Art as Experience* (1934). There, the emotive patterns found in an organism's response to conflict "become . . . a metaphor for artistic self-expression" (Cumming 1991, 181). It is a small step from here to Meyer's maxim that "affect or emotion-felt is aroused when an expectation —a tendency to respond—activated by a stimulus situation, is temporarily inhibited or permanently blocked" (Meyer 1956, 31). One step further and we are in the realm of classical comedy, which typically engages the disconfirmation and resolution of expectations. The music of Mozart, Haydn, and Beethoven is where Meyer has done his best work, of course. The gap between behaviorism, with its conflict of blind and brute creatures, and the classical comedy of manners may seem vast; but Meyer's career develops logically from one to the other.

Meyer's career path mirrors Schenker's in that it unfolds over time a metaphorical process enshrined in the mature theory. Meyer's metaphor, as we have seen, maps the top-down knowledge of schemata onto the bottom-up data of "natural" gestalt principles; it identifies culture with nature in the same way that Schenker brings together counterpoint and melody. This metaphor is already implicit in Meyer's first major work, *Emotion and Meaning in Music:* "paradoxical though it may seem, the expectations based upon learning are, in a sense, prior to the natural modes of thought" (Meyer 1956, 43). Hence, although our minds expect structural gaps to be filled, "what constitutes such a gap depends upon what constitutes completeness within a particular style system" (44). Meyer's early and late work alike advocate a "rhyme" between perception, knowledge, and music, or, as Cumming puts it, "a synonymity between mental structures, stylistic systems and musical reality." The key difference rests in the level at which this analogy is explained. Early Meyer appeals to universal behavioral principles, while the elements of musical style are defined rather vaguely. In late Meyer, the interest in behaviorism falls away, to be replaced with a far more detailed analysis of style. *Explaining Music* (1973) presents a taxonomy of melody types: "conjunct" and "disjunct" (including "gap-fill"), "complementary," "axial," "changing note," and "archetypal schemata." In line with the drift of Meyer's career, archetypal schemata subsequently become redefined so as to encompass all of the foregoing melodic types. Meyer's drift toward schema theory represents an identification of music cognition with style analysis: a chunk of style enshrines a mental model. Schenker too had moved toward a notion of a musical schema: his *Ursatz*. But whereas Schenker's metaphorical act is to project an *Ursatz* onto form, Meyer's is to internalize social (stylistic) behavior as a mental model.

Meyer puts a musical schema center stage in one of his most satisfying comic dramas, the analysis of Beethoven's *Les Adieux* Sonata, Op. 81a, in E♭, from the final chapter of *Explaining Music* (his "Summary Example"). The piece begins, famously, with an interrupted cadence, a feature that had attracted Meyer's attention in his first book (ex. 1.9):

Example 1.9. Beethoven, Piano Sonata in E♭ Major, Op. 81a, first movement, mm. 1–2




The early Meyer notes that "the meaning of the passage and its affective power derives from this inhibited tendency toward a perfect cadence" (1956, 53) and leaves it at that. The later analysis is far more sensitive to the "Lebewohl" motto's conventionalized aspects. It is not merely an interrupted cadence, but a schema Meyer designates "horn fifths," a "conventional patterning . . . used in the eighteenth century by natural brass instruments (without valves) to play authentic cadences" (1973, 243). The schema also entailed a conventional placement at the end of movements, a prototypical case being the finale of Mozart's 39th Symphony (also in E♭). Meyer thus hears Beethoven's opening as deviant on at least three levels. The cadence is interrupted; it comes at the head of a slow introduction, instead of at the end of the movement; and it is not accompanimental, as it should be, but forms the main thematic substance. There then follows a series of variants of this schema, all aberrant in some way, and it is only presented in its pure horn-fifths form in the coda. Meyer's narrative—a sequence of faulty cadences culminating with a correct version—is identical to Schenker's in the *Eroica* (the four descents of the fifth-*Zug*). Filtered through Schenker's theory, the process appears as a story of gradual maturation; Meyer casts the process as a chain of witty evasions. There is also a "subplot" on the "nature" side of Meyer's theory, the gestalt linear and gap-fill patterns. One of the consequences of the C minor interruption of measure 2 is that "the linear motion generated by the descent from G now has less tendency to stop on the E♭" (1973, 247); that is, it is compelled to fall further to C. Meyer portrays the C minor role in language reminiscent of his "foreboding rumble of distant thunder" from his earlier book. The implications of the C minor thunder "reverberate throughout the movement" (247), and the storm breaks in the development section, which "begins and ends in C minor" (255), to be calmed only in the coda, just before the "correct" arrival of the "Lebewohl" motto (it is easy to imagine the horn calls echoing in thanksgiving in the valley). Meyer's narrative, then, plays out the two branches of his theory: the temporal (subversion of pattern) and the spatial (deviation from a norm). Just like Schenker's *Eroica* analysis, it elaborates the conceptual metaphor "states are locations."

# 4. HISTORICAL METAPHORS

We study music history in order to hear better in the present. Historical listening is a species of "hearing as" effect, which is motivated by knowledge of the facts. Looking back on this chapter, we have investigated how perception may be guided by knowledge in ever increasing circles, starting with technical concepts of counterpoint, rhythm, and melody; proceeding to basic-level categories of musical style; and ending with the broad value systems enshrined in analytical methods. The latter comprise not isolated metaphors, but systemic metaphors: broad patterns of interlinked concepts, values, and symbols. Systemic metaphors, at their broadest, take the form of culture, which is why anthropologists have much to teach historians.

I want to argue, in the closing part of this chapter, that systemic (cultural and historical) metaphors have structure, and that this structure is governed by the same metaphorical principles that operate at lower levels of perception and analysis. This claim has two parts. First, the integrity of a systemic metaphor is prototypical, in that it depends on a cluster of motivations rather than on rigid (objectivist) criteria of set membership. Second, these motivations are organized radially according

to a center/periphery model. The central case corresponds to those basic-level or prototypical categories we looked at earlier in this chapter; peripheral variants are metaphorical projections from this prototype, not generative elaborations.

It is important to insist on the metaphorical nature of these processes. Otherwise, my approach might be thought to resemble the structuralist history that used to be fashionable about thirty years ago in the work of Kuhn and Foucault. I will address Kuhn in chapter 2 and Foucault in Part II, the historiographical half of my book. For the present, I will simply stress that my approach is not structuralist insofar as it rejects the objectivism of which structuralism was a symptom.

Systemic metaphors in music take the form, technically, of *style*, and culturally, of *tradition*. Each comes with its own notion of "center." Cognitively orientated style analysis, such as that in the work of Meyer and Gjerdingen, is centered around stylistic archetypes or schemata. Historical and cultural hermeneutics, such as in the writings of Scott Burnham and Steven Feld, finds its centers in base or root metaphors, which are analogous to regulative myths.

Style analysis and tradition critique lean, respectively, toward the realist and constructivist sides of metaphor theory. Metaphors are realist when they foreground the motivated or experientially grounded nature of knowledge. Metaphors are constructivist when they emphasize the imaginative freedom intrinsic to "hearing as" effects. Both of course work together within a single dialectic. On the one hand, history is simply *there*; it cannot be freely selected in the way we choose a metaphorical system by Schenker or Meyer. We can decide not to hear a Haydn quartet in terms of what Gretchen Wheelock styles "the metaphor of conversation," the "witty exchange among familiars" (1992, 90); but that would be to deny something essential about the music. On the other hand, we are always distanced from history; history is a story we tell by constructing interpretational frameworks. To borrow the art-historian Michael Baxandall's useful distinction, we are not participants but observers (1985, 109). Up to a point, we can learn to participate in other cultures, just as we learn a foreign language. But this "participant's understanding" can yield only crude generalizations that would strike insiders as "simplistic and tactless" (Baxandall 1985, 110). Nevertheless, our very detachment gives us perspective from which we can make comparisons and detect patterns invisible to insiders.

The interplay between participant's understanding and observer's understanding that Baxandall posits is comparable to the two sides of systemic metaphor. Style analysis assumes participant's understanding, given that learning a style is in many ways analogous to learning a language. Hermeneutic historiography and ethnography assume observer's understanding predicated on historical and cultural distance and "hearing as." In the former, the center is motivated; in the latter, the center is recuperated.

## *Motivating the Center*

Style assumes an historical center, and learning a style gives us access to it. This is the implication of Meyer's *Style and Music*. Meyer uses melodic schemata as constants against which to measure the evolution of style across the eighteenth and nineteenth centuries. Meyer sees this evolution as a gradual shift from culture to nature, from a classical style that is "rule-governed, learned, and conventional" (1989, 209) to a "repudiation of convention" (164) in romantic music. He identifies convention with changing-note schemata, one of which (the $\hat{1}$–$\hat{7}$ . . . $\hat{4}$–$\hat{3}$ schema) we have already looked at in the three examples from Bach, Mozart, and Beethoven. Nature is epitomized by turn-like axial and gap-fill melodies; these are prevalent in all styles—even serialism—and thus represent invariant (that is, "natural") psychological processes. Nature and nurture always mix, of course, but this mixture is graded: "in changing-note melodies nurture (syntactic convention) dominates nature, while in axial [and gap-fill] melodies nature dominates nurture" (245). Meyer's striking move is to associate two distinct stylistic types with different points in history, and to conceive of one as a deviation from the other. This is to give history a center, analogous to the center of a musical structure. When Robert Gjerdingen, Meyer's student, explored the $\hat{1}$–$\hat{7}$ . . . $\hat{4}$–$\hat{3}$ changing-note schema

at greater depth, he pinpointed this center to the 1770s, when its use reached a peak (Gjerdingen 1988). This is also the time when Mozart wrote his Piano Sonata in G Major, K. 283. Is Mozart's sonata at the center of music history? Of course not, and Gjerdingen never makes this claim. But *A Classic Turn of Phrase* outlines three major areas where prototype theory can help our historical understanding. First, it shows that history, though distant, can still be accessible; it can be learned and internalized. A schema is a basic-level category and mixes perception and knowledge. Perceptual principles are universal, and knowledge can be acquired. Second, schema theory shows that we need not worry too much about the exact compass or content of an historical framework. As a prototype, a schema is a radial category. It is a loose network rather than a rigid set, defined not by the precise presence or absence of features, but by their distance from a prototypical center. Third, it shows that the cluster of motivations which ground a center is in fact what makes a schema historical. An historical center, properly defined, is simply the time when the features that constitute the schema are maximally motivated. The heyday of a style is when everything fits together.

## ACCESSIBILITY

Paradoxically, a schema is both quintessentially factual and easily internalized as a mental model. Since a fact can also be historical, learning a schema collapses the distinction between past and present. In the real world, a schema is a miniature plot or set of directives in our minds by which we run our lives. For example, the "restaurant schema" tells me to expect a waiter to take my order after I sit down, the courses to be served in a particular sequence, to be issued with a bill at the end, and so on. In musical terms, Meyer sees a schema as both a "replicated style-chunk" (1989, 234), hence a musical fact, and a "fundamental framework in terms of which culturally competent audiences . . . perceive, comprehend, and respond to works of art" (cited in Gjerdingen 1988, 47), thus a mental model. What Gjerdingen adds to Meyer is, chiefly, a mature theory of categorization based on prototype theory and a more up-to-date knowledge of computer science. Hence, when he calls a schema "a set of features combined to form a specific structural complex" (45), he is relating musical structure to the connectionist theory of the mind as a neural network. A schema, then, is a quasi-mental network. Music becomes a metaphor for mind.

A schema is a basic-level category because, though a mental structure, it is also a chunk of real music. It is concrete primarily because it is holistic—a network of features combined into a structural complex, rather than an isolated feature (such as a chord or motive). Gjerdingen's diagram of Mozart's $\hat{1}$–$\hat{7}$ . . . $\hat{4}$–$\hat{3}$ schema presents it clearly as a "coordinated set of movements" (Gjerdingen 1988, 64), a whole (fig. 1.1):

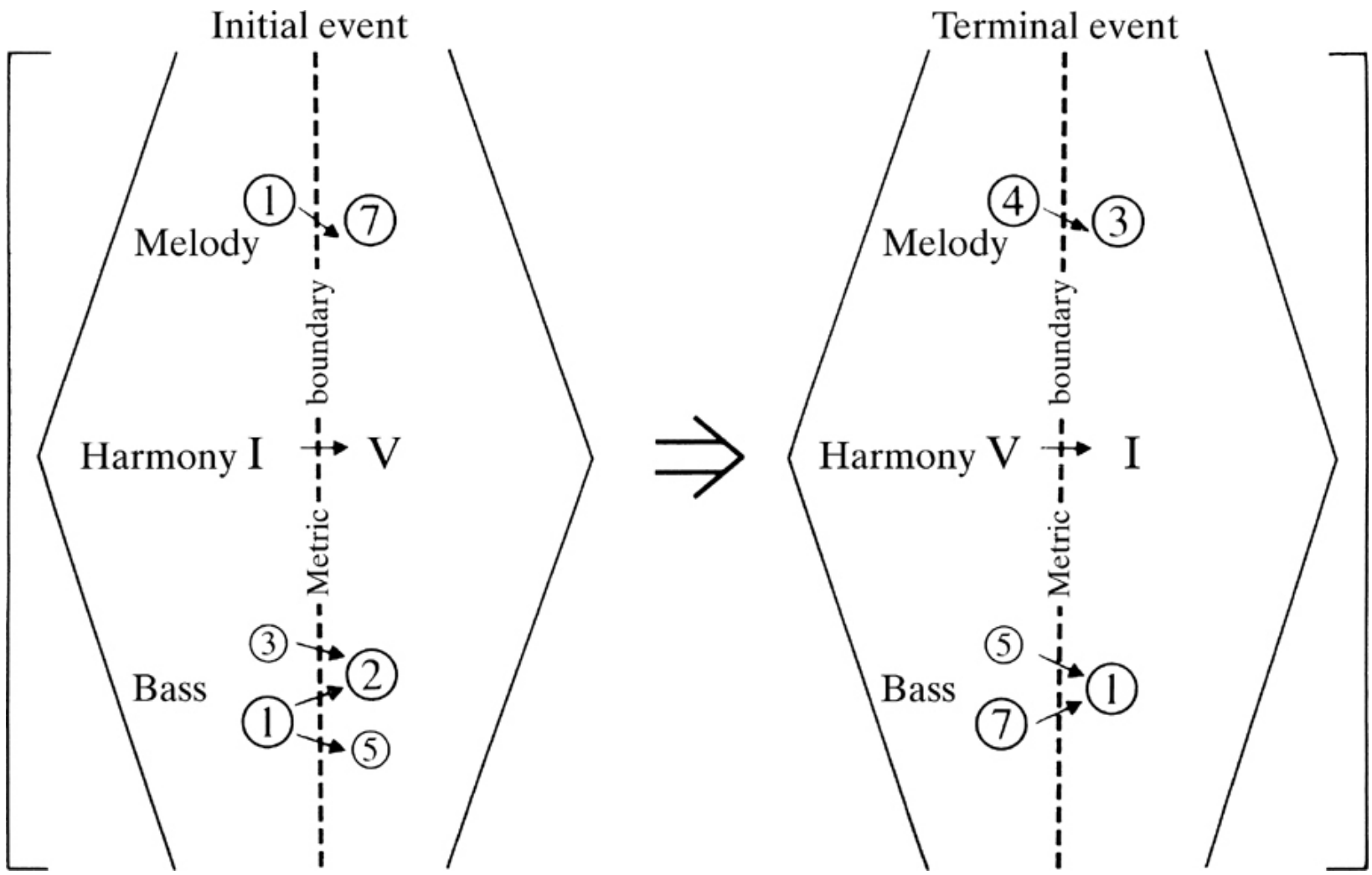


Figure 1.1 Gjerdingen's graph of Mozart's schema

The schema comprises two events: an initial subphrase answered by a conformant subphrase. Confronted by the initial event, a competent listener will expect the second; it is therefore as much a stereotyped sequence of actions as any schema in the real world (as in expecting the waiter to take my order). The musical schema coordinates melodic, harmonic, and rhythmic events. Thus, in the initial event, a scale-step progression from $\hat{1}$ to $\hat{7}$ is supported by a bass-line movement from $\hat{1}$ to $\hat{2}$, an inner-voice line from $\hat{3}$ to $\hat{2}$, and a shift from tonic to dominant harmony. Most importantly, the melody's $\hat{1}$–$\hat{7}$ motion traverses a weak-to-strong rhythm. The exact placement of the metric boundary in the first event is repeated in the second event.

## TYPICALITY

The $\hat{1}$–$\hat{7}$ . . . $\hat{4}$–$\hat{3}$ schema is a prototype. It can be defined only in terms of its typicality, not according to a set of invariant core features. Its constituent elements generally cluster together in the same package, but there are many instantiations of the schema in which one or more features are missing or changed. These variant, or deviant, instantiations are defined in terms of distance from a prototypical center. The typicality of the $\hat{1}$–$\hat{7}$ . . . $\hat{4}$–$\hat{3}$ can be better appreciated as a particularly ideal member of the family of changing-note schemata. Changing-note schemata (others include the $\hat{1}$–$\hat{7}$ . . . $\hat{2}$–$\hat{1}$, or $\hat{3}$–$\hat{2}$ . . . $\hat{4}$–$\hat{3}$) are themselves "central" because they constitute a perfect blend of formal symmetry and dynamic process; hence Meyer calls them a *tertium quid*. Unlike other members of the changing-note family, the $\hat{1}$–$\hat{7}$ . . . $\hat{4}$–$\hat{3}$ has a big enough gap (between the $\hat{7}$ and the $\hat{4}$) to generate rich formal implications (either a gap-fill descent or further leaps). One may also go beyond Gjerdingen and explain the $\hat{1}$–$\hat{7}$ . . . $\hat{4}$–$\hat{3}$'s typicality psychoacoustically. Its intervallic structure—two semitones separated by a tritone—conforms to the theorist Richmond Browne's "rare interval hypothesis" (1981). Browne argues that listeners are most highly sensitized to semitones and tritones because these are the rarest intervals in the diatonic pitch set (a C major scale contains two semitones, E–F and B–C, and one tritone, B–F). These intervals consequently function as perceptual cues, giving

listeners their sense of key. The $\hat{1}$–$\hat{7}$ . . . $\hat{4}$–$\hat{3}$ schema thus became prototypical of first subjects in part because it established the tonic with particular efficiency.

The schema's typicality is thus defined not by any invariant set of features, but by a network of overlapping motivations; structural, stylistic, and psychological. A schema's motivation is therefore multidimensional; in Meyer's words, a schema endures—that is, it achieves compositional success—because it is "congruent both with human perceptual/cognitive capacities and with prevalent stylistic constraints" (51).

### HISTORICITY

Historically, Gjerdingen's statistical survey concludes that the $\hat{1}$–$\hat{7}$ . . . $\hat{4}$–$\hat{3}$ schema reached its peak in the early 1770s. Earlier and later instantiations (such as the Bach passion and the Beethoven quartet) may have some of its features, but not in the prototypical arrangement. For example, the Bach is notably missing the schema's antecedent-consequent phrase structure. Moreover, Bach's melody sits mostly on a pedal point, whereas the schema's typical bass line moves in step with the top voice. The schema, then, which is shared by the Bach, Mozart, and Beethoven examples, is most congruent with its style in the Mozart sonata. The work is thus prototypical both formally and historically. We can imagine history as a radial category, with noncentral, distal instantiations of the schema stretching back to the baroque and forward to the nineteenth century, around a central 1770 prototype.

## *Interpreting the Center*

Yet the situation from which we view the past is itself colored by values. That is not to say, however, that the supposed reality of the past is entirely a figment of our historiographical imagination. Rather, the truth, instead of being immediately posited, emerges through a dialogue between our own horizon and that of the artwork. Meyer and Gjerdingen presuppose that eighteenth-century consciousness is immediately accessible; indeed, the ostensible simplicity of their musical materials fosters the illusion of transparency. By contrast, historical hermeneutics, after Hans-Georg Gadamer, proceeds from an assumption of estrangement, not familiarity. Gary Tomlinson contends that understanding (Gadamer's "fusion of horizons") is reached only after a complex process of negotiation (1993). The crux of the matter, however—and this is where the two approaches converge—is that hermeneutics is also predicated on a bedrock of identity in the form of connectedness within a common and continuing tradition. At the heart of this claim is a rather obvious point: to accept that historical writing involves interpretation is clearly not the same as saying that interpretation is necessarily groundless. Tomlinson latches onto Gadamer's key insight that interpretation can never be entirely subjective, since it always springs from a living historical tradition. The value judgments or prejudices that we project onto ("lay over," in Tomlinson's phrase) historical data are themselves shaped by this tradition: "we should understand our prejudices as the framework itself of our historical experience. They reveal our participation in the traditions that make the past accessible and comprehensible to us in the first place" (21). Gadamer's notion of an "effective-historical consciousness" (1975, 267), which Tomlinson explains as "the ever-moving sense of the historical situatedness and connection of ourselves and our data" (21), is essentially an extension into historiography of metaphorical motivation. Once we grant our connectedness with an accessible past, however strange, the question of whether or not this distance can ever be completely bridged becomes only a moot speculation—a relic of the objectivist search for rational absolutes. The center can be recuperated.

I want to compare two studies in metaphorical connectedness, both of which show how music can motivate the tools of its own representation. Moreover, the affinity between these two studies suggests a deeper kind of connectedness, which may underlie cultures that are to outward appearances vastly different.

### THE *EROICA* MYTH

One of the many things revealed in Scott Burnham's *Beethoven Hero* (1995) is that qualities inherent in a piece of music shaped the tools by which it was later analyzed. Furthermore, these same analytical methods were then applied to the musical tradition as a whole. The piece in question is Beethoven's *Eroica* Symphony, a work central to the Western canon. The persistence of its appeal testifies partially to the continuity of a tradition, in which contemporary listeners can still identify, however nostalgically, with the "heroic" values of Beethoven's time—values that of course the *Eroica* helped create. But this persistence is also transmitted through the institutional mechanism of analytical models. According to Burnham, the work's compellingly dynamic and humane qualities ("its uncanny sense of presence that is linear, continuous, weighty, and inexorable" [66]) prepossessed generations of analysts, who then metaphorically represented their experience in different analytical metalanguage: A. B. Marx as a conflict between the formal agencies of *Gang* and *Satz*; Schenker in terms of the forward impulse of the *Urlinie*. One might thereby infer that, rather than being abstract models imposed *on* the music, these analytical categories are actually metaphorical projections *from* the music.

Burnham can thus map the history of analysis as a series of removes from a central core: the nearer the prototypical center, the more metaphorical. Hence, when Marx and his fellow critics represent the *Eroica* in terms of heroic plots, rather than the more technical metalanguage fashionable today, they are "responding *metaphorically* to something of great moment in the musical process, something that we would today be inclined to describe syntactically or stylistically" (1995, 17). A Schenkerian graph, although still connected with the *Eroica* tradition, is nevertheless more distant from the center, because more abstract. Burnham can spatialize history as a radial structure because he is careful to define the *Eroica* not as a work so much as a myth—an archetypal heroic plot rendered in tones. The symphony is a story Beethoven tells about this mythical plot, just as much as the "stories" told by its analytical reception (and the composed stories echoing down through the history of romantic symphonic music). All of us, including Beethoven, are involved in telling metaphorical stories about the *Eroica*. In exploring how a masterwork can hold a musical culture together across time, Burnham is endowing the *Eroica* with the same kind of regulatory force anthropologists attribute to myth in *pensée sauvage*. The piece plays an intermediary role in the cycle of cultural production and reception, reflecting the values of Beethoven's time and then feeding back to enact, reassert, and change them.

## "THE BOY WHO BECAME A *MUNI* BIRD"

What makes the conceit of *Eroica* as myth so powerful is that, like a corrosive acid, myth dissolves sedimented boundaries in any cultural model, revealing its basic unity. These levels are most porous in cultures whose music theory is not score-bound. Alan Merriam (1964) was among the first anthropologists to argue that an absence of literacy was not in itself prejudicial to a culture's ability to theorize music. Steven Feld's study of Kaluli music aesthetics in his *Sound and Sentiment* (1982) is to date the most spectacular confirmation of this thesis.

Feld's book is based on firsthand ethnographic fieldwork with the Kaluli tribe of Papua New Guinea. It argues that every aspect of Kaluli musical culture—its songs and poetry, its theatrical and religious rituals, its theories of emotion and meaning, even its codification of birdcalls—is organized by the myth of "the boy who became a *muni* bird." According to Feld, "the myth's central theme of 'becoming a bird' stands out as a metaphoric base for Kaluli aesthetics" (14). The tonal organization of *gisalo*, the Kaluli's main song type, is a descending melodic tetrachord, and it is identical to the call of the *muni*, a type of fruit dove (*Ptilinopus pulchellus*). The bird's call suggests to the Kaluli the sound of a high human falsetto, specifically the crying of the child at the center of the myth. This myth tells the story of a boy who becomes a *muni* after being denied food by his sister, a social provocation analogous to death. At the point of flying away, the boy's weeping is transformed into bird-song, which, in turn, moves the sister to tears. The myth, therefore, helps the Kaluli explain many aspects of their culture to themselves: the origin of music, the origin of reflective language

(poetry), the passage from life to death (the society of birds represents the afterlife), and the relationship between sound and sentiment. Kaluli aesthetics is thus dominated by birds. "Becoming a bird," then, is "the core Kaluli aesthetic metaphor" (217), and this individual metaphor finds its place in the vast network of interlinked values, images, and symbols that make up cultural metaphor.

Burnham detects not one but two separate sources for the analytical metaphor of motion: first, a musical *work* (the *Eroica* Symphony); second, the musical *concept* of motion (associated with melody). So too, the Kaluli metaphorically map from two domains: not just the *muni* myth, but also the motion of water. There are distinct differences, which can be defined, respectively, as "discursive" and "conceptual." Like a musical work, a myth is a discourse unfolding in time, a syntagmatic chain composed of metonymic links. Feld follows the classic structuralist method of Claude Lévi-Strauss in viewing metaphor as the end result, the product, of structural analysis. After the story of the *muni* bird has been chopped up and distributed into vertical paradigms, the analyst can uncover metaphorical relations between its various episodes: "a structural analysis shows how metonymy becomes metaphor, how it is that the mixing of contexts in story episodes turns intrinsic relations into symbolic ones" (38). "Metaphorization," therefore, comes as the last stage, after the stage of "provocation" (social disturbance = denying the boy food) and "mediation" (boy turns into bird). This is metaphor from the perspective of structural anthropology, as the mediation of logical oppositions. It has nothing to do with metaphor as conceptualization, the process by which the Kaluli map from water.

Feld finds that "Kaluli song terminology and conceptualization of musical form relate systematically to the terminology of waterfalls, water sounds, and water motion" (164). The word *sa* means both "waterfall" and the melodic interval of the descending minor third. *Sa-gu* stands for "waterfall sound" as well as tonal center. *Gulu* is onomatopoeic for a waterfall's long continual flow but also means "to sing a line that moves to and ends on the tonal center" (168). The terraced contours of melodic descents are likewise described in terms of the descent of the water to the pool beneath. Even the singer's compositional act of inserting words into a melody is compared to "a waterfall flushing down into a waterpool"—that is, both the melody and the pool are receptacles (166). All in all,

> the Kaluli language . . . paradigmatically relates two semantic fields—sound and water—permitting both shared connotative and denotative features of the two domains to be linked in systematic metaphor. Kaluli musical theory, then, verbally surfaces in metaphoric expression. (165)

## TOWARD A THEORY OF CROSS-CULTURAL METAPHOR

Neither Burnham nor Feld theorizes the difference between the discursive and conceptual sides of their systemic metaphors: between motion identified with a mythical discourse (the hero's journey, the *muni*'s song), and motion grounded in physical or environmental experience (such as the movement of water). A metaphorical theory of dual foundations, with its notion of experiential image schema, would elucidate these differences.

A mature, cognitive theory of metaphor (as distinct from Burnham's hermeneutics and Feld's structuralism) would also help us theorize the commonality of metaphorical processes across cultures. In the current climate, this is an extremely contentious issue. To approach this question, one must first get rid of some basic misnomers about comparative anthropology. This is what it does *not* mean: it is not a hunt for musical universals, nor a search for the origin of music; nor has it anything to do with the so-called discourse of world music, which represents the encroachment into musicology of post-colonial studies (see Born and Hesmondhalgh 2000). The latter is interested, for example, in how the West exploits the cultural capital of the third world, as when record companies sample Pygmy songs without remunerating the native musicians (Feld 2000). Comparative anthropology reflects, instead, the merging of cultural theory with cognitive linguistics. Such pathbreaking books as Gary Palmer's *Toward a Theory of Cultural Linguistics* (1996) explore how cognitive models operate across different ethnic contexts: Bedouin lamentations, spatial organization in Coeur d'Alene place names, Kuna narrative sequence, the domain of ancestral spirits in Proto-

Bantu noun-classifiers. This is assuredly not an exercise in leveling; rather, it is an attempt to understand.

Written in the early 1980s, *Sound and Sentiment* is very much cultural linguistics *avant la lettre*. Two of its conclusions stand out with particular force: first, that supposedly primitive societies can have a self-reflective music theory—a poetics—every bit as sophisticated as our own; second, that it can be learned by an outsider to the satisfaction of the insiders (Feld performs their music back to the Kaluli and is constantly alert to their responses). Feld will never be totally accepted by his hosts, but his experiment does indicate that a Westerner's negotiation with the Other can be graduated as a scale of cultural informedness. Stylistic competence is thus appraised in terms of distance or proximity to a center; this is to pick up on a core idea of John Blacking's (1995, 178), an ethnomusicologist who evangelized the once-unfashionable idea of a musical commonwealth of experience. Although Feld is careful not to associate his work with the outmoded structuralist canard of musical universals, *Sound and Sentiment* does suggest that diverse cultures share common mechanisms for creating meaning. He begins to shift the basis for commonality from content to technique; from the abstract algorithms of structural anthropology to embodied and performative acts. Referring to Hugo Zemp's parallel research (1978, 1979), Feld points out that the Kaluli's metaphoric processes are also common to the 'Are'are people of Malaita in the Solomon Islands, who conceptualize music not in terms of water but of bamboo. If the metaphorical imagination can be shared by societies as disparate as the Kaluli and the 'Are'are, why not also by Europeans of different centuries?

# 2
# *Conceptualization*

## 1. MUSIC AND METAPHORICAL THOUGHT

I would like now to lay my cards on the table and say exactly what I mean by "metaphor." The two parts of my bidirectional theory of musical metaphor are outlined below in the following two chapters. But why do we need two parts? I contend that music can be a source as well as a target for metaphorical mapping, and that musical experience shapes thought just as thought shapes music. The main limit of current cognitive theories of metaphor is that they do not engage with mainstream aesthetics. Of course, cognitive science was never designed to deal with aesthetic questions, and theorists who apply Lakoff, Johnson, and others "neat" to music as an art form are missing something vital. The big question is whether metaphor as model (cognitive metaphor) and metaphor as trope (poetic metaphor) have anything in common. The underlying question is whether "scientific" and "artistic" kinds of imagination are connected with each other, which leads to the key issue of schematism. Both Mark Johnson (in cognitive science) and Paul Ricoeur (in literary poetics) ground their theories of metaphor in Kant's theory of the schema. Schematism will be the pivot between the cognitive and aesthetic sides of my theory of musical metaphor.

The notion of schema as hinge is central also to how I view conceptualization itself, and this accounts for the main difference between my approach and that of other writers on musical metaphor, who see the schema more as a *source* for projection. Another difference is the leading role I give to mapping from basic-level and prototypical categories, which I term, following Eve Sweetser, "deontic [or "root"] to epistemic," where "deontic" is equivalent to basic-level or prototypical categories, and "epistemic" the same as superordinate. I will show how deontic-to-epistemic mapping gives us an escape hatch from the all-or-nothing dilemma that plagues music psychology. Faced with the choice between the messy realities of complex scores and the impoverished clarity of empirical data, music psychology invariably sides with the latter. I contend, however, that this is a false choice: cognitive processes can still be studied at the higher reaches of musical culture with material that is rich and humanly interesting.

### *The Schema as Hinge*

A schema is a hinge between the dual aspects of musical material: the intramusical and the cross-domain. In other words, these aspects are isomorphic with each other on the basis of a common array of experiential image schemata. Figure 2.1 models this relationship, showing how intramusical and cross-domain metaphors comprise complementary mappings from the same schemata:

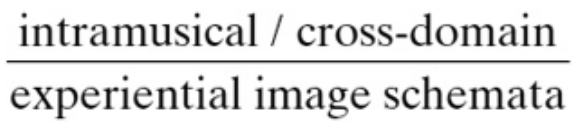



Figure 2.1

This model is projected onto a more abstract level through metonymy and metaphor proper. Metonymy, which governs part/whole relationships within musical structure, maps from a basic-level (or prototypical) category onto a superordinate level. Metaphor proper (which Lakoff confines to

operations between experiential fields) elaborates cross-domain mappings into projection of full-scale cultural metaphors (including historical culture). Both analytical and cultural metaphors are systemic, consisting of broad networks of values and concepts. Although at this level of complexity they interpenetrate, it is important to keep in mind that they spring from opposed sources: intramusical and cross-domain (fig. 2.2).

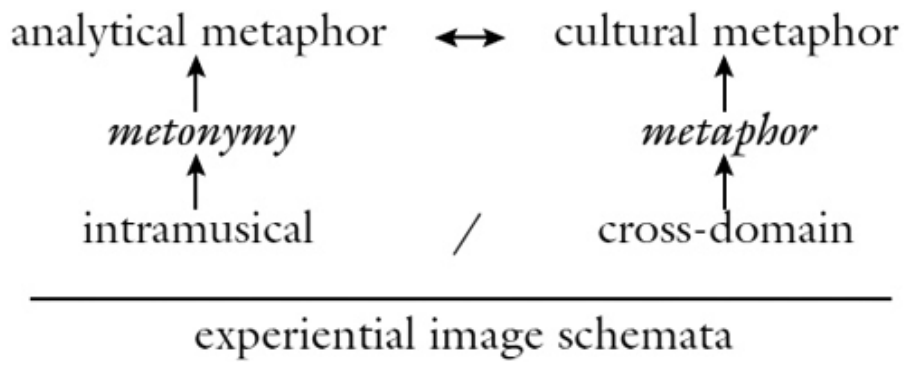



Figure 2.2

My diagram may misleadingly suggest that the three levels of schematism, metaphor, and prototypes are fixed and discrete. In fact, schematization, metaphorical mapping, and prototype effects are also principles permeable to each other. Thus we have prototypical schemata, such as CENTER/PERIPHERY, PART/WHOLE, and PATH, which in certain cases can organize subschemata (such as UP/DOWN, SCALE, BALANCE, FORCE, etc.). What renders a schema prototypical is a cluster of motivations. Similarly, as well as being a ground, schemata can function as sources for mapping, by which people project from bodily experience onto concepts and language. Lakoff, Johnson, and Turner all apply the term "cross-domain" to mappings both between image schemata and concepts and within conceptual fields themselves. The reason for this dual application of cross-domain is that long before Lakoff and Johnson formulated their notion of "image schema," they presented this distinction in terms of two types of metaphor: "orientational metaphor" versus "structural metaphor." Structural metaphors are "cases where one concept is metaphorically structured in terms of another" (Lakoff and Johnson 1980, 14). A much-cited example is the metaphor ARGUMENT IS WAR, which maps from the concept "war" onto the concept "argument." Conversely, "orientational metaphors [generally] have to do with spatial orientation: UP-DOWN, IN-OUT, FRONT-BACK, ON-OFF, DEEP-SHALLOW, CENTRAL-PERIPHERAL" (14). They arise "from the fact that we have bodies of the sort that we have and that they function as they do in our physical environment" (14). Thus orientational metaphors are schemata all but in name, and, like schemata, they are more fundamental than structural metaphors. Indeed, they were superseded by image schemata once this notion was developed. In Johnson's mature writings, image-schematic mapping totally assimilates orientational metaphor. By contrast, Lakoff's later collaboration with Mark Turner considers the two side by side (Lakoff and Turner 1989, 89–100), albeit without laboring the issue of grounding. Hence, in Lakoff and Turner's analysis of a famous Emily Dickinson poem ("Because I could not stop for Death"), the structural metaphor DEATH IS DEPARTURE is said to make use of the orientational metaphor STATES ARE LOCATIONS, but without according the latter foundational status. Nevertheless, a clear demarcation between schematic and metaphorical levels is especially important, I insist, when we add the further dimension of mappings between bodily experience, concepts, and music.

Talk of concepts brings us to the possibly confusing notion of "conceptual metaphor." It is not clear where in my diagram the level of conceptual metaphor might lie (is it a sublevel of the schematic level, perhaps?). From the point of view of cognitive science, all metaphor is conceptual, of course. A particular conceptual metaphor is a mapping that has become conventionalized. This happens with image-schematic (or orientational) mappings, such as STATES ARE LOCATIONS (which we considered in chapter 1 with Schenker and Meyer), as well as structural, cross-domain mappings between concepts, as in ARGUMENT IS WAR. Conventionalization in my diagram

happens, metaphorically, in the standardized pairings between intramusical and cross-domain, and schematically, in their habituated association with foundational image schemata. This becomes clearer when we move on to consider the six constituent metaphors I introduced in chapter 1.

At a basic level, dual-aspect perception divides into six prototypical "listening types," or, more precisely, three pairs of prototypes: harmony/painting, rhythm/language, and melody/life. Each pair is based on a common schema that generates the conceptual structure (radial, hierarchical, or processive) underpinning both aspects (fig. 2.3).

| harmony/painting | rhythm/language | melody/life |
|---|---|---|
| center/periphery | part/whole | path |

Figure 2.3

## THE CENTER/PERIPHERY SCHEMA (RADIAL STRUCTURES)

"The fact of our physical embodiment," says Johnson, "gives a very definite character to our perceptual experience" (1987, 124). The world radiates from the perceptual centers of our bodies, from which we see, hear, and touch our environment. Perceptual experience is organized according to a CENTER/PERIPHERY schema (fig. 2.4), the schema for radial structures (Lakoff 1987, 283). From the vantage point of a perceptual center, things fade off into the periphery of an horizon. As in perception, so in experience, where we evaluate the emotional, social, and philosophical concerns of our *Lebenswelt* in terms of proximity to a more metaphorical center.

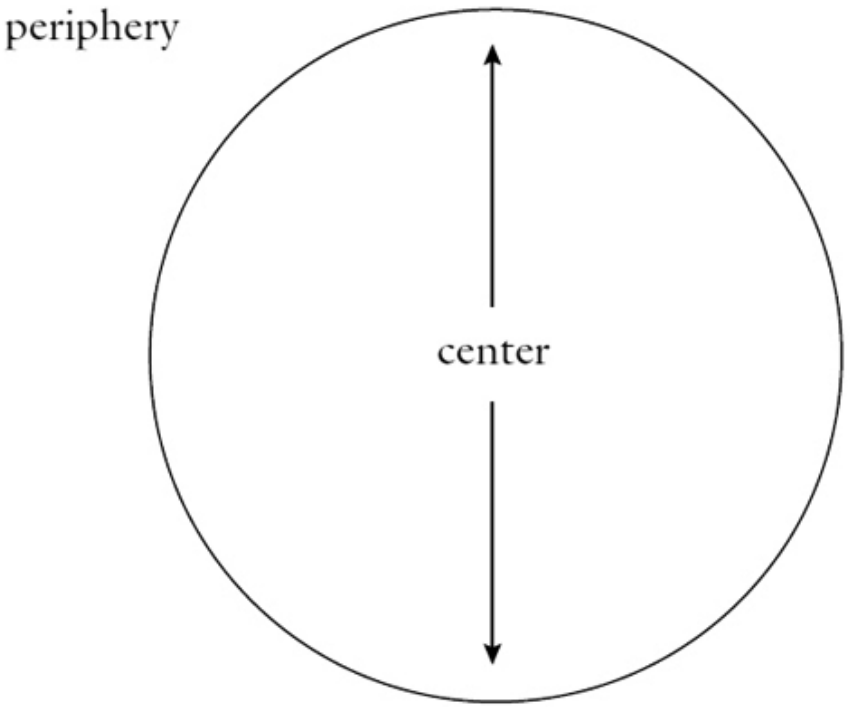



Figure 2.4

Like the visual medium of painting, harmony is appraised according to distance toward a center of intervallic perfection: the perfect consonance of the unison or octave. We navigate tonal space in terms of departure from and return to a tonal center. Just as we can open up new perceptual territories by moving toward the horizon, we create transitory tonal centers by modulating. The visual medium of painting finds its center in line. Color decorates line just as musical ornaments (including harmonic "color") decorates the musical line of counterpoint or melody.

## THE PART/WHOLE SCHEMA (HIERARCHIES)

At the moment we are born, we are tethered via umbilical cords to our biological mothers. The severing of this cord pitches us into a lifelong process of metaphorical linking, bonding, and connecting. We learn to understand our bodies as articulated into faculties, limbs, and digits. From

the physical and spatial, we project onto the temporal, causal, and logical as we learn to perceive similarity relations and patterns in our environment. We also integrate ourselves within family and social groupings. Reasoning entails drawing connections between ostensibly unrelated events, and language expresses this via the logical connectives of grammar ("and," "but," "if-then"). PART/WHOLE SCHEMATA govern how we understand *hierarchical structures* (Lakoff 1987, 283; fig. 2.5).

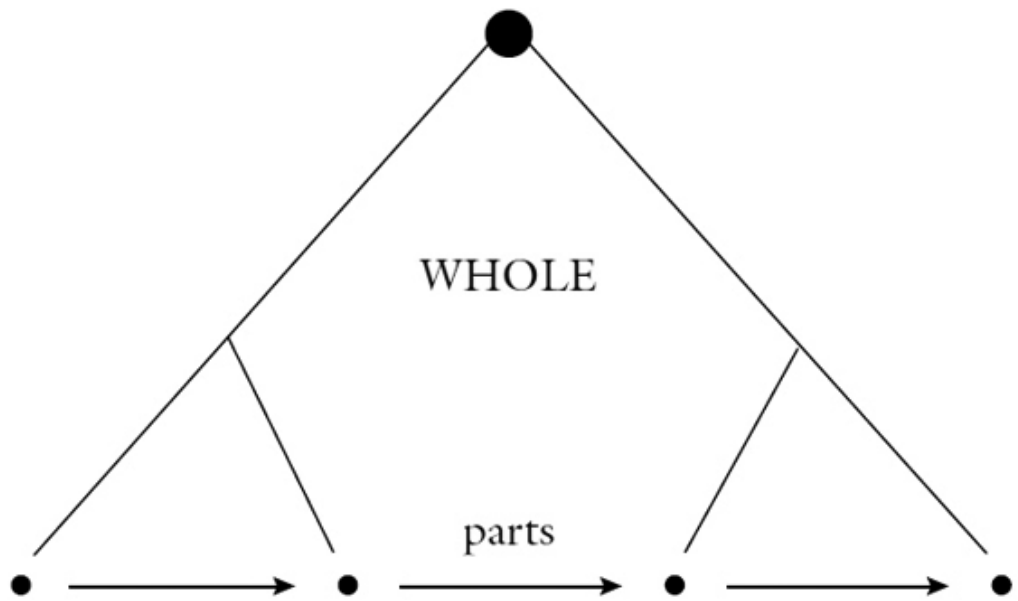



Figure 2.5

The articulation of musical language is rhythmic. We link one beat to another, one section to the next, in rising metrical patterns, punctuated with various degrees of closure and interruption. Just like linguistic syntax, rhythm can be inflected, inverted, or transformed.

THE "PATH" SCHEMA (PROCESSES)

From the time we can first crawl, our lives are filled with paths. There are physical paths from a source to an intended destination, but also metaphorical ones, such as goal-directed activity, changes in emotional or psychological state, the steps of an argument or story, even the passage of time. According to Johnson, "in all of these cases there is a single, recurring image-schematic pattern with a definite internal structure" (113). The parts of this structure are (1) a source, or starting point; (2) a goal, or endpoint; and (3) a sequence of contiguous locations connecting the source with the goal (fig. 2.6). Conceptually, paths entail processual structures.

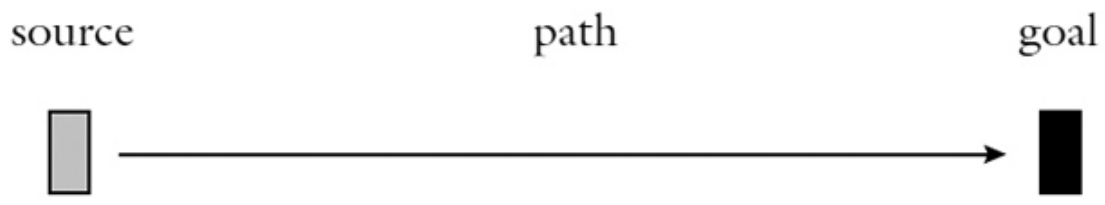



Figure 2.6

Paths are pervasive in music. A piece "moves" from beginning to end along a network of formal and harmonic pathways: from first to second theme group, from C major to G major, from one note to another. As in life, a musical path may encounter interruptions and digressions, such as an interrupted cadence or a formal episode. The prototype of musical motion as a path is the curvilinear course of melody, whose tensions and resolutions are subject to the "gravitational pull" of the tonic and the "momentum" of pattern continuation. But the fact that melodic flow can be generalized so easily to music as a whole is indicative that the path schema is perhaps the most vital one of all. Motion is quintessential by dint of its relationship to temporality, which is arguably the basic horizon of human experience. Motion is life.

Taking into consideration these three pairs of prototypes, the overall model looks like figure 2.7. This model outlines the three dual-aspect systemic metaphors that I unfold in part II. Here, the metaphors of music as harmony/painting, as rhythm/language, and as melody/life are associated with three historical epochs: baroque, classical, and romantic. Part II of my book also shows how these metaphors are cognate with contemporary theories of metaphor. Thus metaphor was explained in terms of proportion and vision by the baroque, of rhythmic gesture and poetic expression by classical theorists, and of dynamic or organic process by the romantics.

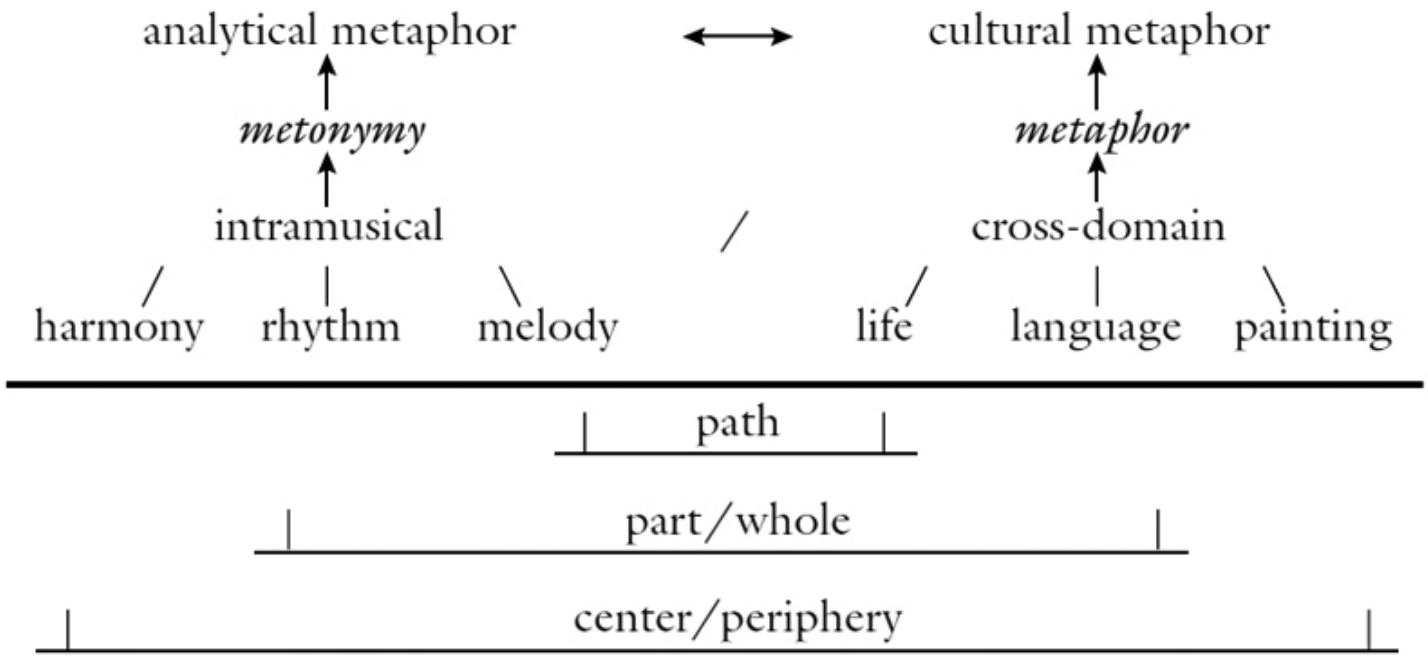



Figure 2.7 Experiential image schemata

My nesting of the three schemata indicates something remarkable about the archaeology of musical metaphor. At each musical period, a particular conceptual structure, associated with a particular image schema, happened to be prototypical. Further, although the three metaphorical pairs seem coextensive to us today, my "secret history" reveals an implicit ordering and functional priority: harmony/painting came first (seventeenth century), followed by rhythm/language (eighteenth century), with melody/life coming last (nineteenth century). This broad drift from the spatial (harmony) to the temporal (melody) accords with the neo-Darwinian evolutionary perspective of cognitive semantics. Lakoff's spatialization of form hypothesis, which requires "a metaphorical mapping from physical space onto 'conceptual space'" (1987, 283), makes claims both about the history of language (phylogenesis) and the order by which individuals acquire it (ontogenesis). Similarly, Eve Sweetser, looking at the historical order in which words receive new senses, finds that "spatial vocabulary universally [i.e., in *all* languages] acquires temporal meanings rather than the reverse" (1990, 9). Putting music theory on a Darwinian footing is a tall order that is of course far beyond the remit of this book. But one can begin, tentatively, to follow in the tracks of philosophers such as Ruth Millikan (1984), who proposes that language and thought are as much "biological categories," with "proper functions," as a heart that pumps blood (19). Of course, this is a hugely contentious claim to make. Here and throughout the rest of this chapter, I refer to theorists working in disciplines in an evolving state of empirical research, areas subject to debate, proof, and possible falsification. In a book this size, I can do no more than pull out key ideas. Nevertheless, even adumbrating this broader agenda is important in order to put distance between new metaphor theory and the shopworn synchronic-diachronic progressions of the structuralists. The agenda of metaphor theory is ultimately not structuralist, but bioevolutionary.

## 2. SCHEMATISM, METAPHORS, AND PROTOTYPES

My model indicates that projection happens from three sources: from schemata, from domains (metaphor proper), and from basic-level or prototypical categories. It is vital to keep these three

sources separate. Thus schemata are not metaphors so much as grounds for metaphors—a distinction overlooked by theorists such as Brower, Larson, and Saslaw, who propose that mappings happen directly from schemata. After explaining schematism more fully, I will outline how individual metaphors are elaborated into cultural systems. Finally, in what is perhaps the most novel strand of my theory, I will relate basic-level mappings to a range of other topics: grammatical extensions from deontic to epistemic senses; pedagogical progression in education theory; and Kuhn's notion of scientific paradigm as educational "exemplar," leading finally to the concept of "educational metaphor."

## *Schematism*

An image schema is a structure for organizing our experience and understanding. The question is whether a schema has cognitive reality in itself or is a foundational procedure on the basis of which experience is structured. My model indicates the latter: I view musical schemata as the ground that connects intramusical and cross-domain metaphors with each other. As such, I follow the classical definition of schema given in Kant's *Critique of Pure Reason*. A schema is for Kant a transcendental mental image that synthesizes concepts and intuitions. Schematism, part of Kant's "productive imagination," relates how the mind generates images that can fit concepts.[1] My "dual aspect" of intramusical/cross-domain parallels Kant's dualism of concept/image.

By relating schema to bodily experience, I also follow Johnson's extension of Kant's ideas from a transcendental to a cognitivist dimension. Kant took care to separate the intellectual faculties quite sharply from the realm of physical sensation, according them an a priori status. By contrast, Johnson argues that these faculties are actually constituted by bodily experience, so that mind and body are permeable to each other. Johnson thus takes issue with Kant's split between the realm of sensation on the one hand and the transcendental realm of human reason and freedom on the other, the "strict separation of the analytic from the synthetic, the a priori from the a posteriori, and the formal from the material" (Johnson 1987, 167). He questions Kant's assumption that "judgments of taste" necessarily bear no conceptual content. Instead, Johnson puts imagination and concepts on a continuum, with imagination central and concepts as a derivative from it. In a happy phrase, he suggests that "the Third Critique ought perhaps to be regarded as the 'First' Critique in importance, insofar as it elaborates a notion of imaginative meaning and understanding that makes possible our more abstract conceptual and propositional structures" (169).

I depart from Johnson, however, on the important matter as to whether schemata are accessible to introspection. I concur, rather, with Kant's thesis that schematism is "an art concealed in the depths of the human soul, whose real mode of activity is hardly likely ever to allow us to discover, and to have open to our gaze" (1986, 183). Kant had originally proposed the existence of schemata in order to ground the subject's capacity for reflective judgment, thereby escaping the infinite regress of invoking rules for rules. If schemata were available to consciousness, then we would have to explain their own grounding in something even more fundamental (see Bowie 1997, 56–58). Keeping schematism "concealed in the depths of the human soul"—as a procedure rather than a structure—avoids this problem.

The debate over schemata, as I take it, contests three issues: whether they are abstract or embodied, the distinction between "schemata" and "metaphors," and the extent to which they can be explicated at the level of theory. Mainstream interpretations of schema are simply variants on the notion of conventionalized cognitive pattern: conceptual networks, theoretical frameworks, even narrative plots or "scripts." Hence David Rumelhart defines schema as "generalized knowledge about a sequence of events" (1977, 165), Ronald Langacker speaks of "schematic templates representing established patterns in the assembly of complex symbolic structures" (1990, 16), and Gilles Fauconnier states that "the schema is a *frame* with *roles* that can be filled by elements of one or the other domain" (1996, 60). These are definitions of schema as a relatively abstract structure; Lakoff and Johnson's concept of schemata as embodied lies off center from this mainstream. It is striking,

nonetheless, that it is this notion of embodied schemata that has proved most attractive to music theorists, arguably because of the link it fosters between music's formal and performative dimensions (by contrast, Meyer's and Gjerdingen's abstract accounts of melodic schemata have proved to be a minority view, although, ironically, more typical of the cognitivist mainstream).

Careful to avoid an overly rigid definition, Johnson explains schema in a dynamic sense as "a recurrent pattern, shape, and regularity in, or of, [various] ongoing ordering activities" (1987, 29). Identifying a "weak" and a "strong" strand in Kant's theory of schematism, Johnson associates himself with the milder argument that schemata are structures, while stopping short of "his stronger thesis that schemata are procedures for generating images that can fit concepts" (29). By contrast, I find Kant's "stronger" thesis persuasive, as it is the best way of clearly separating schemata and metaphors. Schemata are thus the basis for metaphors, rather than metaphors themselves. The confusion between schemata and metaphors flows directly from Lakoff and Johnson's thesis that schemata are metaphorically projected onto concepts and language. But we keep closer to the spirit of Kant's original theory (his "stronger" thesis) when we understand a schema as a hinge between two aspects of metaphor. Intramusical and cross-domain metaphors are isomorphic by virtue of being elaborations of a single underlying experiential image schema, just as Kant's schema mediates between concept and image.

My model is thus radically different from the work of other music theorists who have attempted to apply Lakoff and Johnson's ideas to music. A literature on cognitive semantics and music has arisen with surprising speed. And yet there is an alarming trend to accept Lakoff and Johnson uncritically, to jump straight into elaborate analytical methodologies without any reflection on the philosophical undercarriage. A symptom of this haste is the elision of schema into metaphor, presuming mappings from a notional bodily structure onto musical structure with an unacceptable degree of immediacy. For a clear case of such immediacy, see Janna Saslaw's article "Forces, Containers, and Paths" (1996). Saslaw employs image schemata to explain how the nineteenth-century theorist Hugo Riemann structures tonal space. She seems to understand "cross-domain mapping in the conceptual system" (203) to mean primarily mapping from the body. Here are some of her interpretations of musical schemata:

1. CONTAINER: Riemann conceptualizes musical phrases as "containers" for harmonic events, portraying "secondary dominants as insertions into the container of the already expanded diatonic cadential progression" (226).
2. PATH: The stations of a cadential progression are understood as a path between a source and goal.
3. FORCE: Modulation, a forceful turning away from the path of the original key, represents the "force" schema.
4. NEAR/FAR: Riemann's unified tonal universe is organized in terms of proximity to a tonal centre, hence a NEAR/FAR schema.
5. BALANCE: The preoccupation with symmetrical harmonic relations around a central axis evinces a BALANCE schema.

Saslaw's approach is attractive in that it simplifies musical structure into accessible visual images while suggesting cross-modal links with the outside world. Cognitive semantics has been rendering grammatical constructions geometrically—circles, squares, lines, arrows, and such—for many years (see especially Lakoff 1987, 416–61; Langacker 1990). Certainly, the use of such visual aids conveys a whiff of a "new simplicity" movement, a *faux naïf* appeal to first principles. But the visual dimension also expresses the primal, cross-modal substrate unifying language and thought, on the basis of which "lexicon and grammar form a continuum of symbolic elements" (Langacker 1990, 12). Despite Johnson's oft-repeated warnings that his schematic diagrams should not be confused with images per se (1987, 23), it is undeniable that their appeal is largely due to the heuristic efficacy of pictures. An image schema, in brief, operates heuristically as half picture, half patterned bodily movement. Schematizing language thus cuts in two directions: toward metaphors of spatialization and toward metaphors of motion. Musical grammar is spatialized—imaged—into a landscape that we "walk." This very point is put by Mark Johnson himself, making his *entrée* into musicology in a collaborative paper with Steve Larson (2003). Johnson and Larson define the conceptual metaphor of musical time in terms of a landscape/motion opposition. Given that we typically conceptualize time either as "motion through space" ("The Moving Times Metaphor") or as a "landscape" through

which we ourselves move ("The Time's Landscape Metaphor"), we can imagine music as either "moving" past us or as a structure we navigate (audiences prefer the former, letting the piece flow past; analysts choose the latter, moving "through" or "across" a score).

Image-schematic mapping thus implicates music in complementary metaphors of landscape and motion. Strikingly, this dichotomy is also borne out by the split in current Anglo-American music theory between what one might term "spatializing" and "dynamic" tendencies. On the "spatial" side, the so-called neo-Riemannians follow Riemann in "imaging" tonality as a conceptual lattice of harmonic relations, navigated along "north," "south," "east," and "west" intervallic pathways (see Cohn 1999). Brian Hyer relates such imaging to Riemann's propensity for "theorizing hearing in terms of seeing" (1995, 104) and ultimately to Kant's notion of the "monogrammatic schema" (105). On the "dynamic" side, Schenker has been rescued from romantic ideology by the grounding of his metaphors of motion in physical reality. If Schenker's theory conjures up a world of purposeful action within a dynamic field of musical forces, then, argues Steve Larson, these effects are the result of mappings from actual forces, which he terms "gravity," "magnetism," and "inertia" (1997, 102). Larson sees musical motion as "a mapping of physical gesture onto musical space" (102). His theory enables Larson to redescribe the stability relation between melodic scale steps in "pitch space" (1993). Depending on which of these three metaphorical forces we choose to invoke, we can hear the scale-step succession $\hat{5}$–$\hat{4}$ in different ways. Gravity predicts continuation *down* to $\hat{3}$. Magnetism predicts continuation *to the closest stable pitch, which is* $\hat{3}$. And inertia predicts continuation *in the same direction* to $\hat{3}$. These three modalities happen to converge on the same scale step, $\hat{3}$, which is a good way of explaining why the pattern $\hat{5}$–$\hat{4}$–$\hat{3}$ is metaphorically so strongly motivated—in other words, exactly *why* it has become common practice.

These spatializing and dynamic tendencies come together in Candace Brower's recent work (2000), to date the most literal application to music of Johnson's schema theory. Brower cuts various swathes through tonal space ("chromatic space," "fifth space," "triadic space," "major-minor space"), configuring it alternately as paths, cycles, nested containers, and other schemata. "These schemas," claims Brower, "show in a general way how the various aspects of tonal organization are shaped by the image schemas that underlie them" (325).[2] The problem—typical, I have argued, of all these theorists—is that Brower collapses schema and metaphor into a single category, which she calls "music-metaphorical schemas" (325). When schemata are unchecked by any external control (i.e., metaphor and prototype effects), identifying and assigning them becomes an arbitrary matter. It also proves impossible to distinguish individual schemata from entailments and mixtures. Brower thus succumbs to two fatal slippages. First, schemata are imposed willy-nilly onto the three parameters of melody, harmony, and rhythm without discriminating among their particular properties ("tonal harmony appears to be structured by the same schemas as tonal melody" [340]; ditto rhythm [351]). I have argued, by contrast, that these parameters pair off with specific schemata. Second, a single schema—path—ends up swallowing all the others under the aegis of goal-directed tonal motion. Finally, Brower synthesizes all the schemata into a composite "schema for phrase structure," which "captures the way that harmony, melody, and rhythm work together to articulate a series of completed motions" (350). To claim that "rhythm makes the metaphor of goal-directed motion particularly vivid" (351) only makes sense, of course, from a Schenkerian perspective. (In Brower's concluding analysis of the "image-schematic structure" of Schubert's "Du bist die Ruh," her schemata serve merely to decorate a perfectly normal Schenkerian reading). So these are the twin blind spots of the project: a refusal to reflect either upon Johnson's original definitions, or upon the mediated character of Schenkerism itself.

As William Echard confesses (in an equally problematic "image-schematic analysis" of a Neil Young song), such applications of schema theory "just dress up well known intuitions in another jargon" (1999, 143). But this is surely going too far. Enough to say that "cognitive semantics" functions here really as a mask—or even a ventriloquist's dummy—for the true enterprise, which is the exploration not of metaphor but of tonal structure. The real issue is the nature of the relationship

between the two rival spaces of tonal structure: pitch space, predicated on basic-level acoustic principles of the circle of fifths, scale steps, *basse fondamentale*, and *Auskomponierung* (Lerdahl 2001); and the more abstract, decentered topography of neo-Riemannian space, with its transformations of Parallel, Relative, and *Leittonwechsel* (Klumpenhouwer 2002). I have elsewhere defined pitch space as deontic and neo-Riemannian space as epistemic (Spitzer 2003). Simply put, although diatonic and chromatic idioms coexist in many mid-nineteenth-century works, it is a mistake to consider the latter as a generative elaboration of the former. Rather than the idioms coexisting in one space, the piece migrates between two distinct geometries along metaphoric mappings from deontic to epistemic space. A work may be said to "rise" and "fall" through the tonal universe.

## *Metaphors*

Cross-domain metaphors in music are systemic; Johnson calls them "massive experiential structurings [that involve] values, interests, goals, practices, and theorizing" (1987, 130). The question is how these systemic metaphors are organized. I suggest three answers. First is a gradation in richness between basic-level metaphors and cultural ones. At a basic level, the cross-domain metaphor "music is language" operates with relatively scant cultural knowledge and provides coarsely grained information. We do not need to specify exact lexicons, morphologies, or grammatical systems in order to grasp a musical phrase as metaphorically language-like. At the other extreme, when eighteenth-century theorists, according to Bonds (1991), understood music in terms of the "metaphor of language," they implicated theories of musical structure in culturally specific values. For example, notions of periodicity, expressive gesture, and genealogy, which seem hardly germane to modern-day linguistics, were absolutely seminal in the Enlightenment. Cultural metaphor, I argue, which frames specific propositional knowledge, is cognitively more richly textured than basic-level metaphor. Nevertheless, basic-level cross-domain metaphors (such as "music is language") are more fundamental, durable, and accessible across changing historical times and cultures. Basic-level metaphor thus functions as a source for projection onto cultural metaphor, underpinning and providing access to it. Hence, although cultural metaphors are open-ended ("open sets"), they are radial categories, defined by their proximity to a prototypical center.

Second, cross-domain metaphors are isomorphic with intramusical metaphors. A burning issue in metaphor theory is why some entailments get projected but not others. For instance, with the metaphor ARGUMENTS ARE BUILDINGS, "structure" is mapped, but not "chimneys" (an argument may be "structured," but can it have a "chimney"?). With cross-domain metaphors in music, I argue, mappings are motivated and selected by properties of musical material. A failing of Bonds's theory, therefore, is that the cross-domain metaphor "music is language" is not linked with the intramusical metaphor "music is rhythm," which is its exact analog. The dual aspects of systemic metaphor thereby motivate and select each other.

Third, cross-domain metaphors are isomorphic with experiential image schemata (again, not mentioned by Bonds). The metaphor MUSIC IS LANGUAGE is predicated on the prototypical PART/WHOLE schema (as is its partner, MUSIC IS RHYTHM).

A further constraint on cross-domain mappings is that the number of cultural metaphors in the European common-practice period is closed: they number precisely three. The logic of this ternary system ("music as painting," "music as language," "music as life") will unfold in part II of my book.

Before I give musical examples, I should briefly explain why I use the term "cross-domain mapping" at all, given that there are alternatives in the cognitivist literature. Langacker's cognitive semantics describes how propositions are colored by images, rather than domains (1990, 5–15). Fauconnier "blends" concepts from diverse "mental spaces." "Blending" is not at all inconsistent with "mapping" (see Lakoff 1987, 282; Fauconnier 1996, 59–60). Nevertheless, mapping operates between two domains, whereas there seems to be no limit, in principle, to how many source concepts can be blended into a rich, systemic concept. Because of its inherent duality, then, cross-domain

mapping is well suited to musical metaphor, where the operation has two terms: music and nonmusic. That being said, the greater fluidity of blending aptly describes what goes on *within* the networks of concepts that are mapped onto music. Here, blending certainly occurs, and is the main way in which heterogeneous concepts are synthesized into Johnson's "massive experiential structurings." For this reason, I freely use the notion of "blending," albeit without the rigor of theorists such as Zbikowski.

Individual cross-domain metaphors in music are seemingly inexhaustible. Music has probably been compared to, heard as, everything. Kircher compared music to a sunflower as well as a magnet (1988, 161); Kepler drew analogies between musical proportions and those of the planets' orbits (1997), Mersenne between these proportions and the geometry of a cube (1627, 45); Rousseau heard music as vocal expression (1764), Kirnberger as punctuation (Beach 1982, 114), Schopenhauer as "Will" (1948, 339), Hanslick as painterly arabesques (1986, 29). Kendall Walton even compares musical works to zoos—"full of life, but discrete bits of life, each in its own separate cage—not a working ecological system" (1994, 52). Such plurality is just as common within writings of a single author as between authors. In his *Literary Notebooks* of 1797–1801, Friedrich Schlegel refers to music as "wit" (fragment 1143), a "novel" (fragment 1359), a "fairy-tale" (fragment 1363), "drawing" (fragment 1403), "imagination" (fragment 1405), "everything and nothing" (fragment 1416), "life" (fragment 1469), "the language of love" (fragment 1536), and "God" (fragment 1737).

Such variety notwithstanding, individual metaphors coalesce into systems, and mostly on historical lines. Geographical systems are also conceivable, but the present book focuses on German culture. Hence "sunflower" (Kircher), "planets" (Kepler), "geometry" (Mersenne), and many other baroque metaphors can be woven together into a systemic cross-domain metaphor which I designate "painting." How I do this will be seen in part II. And the same goes for the diverse metaphors that constitute the systemic metaphors "language" and "life."

## EDUCATIONAL METAPHOR

The convergence between metaphor and education has been explored by many of the contributors to the collection *Metaphor and Thought*, edited by Andrew Ortony (1994). Building on Rumelhart and Norman's seminal essay, "Analogical Processes in Learning" (1981), Hugh Petrie and Rebecca Oshlag propose that metaphor aids in the acquisition of new knowledge, introducing novel concepts by relating them to familiar concepts: "the very possibility of learning something radically new can only be understood by presupposing the operation of something very much like metaphor." Petrie and Oshlag stress that "this is not just the heuristic claim that metaphors are often useful in learning, but the epistemic claim that metaphor, or something very much like it, is what renders possible and intelligible the acquisition of new knowledge" (582). An educational metaphor presents "a basic way of passing from the well known to the unknown" (608). The authors cite an experiment conducted by Joshua and Dupin (1987) on French schoolchildren, in which metaphor was used in order to wean the students away from a misleading model for how electricity works. The students (aged between twelve and fourteen) assumed that an electric current leaving a battery gets "worn out" in its travels through the light bulb. They found it difficult to overcome the epistemological obstacle that the current remains actually the same after passing through the bulb. To help the students grasp a "without loss" conception, Joshua and Dupin employed a modeling analogy based on the metaphor of a train: "workers in a station (the battery) permanently push on train cars going past them, maintaining the movement by tiring their muscles" (596). The analogy was understood immediately and the lesson learned. Joshua and Dupin's experiment seemed to indicate, firstly, that students do try to account for new experience using their existing (albeit inadequate) cognitive structures; and, secondly, that the structure of this knowledge can be changed by metaphorical use of other existing knowledge (e.g., about trains). New knowledge is acquired on the basis of old. Old, familiar, concrete knowledge is akin to Lakoff's basic-level knowledge and Sweetser's deontic usage. Progressing from basic-level/deontic knowledge to new knowledge is a metaphorical process. In

Petrie and Oshlag's words, a "metaphor is a guide in that it essentially says, 'Look at and deal with this new situation as if it were like one you already know about'" (597).

Although this insight has been formulated technically only in recent years, it has really always been with us. The idea of the metaphor as a guide is apparent in music pedagogy through the ages. Annie Curwen's extremely influential 1886 *Pianoforte Method* tables a system of directives in its preface:

1. Teach the easy before the difficult.
2. Teach the thing before the sign.
3. Teach one fact at a time, and the commonest thing first.
4. Leave out all exceptions and anomalies until the general rule is understood.
5. In training the mind, teach the concrete before the abstract. (Quoted in Swanwick 1988, 133)

This is ad hoc, rule-of-thumb, commonsense folk psychology of the purest kind. Yet it suggests that gifted teachers intuitively follow a metaphorical regime predicated on a basic-level conception of musical knowledge. At the higher reaches of music education, such as composition theory and analytical method, metaphor functions in the same way as the shared exemplar for scientific culture. Educational metaphor is thus better known in the guise of Thomas Kuhn's celebrated, though much misunderstood, notion of scientific paradigm. To recuperate "paradigm" for metaphor theory requires us to correct the common misunderstanding of this term as a set of beliefs.[3] It really means adherence to a specific *exemplar* of such beliefs. Kuhn's term lies closer to Lakoff's concept of prototypical exemplar, as he made clear in the postscript to the second edition of *The Structure of Scientific Revolutions:* "because the term has assumed a life of its own, I shall here substitute 'exemplars'" (1970, 187). Hence "the paradigm as shared example is the central element of what I now take to be the most novel and least understood aspect of this book" (187). A paradigm is therefore not a constellation of concepts or a body of "shared rules" (43). Kuhn is interested, rather, in "the process of learning a theory" (47) and the way "scientists work from models acquired through education" (46).

Kuhn conceives "paradigm" as an educational metaphor. His postscript clarifies the meaning of paradigms as scientific "models" that "supply the group with preferred or permissible analogies and metaphors" (184). The link with metaphor becomes explicit in Kuhn's contribution to the Ortony collection, his essay "Metaphor in Science" (1994). Petrie and Oshlag (1994) build on Kuhn's work by connecting his concept of exemplar with their theory of learning, "the vehicle of a metaphor being a prototypical example of the new category to be learned" (589). Once a student of physics grasps a shared example such as Newton's Second Law of Motion ($f = ma$), he or she learns to apply it to new situations. Kuhnian metaphor, then, is "the resultant ability to see a variety of situations as like each other," an "acquired similarity relation" (Kuhn 1970, 189). Paradigm as "acquired similarity relation" is similar to my notion of music theory as basic-level mapping, except that Kuhn never explains *how* such metaphors are constructed. Part II of this book shows how musical metaphors are created, and how they are institutionalized as music-theoretical paradigms or exemplars. "Acquired similarity relation" translates into musical pedagogy; "hearing as" is mediated through learning *how* to hear something as something else.

Educational metaphor leaves its trace in the layout of successful compositional treatises, which enshrines principles of sequentiality and progression. According to Heinrich Koch, whose eighteenth-century *Versuch einer Anleitung zur Composition* (1782–93) taught the seminal metaphor of "form as rhythm," "it is recognized as a general rule that with every skill to be acquired, one must proceed gradually from the easier to the more difficult, from the simpler to the more complicated" (Baker 1983, 65). Hence Koch's treatise progresses in steps from small phrases through miniature forms to expanded forms. The miniature phrase (song and dance forms) constitutes a basic level of musical knowledge: "the shortest compositions common in music are chosen first, because the different possible ways of connecting their few melodic sections *can be most easily perceived and imitated*" (Baker 1983, 78; emphasis mine). Sequential progression becomes even more important in

the nineteenth century and actually became a focus of philosophical debate, as we will see in chapter 6. A. B. Marx, for example, governs the progression of his systematic *Lehre* according to the dictate of the Berlin educationalist Adolph Diesterweg: "proceed from impressions to concepts, from the particular to the general, from the concrete to the abstract, not the reverse. This principle serves the entire task of teaching, as well as upbringing" (Marx 1841, 55). Curwen, like Marx, was influenced by the philosopher Johann Herbart's concept of "apperception" (see her *Psychology Applied to Music Teaching*, 1920). Herbart adapted this originally Kantian term into a system of educational psychology, showing how new things are learned by being filtered through existing frames of knowledge. The affinity between Herbartian "apperception" and educational metaphor was picked up by the cognitive scientist George Miller in another essay in the Ortony collection ("Images and Models, Similes and Metaphors"), and I will develop it further in chapter 6.

In the twentieth century, theories of sequential progression were boosted by ideas from developmental psychology, particularly after Jean Piaget. Following Piaget, the educational theorist Keith Swanwick considers the development of the child's musical intelligence in terms of a progression from "figurative" to "operative" knowledge.[4] This progression is most commonly linked with the move from singing or performance to composition and reflection. But it can actually develop in any of music's three domains: performing, composing, and conceptualizing. To be sure, the child's earliest musical experiences often come through singing, and composing is usually left till the final stage of schooling. But just as "songsinging" skills develop across the entire range of a musical career (Davidson 1994), the creativity we associate with composition is already manifest in children's "imaginative play" with musical materials (Gardner 1983). For a babbling child, to sing and to improvise are not necessarily separate activities. Similarly, at the opposite end of the spectrum, the level of academic music theory, a figurative-operative progression can be unfolded by the simple-to-complex chapter plan of a compositional manual.

The figurative-operative progression is thus recursive: it is repeated at each stage of learning and development. Educational metaphor presupposes a sliding scale fixed at neither end, by which conceptualization is relative to age, experience, and culture. At the extreme, the level of art music (which most interests me here), educational metaphor helps us understand how the seemingly arcane categories of academic music theory are profoundly linked to processes at more basic levels of musical thought.

## *Prototypes*

The heart of my theory pertains to a variety of projection that is immanent in music: mapping from basic-level to superordinate categories. When we map from harmony to "tonal space," from rhythm to "hyperrhythm," and from melody to "formal process," we stay within the circle of musical thought. This is why I consider categorical mapping a more quintessential kind of musical metaphor than either the schematic or the cross-domain. For this reason, I will spend a little more time discussing its precepts.

Lakoff's "dual foundations" of metaphorical understanding (1987, 269) comprise basic-level concepts and kinesthetic image schemata, both of which "are directly understood in terms of physical experience" (282). Whereas image schemata emerge from the shape and action of our bodies, basic-level concepts relate to our categorization of knowledge and language. As Lakoff makes clear, basic-level concepts are more sophisticated than image schemata: "basic-level concepts are much more richly structured than kinesthetic image schemata, which have only the grossest outlines of structure" (270). For example, our concept of "chair" or "running" is more richly structured than our more general schemata for PART/WHOLE or SOURCE–PATH–GOAL relationships.

The problem with most applications of Lakoff and Johnson's work to music is that they draw solely on one branch of the dual foundations: namely, mapping from image schemata. As we have seen, they commonly compare music, and redescribe it in relation to, our bodily experience of structure and directed motion. But this is to leave out one half—arguably the more interesting half—

of the theory. Basic-level concepts and categories are just as physical as schemata, but on a higher epistemic level. They are physical, in Lakoff's words, because they are "functionally and epistemologically primary with respect to the following factors: gestalt perception, image formation, motor movement, knowledge organization, ease of cognitive processing (learning, recognition, memory, etc.), and ease of linguistic expression" (13). But my interest lies further along the nature-to-culture spectrum, in the metaphorical reasoning that operates within the higher reaches of musical knowledge—the domain of compositional practice and music theory. Although comparatively sophisticated, these concepts also bear the imprint of the body.

Eve Sweetser's work on etymology (1990) is especially relevant here. Unlike Lakoff or Johnson, Sweetser focuses on metaphorical mappings between levels of language (lexical categories), rather than from the body itself. I want to draw a direct comparison between what I term intramusical mapping, and what Sweetser calls mappings from deontic to epistemic grammatical usage.

Following Lakoff's spatialization of form hypothesis (see above), Sweetser discovers that most Indo-European languages use "vocabulary from the external (sociophysical) domain to describe the internal (emotional and psychological) domain" (1990, 49). This is revealed in frequent polysemy of abstract and sociophysical vocabulary. Central metaphors of perception are vision, to denote intellectual cognition ("I see what you mean") and hearing, signifying not just understanding, but also receptivity and obedience ("I hear what you say"; "to hear is to obey"). Sweetser thus argues that we "model our understanding of logic and thought processes" (the epistemic level) by extending the usage of deontic words from the social and physical world (21). This principle also explains why we commonly use not only metaphors of perception, but also deontic modals such as "may" or "must" to structure our notions of logical possibility or necessity. An example of a deontic modal as a mark of social obligation is: "you *must* be home by ten, or I'll tell Mother." This is metaphorically extended to the epistemic modal "John *must* be home; I see his coat," which describes a force of logical necessity.

Importantly, Sweetser claims that this flow from the deontic to the epistemic unfolds on three axes: the historical (phylogenetic), the developmental (ontogenetic), and the grammatical. Thus "abstract logical (epistemic) is historically later than the sociophysical (root or deontic) usage," so that "may" meant "physical ability before it came to mean social permission or logical possibility" (30). Secondly, people learn root senses before epistemic usages. Thirdly, mature speakers continue to comprehend epistemic grammar as metaphorical extensions of deontic usage.

I argue that extensions from deontic senses of harmony, rhythm, and melody also happen across the three axes of history, development, and grammatical structure. Historically, as outlined in figure 2.7, the spatialization of form hypothesis is borne out by the space-to-time sequence from harmony (seventeenth century) through rhythm (eighteenth century) to melody (nineteenth century). It is also unfolded within these historical epochs themselves, as theorists developed epistemic extensions of these categories. Part II of my book will illustrate this deontic-to-epistemic shift in all its thick historical detail.

Developmentally, this shift is evinced in a musician's education, most particularly, in theories of musical and compositional pedagogy. I contend that our most valuable historical source for revealing this shift is the very layout of theoretical or compositional manuals, which typically proceed from the concrete and familiar (i.e., the deontic/prototypical) to the abstract and new (i.e., the epistemic/metaphorical). Part II of this book thus interrelates the genealogy of our musical categories with patterns of progression enshrined in music theory treatises.

Structurally (the third and final axis), I propose that our synchronic models of musical cognition bear the trace of this diachronic deontic-to-epistemic flow. Most contemporary analytical models are synchronic (e.g., Schenkerian reduction), and we have lost the habit—second nature in previous centuries—of employing them in their historical and developmental contexts. Part of my book's program is to nudge music theory back in(to) time. To this end, I want to insist on the educational dimension of musical metaphor, and to bring forward that curiously hybrid discipline that is better

known in Britain and Europe than in the United States: education theory. I will round off this first half of the chapter by elaborating what I mean by "educational metaphor," embracing Thomas Kuhn's concept of intellectual paradigm and an application of prototype theory to genre categorization.

## *Categorizing the Basic Level*

So what constitutes the basic level of art music? The question of categorization, which all too quickly slips into the even deeper mystery of creativity, is so immensely complex that I can do no more than sketch out an outline by way of prolegomenon to future research. Moreover, part II of this book takes as its point of departure only a tiny subset of this answer: the three basic-level categories of harmony, rhythm, and melody. As I see it, these three categories fit into a bigger picture, which looks something like figure 2.8.

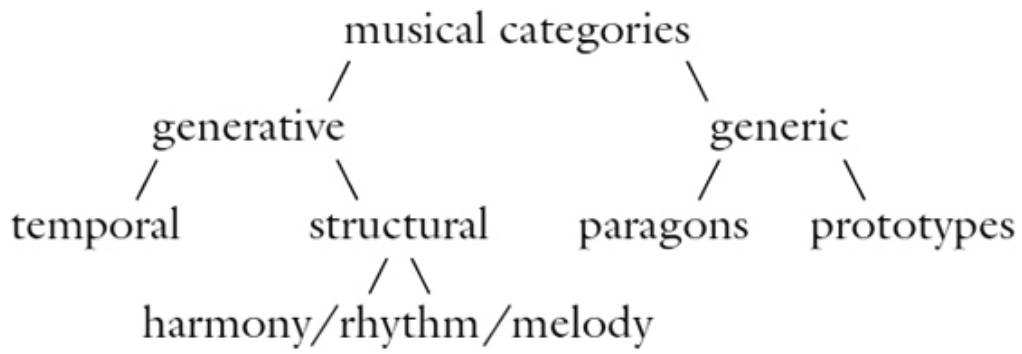



Figure 2.8

Compositional manuals, in literature as well as music, traditionally unfold across two axes, the generative and generic. They normally begin by climbing the generative ladder (like a *gradus ad Parnassum*) from simplicity to complexity. They then codify the range of genres and styles available to the student. The generic axis is marked not by complexity but by typicality. In music theory, the distinction between generative and generic is to some extent parallel with the dichotomy between musical time and structure. A more complex form is often a longer form; conversely, one could not say that a more typical sonata is necessarily longer than an atypical exemplar (e.g., a sonata with a second theme group in an unusual key). Generic classification, rather, is subject to issues of prototypicality, and the centrality of a category being defined by a cluster of motivations, many of which are cultural and historical. Since the generic side of categorization does not feature strongly in this book, I want to dispose of it now.

### GENERIC

In classical rhetorical theory, students were taught (literary) composition through the imitation (*imitatio*) of two types of model: precepts (*praecepta*) and exemplars (*exempla*). The former roughly corresponds to our modern understanding of genre as a mixture between compositional "recipe" and semiotic code. These *poietic* and *aesthesic* outlooks come together nicely in Jeffrey Kallberg's (1988) supple notion of genre as an "interpretational contract" that binds composer and listener on the basis of a shared set of conventional expectations. The latter model, exempla, survives in the modern concept of a canon of masterworks. The exclusivity of canons sits very badly within the present climate; in the teeth of this opprobrium, it is salutary to be reminded that canonic models are a pedagogical necessity, and that the particular content of a canon is an entirely separate issue. Burnham (1995) has shown that Beethoven's *Eroica* became the prototypical exemplar of the heroic symphony. Actually, one could point to any number of Beethoven's pieces that were subsequently taken up as models.[5] The key difference between precepts and exemplars turns on specificity. A precept is a pattern or set of directives at a high level of generality. An exemplar is a specific work. Lakoff calls these two kinds of category "prototype" and "paragon." Prototypes we have already

discussed. A paragon is a real-life individual example. As Lakoff says, "We have baseball paragons: Babe Ruth, Willie Mays, Sandy Koufax, etc. Paragons are made use of in constructions in the language: *a regular Babe Ruth, another Willie Mays, the Cadillac of vacuum cleaners*, etc. . . . A great many of our actions have to do with paragons. We try to emulate them" (1987, 87–88). The *Eroica*, a work many nineteenth-century composers sought to emulate, is a musical equivalent of a paragon, the Babe Ruth of symphonies.

Both prototypes and paragons are varieties of what Lakoff calls "metonymic models" (remember, Lakoff sees metonymy as a subclass of metaphor). With metonymic models, "a subcategory . . . is used to stand for the entire category" (84). The *Eroica* (paragon) can stand for all symphonies; a Beethovenian sonata form (prototype) can stand for all sonata forms (even ones without such extensive development sections or codas). As subcategories, the *Eroica* and the Beethovenian sonata form are both individual central cases. Crucially, the relationship between these central cases and noncentral variants is not predictive or transformational. Beethoven's music is not necessarily more complex or foundational than other music. It has become centralized due to a range of factors (some, to be sure, reflecting its aesthetic value, but others wholly contingent, reflecting the vagaries of its social reception). The distinction between metonymic and transformational models is an essential one. It is not possible to derive noncentral, remote categories from the central case through a process of elaboration or reduction, although many theorists have tried. For example, in the baroque era, the famous dispute between advocates of the *prima prattica* (traditional counterpoint) and the *seconda prattica* (the Monteverdian theatrical style) revolved on the issue of whether the latter was a more elaborate version of the former or comprised a new style in its own right. In other words, the dispute was really about whether the relationship between first and second practices belonged on the generative axis or the generic axis.

The most familiar example of a metonymic model is the thematic type known as the period. A period is an eight- or sixteen-measure antecedent-consequent form. On account of its symmetry, it lends itself beautifully to hierarchical or transformational theories of musical structure, by which we progress from phrase level to global level systematically. For this reason, the period has become prototypical of all themes. But its prototypical status is really a case of metonymic mapping, because the period is surprisingly rare in tonal music; or rather, other phrase types, such as the sentence (an eight-measure theme characterized by internal development and acceleration of phrase rhythm), are just as common, their asymmetry notwithstanding. Schoenberg, who gave these terms their modern currency, himself recognized this anomaly. Chapter 6 of his *Fundamentals of Musical Composition* (written between 1937 and 1948) begins with the blunt assertion that "only a small percentage of all Classical themes can be classified as periods" (1987, 25). Indeed, the only Mozart piano sonata that begins with a regular period does not actually start with a sonata form (K. 331 in A). Nevertheless, as a pragmatic pedagogue, Schoenberg concedes that "the practise of writing periods is a convenient way to become acquainted with many technical problems." This, surely, is why Mozart's A major period has become enshrined in so many theory books as a paradigm (paragon) of the well-formed theme (see Meyer 1973, 26–43; Lerdahl and Jackendoff 1985, 32–33). By the same token, the attempt of a recent theorist to hypostatize the period/sentence opposition into a categorical absolute (see Caplin 1998, 59) must be treated with considerable caution.

## GENERATIVE

Turning now to the generative side of musical categories, the left branch of my diagram, we find an identical process of metonymic mapping in operation. While generic mapping is an essentially comparative process, generative mapping is analytical, serving to explain the constitution of complex form in relation to simpler form. Since Schenker, we have gotten used to the idea of analysis as a synchronic model, laid out in graphic symbols. Yet before the twentieth century, analytical understanding was mainly taught as a diachronic journey through a series of stages. Analysis was taught through composition. In one respect, a treatise such as Koch's *Versuch* teaches a moderately

gifted novice to compose in rising steps of complexity. Its true goal, though, was to engender insights into musical structure, rather than to train generations of third-rate *Kapellmeister*. Understanding of structural levels was taught, then, through sequentiality. As with educational metaphor, new knowledge is taught on the basis of the familiar. Familiar (i.e., basic) knowledge is defined according to two separate, albeit interlinked, parameters, which I term "temporal" and "structural," since they engage the constraints, respectively, of memory and cognition.

"Simple" for compositional courses can be either a detail lifted out of context or a complete albeit rudimentary piece in its full context. This point takes account of two facts about music: that it unfolds through time, and that its complexity ranges through a generic spectrum. Take Koch's use of the minuet, his prototype of the "easy" and "simple" (1782–93, 65). On the one hand, it allows him to concentrate on just a single four-measure phrase. In this case, the basic level is characterized chiefly by brevity, because a listener's attention is focused most acutely within the "psychological present" of short-term memory (perhaps four or five seconds). Carried along by the musical stream, we are always remembering and anticipating events. But we do seem to experience music most directly inside the "window" of a present tense—a window that is constantly shifting forward. It makes sense, therefore, to equate the musical basic level with the psychological present. This is why a composition teacher makes general or abstract points on the basis of a short excerpt or a specific technical device.

On the other hand, Koch may use a minuet in full. Here, a miniature genre is being used to teach the student about a large-scale genre, such as a sonata. Now, the minuet and sonata have different forms and represent entirely distinct performance traditions and cultural backgrounds. By no means does a minuet constitute a more fundamental structural level within a sonata form; nor are sonatas elaborations of minuets.[6] Nevertheless, a minuet can function as an educational metaphor for a sonata; in Koch's words, small-scale genres are "representations in miniature of larger compositions" (1782–93, 118). Minuets can function in this way because they occupy a basic level of perception, where "the different possible ways of connecting their few melodic sections can be most easily perceived and imitated" (78).

The generative axis, then, utilizes two distinct types of basic level. In the first case, we compare the psychological present of a piece with a conceptualization of the entire piece built up from memory and anticipation. In the second case, we compare two different pieces (and two different types of music) altogether. The two exercises are, nevertheless, interlinked, insofar as the usefulness of a minuet as a teaching tool consists chiefly in its brevity. This is not always so, however: baroque sequentiality is based on a progression of contrapuntal species rather than successive formal expansions; a complex texture is obviously not always longer than a simpler one (conversely, a rondo, for example, is often longer than a sonata).

The issue of music's psychological present is an extraordinarily complicated one. It relates, on the philosophical side, to the phenomenology of time perception. On the empirical side, it has been the subject of an enormous amount of work by music psychologists on memory and recognition (see Spitzer 1996b). The question is relevant not only to rhythm (Brower 1993) and melody (Dowling 1986), but also to counterpoint. In fact, it goes to the heart of one of the most pressing concerns of recent music theory: the psychological reality of Schenker's concept of tonal prolongation. Can we really hear contrapuntal elaboration at higher structural levels, or is this notion just an analytical fiction? Larson has written perspicuously on this topic (1997), and his notion of "associative hearing" is implicitly metaphorical. Contrapuntal elaboration can certainly be heard over short passages, and few students have problems with Schenker's (or Forte and Gilbert's) analysis of a Mozart period (e.g., K. 331). But a fading effect besets the perception of prolongational structure when we move from this thematic basic level to the level of large-scale form. Larson cites Meyer's complaint that "while we may hear shorter phrases in terms of prolongation, say, as embellished linear progressions like $\hat{3}$–$\hat{2}$–$\hat{1}$, . . . we more readily hear longer pieces in terms of their 'formal structure,' say, as an elaborated formal string of sections like ABA" (119). Larson's radical solution is to split

prolongation in two, into a compositional and a perceptual type. A work's structure may be prolongational, irrespective of whether that structure is heard. Given that association can hold between abstract events as well as perceptual data, Larson defines compositional prolongation as "a particular kind of association" that operates "between events at different hierarchical levels." Conversely, "the act of hearing a passage of music *as* containing a prolongation" he calls "structural hearing." Structural hearing is associative hearing, and Larson relates it to Schenker's *Fernhören*, meaning "global structural hearing" (115). Larson's insight is in tune with the pedagogical ideal that pervades Schenker's thought. One can, and must, *learn* how to hear; the composer-genius leads, and we follow.

Hence the notion of learning cuts the ground beneath the feet of the entire psychological project of empirical testing. Given that one can learn to hear practically anything, by what criteria could we ever argue that hearing is psychologically constrained? The natural laboratory for testing Schenker, then, is the schoolroom. Attention turns from the theory as a synchronic model to the theory's unfolding within a pedagogical sequence. It is curious that not more work has been done on the ordering of Schenker's ideas in his coursebooks since the important article by Proctor and Riggins (1988). In some ways, though, Schenkerian theory is actually in an ongoing state of testing, as university teachers constantly struggle to find better ways to organize, pace, and sequence his ideas for their students.

# 3. EXCURSUS ON METAPHOR AND AESTHETICS

My theoretical exposition continues in chapter 3, and readers may wish to skip this excursus and return to it later. Nevertheless, it is useful to begin spelling out now some of the intractable differences between cognitive and aesthetic varieties of metaphor, and then to situate my personal approach within the broader context of contemporary writings on the subject. Marion Guck, Robert Hatten, David Lidov, Alexandra Pierce, Roger Scruton, Robert Walser, and Kendall Walton all think of metaphor as "the body in the music." They help turn my theoretical model 180 degrees, so that music becomes a source, rather than a target, for mapping. The goal of this aesthetic turn, we shall see, is Paul Ricoeur's metaphorical poetics.

## *Mapping from the Music*

Metaphor theorists who assume that we conceptualize music in the same way we conceptualize language are naïve, or at least ill versed in aesthetics. The watchword of aesthetics is particularity, which means that art affords a richly grained mode of experience that is valuable precisely because it cannot be subsumed by concepts. Modern philosophers such as Adorno push this claim even harder, to the point where art's nonsubsumptive particularity is actually held up as an ideal for reason itself. Adorno believed this to be especially the case with music. In its apparent capacity to express absolute truth, music teaches philosophy how to transcend the rigidity of conceptual argument, the tragedy that "objects do not go into their concepts without leaving a remainder" (Adorno 1990, 5). The upshot of Adorno's music aesthetics is that music, in its resistance to conceptualization, induces new modes of thought. In brief, *music organizes thought*. This argument is diametrically opposite cognitive metaphor's unidirectionality thesis, which would argue that *thought organizes music*. Following the unidirectionality thesis, metaphor theorists hold that cognition shapes language, and that we map from bodily experience to mental states, but without feedback. According to Sweetser,

> Mappings are *unidirectional:* bodily experience is a source of vocabulary for our psychological states, but not the other way around. The correlations are bidirectional and partial, but the mapping observed in semantic change and in synchronic metaphorical language is both unidirectional and more general than the correlations. Its unidirectionality alone would suggest the possibility that it is metaphorical in nature. (1990, 30)

Granted music's status as an aesthetic object, conceptual metaphor can only do violence to its artistic particularity. Aesthetic, rather than conceptual, metaphor, on the other hand, foregrounds metaphor's

ineffability, its condition of being untranslatable into normal (conceptual) language. Andrew Bowie, following Adorno, associates metaphor's untranslatability with music:

> Although we may not always be able to say exactly what it is that is revealed or articulated to us by a piece of music, that does not mean that the piece is not meaningful in some important sense. The same . . . also applies to new metaphors, which are not amenable to definitive paraphrase. (1997, 5–6)

So is musical metaphor ultimately beyond theory? Yes and no. Although, on the one side, music's truth content is that it exemplifies a mode of conceptless cognition—a higher kind of rationality that transcends concepts—it nonetheless mimics the workings of concepts and language: the artwork is "determined 'critically' as music's mimesis of judgement" (Adorno 1998, 11). This mimesis is played out in the apparent musical logic of thematic development, as well as the dialectic of musical form and content, which could be thought to mirror the interplay of concepts and percepts. One may even hear subjective self-reflection in the operations of musical repetition and reprise. Yet however close this rhyme between music and concepts, no matter how logical or inevitable a classical sonata might seem, musical rationality is ultimately *musical* rationality. Conceptualization is lifted up to the higher dimension of aesthetic experience, from which perspective reason itself appears all too human (that is the essence of Adorno's critique). Music mimes concepts all the better to resist ("critique") them. The analogy between music and concept must be grasped, then, "in terms both of the ineluctability of this mimesis and of music's attempt to escape it" (11).

This tensive dialectical relationship between music and conceptualization is worlds away from the rigid position advocated in a recent book by Mark Debellis (1995). Debellis argues for a hard and fast distinction between "ordinary" listening, which is "strongly nonconceptual" (57), and "theoretically informed listening." In his view, "Musical training . . . advances one's listening from a nonconceptual to a conceptual level" (1–2). Now, I have maintained that music theory *does* shape our hearing of music, in the spirit of educational metaphor. But I strongly dispute Debellis's thesis that there is a sharp discontinuity between theoretically informed listeners and listeners with no technical knowledge of music. Such a separation is based on the objectivist myth that musical structure is abstract, whereas it is really continuous with ordinary people's bodily experience. In the idealist jargon of Adorno's critical theory, conceptual listening (or structural hearing) is immanent in that it emerges hermeneutically from a circle of thought inscribed within the very materials of music.

Although Adorno was the premier music philosopher of the twentieth century, I have chosen in the present book to go down the path of hermeneutics rather than critical theory. This is because hermeneutics, like cognitive metaphor, foregrounds the connectivity between ourselves and our frameworks of knowledge (critical theory, by contrast, focuses on reflective distance). Paul Ricoeur's theory of metaphor follows in a hermeneutic tradition which antedates, and sets up, many of the concerns of modern cognitive approaches, albeit with a crucial twist: the effect of "embodiment" is an aesthetic result rather than a cognitive starting point. Poetic metaphor, says Ricoeur, aspires to the condition of a human body, the effect of flesh. Unlike Lakoff and Johnson, Ricoeur takes a standpoint that is aesthetic, and his "poetics" of metaphor neatly squares the claims of artistic particularity—semantic production (Bowie's "new metaphors")—with the obligations of theory. Ricoeur's metaphorical tension theory, which I adapt to music in the next chapter, is the hermeneutic analogue of Adorno's dialectics. Its fusion of dialectics with embodiment makes it a natural bridge between aesthetic and cognitive approaches. Another bridge—the broadest—is schematism.

## *The Schematism Debate*

Johnson's co-option of Kant's schematism falls afoul of two criticisms that are typically leveled at classical aesthetics by current "postmodern" discourse (ironically, since the pragmatism of cognitive semantics is quintessentially postmodern). We are suspicious today of schematism's supposed 1 normativity and 2 autonomy. In the first case, surely projecting conventionalized (be this by nature or training) schemata onto experience is inimical to the particular? Second, how can we believe that human subjectivity is autonomous from the objective contexts of gender, society, and politics?

Strikingly, Adorno (with Horkheimer), writing forty years before Lakoff and Johnson in a book that became the keystone text of critical theory, associates both these reservations with what they term "projection." "In a certain sense," say Adorno and Horkheimer, "all perception is projection," which is "a legacy of our animal prehistory" (1989, 187). We learn to "refine and inhibit" (188) schematism through reflecting on sense impressions. But when, in the absence of reflection ("when the subject is no longer able to return to the object," 191), we succumb to our brutal instinct of self-projection, then schematism becomes "automized" or "calcified" into a "false projection" (187) that "is hostile to the thing and forgets the thing itself" (193).

Adorno and Horkheimer would have regarded the biological bent of metaphorical projection as a relapse into primitivism. Shrewdly locating the authoritarian undertow implicit in all physicalist theories, they would have easily grasped cognitive science—and the technological paradigm it predicates—as just the latest twist in the cultural logic of late capitalism: a logic ripe for critique. In fact, their attack on "automated schematism" is subsumed within their critique of 1940s fascism; "false projection" is the "morbid aspect of anti-Semitism" (189). In eliding rationality into fascism—and, implicitly, metaphor theory into anti-Semitism—Adorno and Horkheimer clearly go a little too far. Yet their point is well made that, *pace* Kant, reason can hardly be considered autonomously from sociological and political concerns. Schematism might be a good idea, but it is impossible in practice; modern society (the "culture industry") does our schematism for us: "Kant's formalism still expected a contribution from the individual, who was thought to relate the varied experiences of the sense to fundamental concepts; but industry robs the individual of his function. Its prime service to the customer *is to do his schematizing for him*" (124; emphasis mine). The modern administered society is schematic in its standardization. Even culture, under the pressure of commerce, is reduced to an exchange of fungible types—conventionalized pop songs, pulp fiction, and generic cinema. In the immediate terms of our argument, it is cognitive science that appears to rob individuals of their rational faculty. Schematism is richer and deeper than can be dreamed of in Lakoff and Johnson's philosophy.

A defense of these criticisms could be mounted within critical theory itself, with the help of second-generation practitioners such as Habermas (1987). Habermas recognized that the normativity and autonomy of linguistics is essential in fostering the intersubjective communication central to Enlightenment "progress." Nevertheless, a second pair of problems can be detected in metaphor theory, this time in the elisions it creates between, first, the physical and phenomenal body, and second, scientific and aesthetic imagination.

In the many pages Johnson devotes to his IN/OUT schema (1987, 30–37), he never considers the obvious point that our phenomenal sense of being *in* our body or *in* the world does not obey physical laws. For example, we can imagine pouring water *out* of a glass, but can we divest ourselves of our worldly concerns in the same way an astronaut leaves the planet? Our relations with the world are essential, not matters of spatial contiguity. Heidegger's 1927 *Being and Time* (2000), with its ontological concept of "Being-in-the-World" (78–90), dealt with the issues of "embodiment" much more subtly than the metaphor theorists, and sixty years sooner. "Being-in" is not a property a person (*Dasein*) either has or has not (84). Nor is a subject's "inside" a sort of "box" or "cabinet" (87). We find ourselves involved with bodies and our environment in a much more fundamental way than that of an object inside physical space. To conflate human ontology with the spatial contiguity model is, ironically, to assume the same detached visual perspective that metaphor theorists ascribe to objectivism. Of course, metaphorically extending our bodily experience of the IN/OUT schema may certainly have heuristic value; it may even have evolutionary justification. But metaphor theorists ought to make these distinctions with greater care. In particular, they must avow that, notwithstanding the subjectivist tone of their writings, their observation language is actually closer to third-person scientific theory than to the first-person phenomenological introspection to which they often lay claim.

Last and certainly not least is the problem of imagination, which arises directly from an ambiguity in Kant's originary definition of schematism. The idea of the schema was devised in the *Critique of Pure Reason* (originally published in 1781) as part of Kant's project to carefully circumscribe the limits of the theoretical, practical, and aesthetic spheres (i.e., reason, morality, and aesthetics). By these lights, a schema is "a product . . . of pure *a priori* imagination" (1986, 183), an abstract notion of imagination expressly distinct from the artistic kind. Nevertheless, Kant's later *Critique of Judgement* (1790), which was written in part to address questions raised by schematism, retrospectively throws the boundary between theory and aesthetics into doubt. Kant now foregrounds the schema's productive aspect, a creativity that establishes firm links between epistemology and aesthetics, under "the realization of the impossibility of finally separating imagination from cognition" (Bowie 1997, 58). The problem, in short, is that Kant's seemingly conflicting strictures about boundaries, on the one hand, and common creativity, on the other, both had fateful consequences for the history of metaphor theory.

On the former side, it is scarcely an exaggeration to say that the obloquy heaped on metaphor by deconstructive literary criticism is due entirely to its refusal to keep to its place, in the Kantian sense. In the writings of Paul de Man, for whom "Kant remains a constant point of reference" (Norris 1988, 53), metaphor becomes an extreme case of totalized aesthetics in general, and the rejection of metaphor thus forms the central plank of a deconstruction of aesthetic ideology (see de Man 1979). Referring to de Man's critique of Proust, Norris states that "the 'totalizing' power of metaphorical language seems to give access to a self-sufficient realm of imaginary deeds and experiences untouched by the otherwise obtrusive demands of everyday, practical life" (1988, 53). It is easy for de Man to demonstrate that every time metaphor tries to naturalize itself into pure theory, one can detect the hidden hand of rhetorical artifice. De Man associates this repressed, quotidian, contingent force with metonymy and allegory. There are two simple answers to de Man's broadside against metaphor. First, his critique falls wide of the mark of cognitive metaphor, whose pragmatism is in fact closer to his notion of metonymy. Second, more historically nuanced readings of romantic aesthetics, such as Bowie's, reveal de Man's picture of metaphor to be somewhat caricatured (as we will see more fully in Chapter 6, on romantic metaphor).

On the side of creativity, the confluence of epistemology and aesthetics in German critical thought after Kant led to an entirely different notion of preconceptual grounding than is imagined by cognitivism. Following the relay of grounding through to its base takes us from schematism to language to music. In its quest to find a hinge for concepts and intuitions, romantic philosophy settled on poetic expression, a medium that utilized language as an intuitive mode of "world disclosure" rather than as a set of declarative propositions. Literature's paradigm of a semantically indeterminate, albeit "meaningful," language was music (Bowie 1997, 22–23). To put it bluntly, the idea of music in the work of Schelling, Schlegel, Schopenhauer, and Schleiermacher, and ultimately in modern critical theory and hermeneutics, came to occupy the slot marked "schematism" in Kantian philosophy.

It is crucial that we recognize the aesthetic and the bodily as two distinct, albeit cognate, varieties of the preconceptual. Bodies and aesthetic works do share a quality of physical plenitude and particularity. Yet philosophies of embodiment and aesthetics spring from divergent sources. The point of disagreement is language. Post-Kantian philosophy sought grounding in a merger between reason and a musicalized notion of literary language: language, in short, was brought to the center. Today's "cognitive turn" professes to reverse the early twentieth century's "linguistic turn" (Daddesio 1995, 45), and so cognitive metaphor merges reason not with language but with bodily experience. It is interested in verbalization only at a propositional level, never engaging with its poetic ("musical") dimension. What we have here, then, is a surprising mutation of Kant's disciplinary boundary, with cognitive semantics assuming the classical role of pure reason, and with the role of aesthetic judgment handed down through the modern hermeneutic tradition. I believe the clearest example of the metaphorical aesthetic to be Paul Ricoeur's tension theory, and will explain

how in chapter 3. Keeping a rational, cognitivist theory in play with an artistic, poetic one accords with Adorno's stricture that projection must oscillate reflectively between the subject (reason) and object (aesthetics). The merit of Ricoeur's poetics over other metaphorical theories is that it meshes with compositional design: *how* a piece is composed. Absence of poetic theory is the great failing of much contemporary writing on musical metaphor.

## *The Body in the Music*

I begin with a philosopher who sharply demarcates music theory and aesthetics as separate spheres, and end with performance theorists who map organically from "the body in the music" to musical concepts. For Roger Scruton, echoing Kerman, "analysis makes sense . . . only as a prelude to criticism" (1999, 428). Kendall Walton advocates a more fluid interplay between analysis and criticism, and his notion of analytical fiction strongly influences the work of Marion Guck and Robert Snarrenberg. Finally, Robert Hatten, David Lidov, Alexandra Pierce, and Robert Walser explore in various ways how music's acoustic and physical power impacts on theory.

### ENCAPSULATED METAPHORS

Roger Scruton is a neo-Kantian philosopher, a music critic conversant with the latest analytical methodologies, and the writer who, more than any other, put musical metaphor on the map. Moreover, he thinks that musical experience is embodied—that our "indispensable metaphor" by which we hear music as "life," as a "living, breathing, moving organism" (1999, 76), is related to our bodily experience. It would seem, at first, that all these elements line up into a fruitful position. The problem, nevertheless, lies in how they connect, and his overall theory must be rejected.

Scruton's problem, in brief, is that his account of music's indispensable metaphor is hermetically sealed off at both ends: from bodies and from analytical concepts. By his lights, to describe music by analogy to embodied experience we must have recourse to metaphor, but "not because music resides in an analogy with other things, but because the metaphor describes exactly *what* we hear, when we hear sounds as music." Scruton leaves us instead with the paradoxical claim that the "metaphor of musical movement" is "the pure phenomenal residue of our ordinary experience of space" (1999, 96). Unlike Lakoff and Johnson's view of cognition, Scruton actually draws a sharp line between phenomenological experience, whether bodily or musical, and the "everyday cognitive activity [that] involves perception, belief, and information gathering." This is a curious limitation on the scope of his theory, given his claim that "rationality" involves the ability to "project our thought in a speculative arch away from the immediate present" (1999, 88). Why does Scruton separate his projective account of rationality from his cross-modal view of embodied experience? As it stands, Scruton's hermetic model of metaphor can be described, in objectivist terms, as encapsulated, both synchronically and diachronically. His metaphor is cut off from outside domains, since he rejects grounding via analogy or projection; it is insulated from change, since it is unclear how anyone might ever acquire the metaphor of music as motion or develop it through listening, learning, or the internalization of analytical models. Scruton's circular, ungrounded definition is reminiscent of Umberto Eco's acid caricature of the standard tautological definition: "a metaphor is that artifice which permits one to speak metaphorically" (1984, 88).

This is a pity, because it was Scruton who first made the valuable link between Wittgenstein's and Hester's "seeing as" effect and music. Scruton assimilates "seeing as" (now "hearing as") to what he terms the "double intentionality" of metaphor (1999, 87). In listening to music,

> 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." (96)

Metaphorical "hearing as" means "hearing sounds as music," as an "intentional object of musical perception" (78). Scruton's problem is that his account of "hearing as" never rises above a basic level of description; it comprehends only isolated features or emotional qualities. Conspicuously absent

are the conceptual, systemic metaphors of analytical models (see Cumming 1994). This leads Scruton to place undue stress on the noncommensurability of musical with nonmusical experience of space and time. And, to be sure, although we ascribe qualities of space, motion, and purposive activity to the "traditional triad" of "harmony, melody, and rhythm" (Scruton 1983, 80), there are also clear differences, which Scruton recounts in detail. Although we conceive of the pitch spectrum in spatial terms of high and low, and we think of well-formed entities, such as tones, metrical patterns, melodies, and harmonic progressions, as occupying and traversing tonal space, sounds do not cut each other off, as real objects do, since we are able to hear a tune against its accompaniment. Further, "we are not part of the world of sound, as we are part of the visual world" (1999, 13). The most peculiar aspect of musical space-time is that its categories flow into each other: motion to a "place" is just as readily experienced as transformation into a new object. When we hear a note move through the pitch spectrum, "it would be as reasonable to say that it had changed into another sound (a semitone higher, for instance), as that it had moved through auditory space" (14). There is also the problem of agency. It is not the movement of melodies through musical space that suggests motion; "rather, the motion is internal to them" (51).

Wittgenstein's and Hester's "seeing as" effect is compelling because it emphasizes the active, conceptual nature of cognition. This element is lost in Scruton's metaphor of music as motion, because the listener has no choice in hearing tones this way. Scruton further confuses the issue by extending the scope of aspect perception to include the way a listener can choose to hear a bass line as a melody, or to switch between iambic and trochaic patterns in a duple meter. It even stretches to the interpretation of a piece's affective content, as in his discussion of the piano piece "Good Night," by Leoš Janáček:

> Attend to the triadic harmony and the innocent C major melody, and you will probably hear a serene tenderness, as the title suggests. Attend to the constant downward shift from C major to B minor, the inner voice sounding a sixth below the melody at the climax, the pulsating heartbeat of the sixteenth-note figure, and you will hear an apprehension that wipes all serenity away. (160–61)

To hear this piece "as it should be heard," the listener "must be able to shift at will between these contrasting aspects" (161). But shifting between contrasting affects is hardly the same as parsing a rhythmic group in a particular way. Moreover, both these "aspects" inhere *in* the intentional object—the music—whereas Scruton's basic "hearing as" effect obtains *between* the music's intentional and material dimensions (sounds and tones). The former is analogous to the switch between duck and rabbit; the latter corresponds to the act of seeing the material picture as an image of a concept (be it a duck or rabbit).

In Cumming's view, Scruton's refusal to countenance the possibility of conceptual metaphor is due as much to a traditionally empirical view of science as to a conservative theory of metaphor. The two sides support each other: protecting "the description of material things from the incursion of subjective or emotional attitudes" (Cumming 1994, 7) goes hand in hand with a belief that metaphorical expressions can be substituted by literal ones when conveying a scientific understanding. This position is reinforced by an ideologically reactionary suspicion of musical analysis.

## ANALYTICAL FICTIONS

Like Scruton, Kendall Walton holds that music is meaningful because it expresses human behavior. He lists metaphors of "rising and falling melodies, of wistful melodies and hurried rhythms, of motion and rest, of leaps, skips, and stepwise progressions, of statements and answering phrases, tension and release, resignation and resolve, struggle, uncertainty, and arrival" (1994, 50). Also like Scruton, Walton is alert to the paradox of music's phenomenal space—that it is both similar to worldly space and possessed of its own unique qualities. Unlike Scruton, however, Walton does not think that music's distinctiveness makes it inaccessible to analytical discourse. Walton's argument is interesting. He is not saying that music can be analyzed because its values can be translated into objectively theoretical language. On the contrary, analysis is an imaginative practice that partakes of

music's "fictional" (read: phenomenal, intentional, imaginary, metaphorical) world. In other words, Walton is much clearer than Scruton on music theory's subjective and self-reflective underpinnings—its resort to "analytical fictions."

The quality of fiction mediates between aesthetics and theory, such that the distinctive character of music shapes the tools by which we analyze it. Walton thereby draws music and conceptualization into a hermeneutic circle. The connectivity between observer and data that is typical of hermeneutic approaches (see chapter 1) is characterized by Walton as "involvement." We can all hear involvement phenomenologically: a fundamental effect of music is that the boundary between the tones and the listener seems to disappear, so that when I hear a melody rise "I feel as though I am rising, or imagine myself rising" (1994, 53). Building upon this sense of involvement, we tell analytical stories about music because we care about it. Analytical discourse is fictive in the particular sense that it shares in the peculiarly immaterial qualities of musical space. What marks a musical fiction apart from a fiction in the real world is the fluidity of its agency. "Musical worlds," in Walton's precise formulation, "will be radically indeterminate with respect to the identity and individuation of agents." Not only is it hard to tell the dancer from the dance, but an individuated phrase may just as well be experienced as a collective. Musical works "are zoos—full of life, but discrete bits of life, each in its own separate cage—not a working ecological system" (52). Musical fictions impart this indeterminacy of agency to analytical fictions, which express it in terms of linguistic heterogeneity and slippage. This is described with great insight by Walton's chief musical follower, Marion Guck.

Guck compares the fictions of two well-known analysts, Edward Cone (b. 1917), and Allen Forte (b. 1926), showing how the language of each reflects the degree of a listener's involvement with the music. Cone's fiction projects an "involvement with another human being," whereas Forte's suggests "an examination of an inanimate object" (218). Cone analyses Schubert's *Moment musical* in A♭ Major as if it were an internal psychological drama about an "individual (the music) whose thoughts are dominated by a disquieting thought (the note E natural)" (220). Cone's fiction, according to Guck, is traced in the verbs he chooses to animate the story (e.g., the failure of a "promissory note" to discharge its obligation). Verbs are more suitable than nouns to express music's dynamic, evanescent nature. If Cone's metaphor is "piece as personality," then Forte's analysis of Brahms's *Alto Rhapsody* relies on the metaphor "piece as fabricated object" (222). In Forte's story, "the music is an object which the investigator observes but does not interact with" (223). Forte's "music as object" metaphor is revealed by the prevalence of attributive rather than active verbs, such as "made up of," "consists of," or "configurations derive."

Both Cone's and Forte's fictions balance a "background story of engagement" with a "foreground structural characterization" (228). The former is emergent from the musical world; the latter is selected freely by the analyst (Forte *chooses* his metaphor of "piece as fabricated object"). Analytical storytelling thus flows both from the music to the listener, and from the listener to the music. The implication of this bidirectional model of metaphor is that a narrative genre selected by the analyst can be dissonant as well as consonant with the background story. Though this remains unstated, Guck's comparison suggests that Forte's fiction is out of sympathy with the human qualities of the music. Forte's discourse lapses into more human metaphors only when he utilizes Schenkerian techniques, when he avails himself of the "Schenkerian story," through which he "endows the piece with the capacity for intentional action." The Schenkerian story is maximally consonant with the background story of engagement, because it "is largely about the dynamics of spatiotemporal expansion" (224).

Guck's third analyst, Carl Schachter, is arguably the foremost Schenkerian of modern times. His analysis of Brahms's Second Symphony is strongly motivated by the background story in that it situates the listener in the midst of the music, so that it seems as if the boundary between the two is permeable. Schachter's fiction is a striking example of how the malleable and protean properties of musical space—qualities Scruton explores at length—are communicated to the metaphors we spin around it. Take the following example. Schachter writes that "by expanding the end of each group,

Brahms makes the expected downbeat recede further and further into the distance" (225). The peculiarity of this formulation is that it blends a concept of formal expansion with physical distance and temporal delay. Brahms's downbeat recedes from the perspective of the listener both toward a physical horizon and into the temporal future. In another passage, Schachter blends a metaphor of gravitational attraction with emotive language when he writes, "D must sink back to C♯." In Guck's words, Schachter "spins together several themes, among them the process of expansion, motion toward a center, the tension associated with that motion's interruption, and the expressive implications of the 'tendency to move to' the center" (226). In both these examples, Schachter slides from one vocabulary to another, between metaphors of space, time, gravitational force, motion, and emotional tension. The big question is whether this conceptual blending reflects a quality in the music or a quality of the analytical fiction. Guck is ambivalent: "slippage between vocabularies acknowledges the immaterial, enveloping, evanescent nature of musical sounds" (228). Guck is clearer on the problem of musical agency, which she sees as a figment of grammar. Hence, although pitches are individuated as nouns ("D must sink back to C ♯ "), these are only "placeholders demanded by the grammatical structure." Following Walton, she reasons that "music is about acts distilled of agents" (227). The paradigmatic way in which analysts convert acts into things is to use nominalizations instead of verbs, such as "contraction" (rather than "contracts") or "expansion" (rather than "expands"). Using nominalizations sidesteps the problem of music's indeterminate agency. But sliding between grammatical categories is one thing; slippage between conceptual categories is another, and Guck offers no theory of conceptual metaphor. Snarrenberg's superlative account of Schenker's analytical fictions, which I reviewed in chapter 1, shows just how far one can go without invoking an overarching theory of metaphor. Guck hints at the possibility of bidirectionality with her notion of foreground structural characterization (interacting with the background story of engagement). Yet bidirectionality needs to be developed into an explicit model whereby music operates alternately as the source and target for projection.

## PERFORMING GESTURES

Robert Walser's essay "The Body in the Music" (1991) compares music's acoustic power to the action of a physical force. These musical "forces" (see Larson 1997) are closest to bodily force in the act of performance. Here, the "body" in the music is ostensibly the index of the performer's own body as it is brought to bear on the act of sound production. One might think, therefore, that the key to understanding embodied metaphor in music is a study of the performer's gestures. This becomes especially plausible given that rhetorical tropes (as I will discuss in chapter 3) originate in the gestures of the rhetor. But I will reject this thesis, arguing that performance theory, though interesting in itself, is a red herring, a blind alley, for metaphor studies.

When Guck asked three of her students to converse about Chopin's B Minor Prelude, one of them used "the metaphor of an arch" to describe the shape of the melodic line over the course of the whole piece (1991, 4). Guck speculates that Chopin's melodic arches retain a vestige of their origin in physical gesture:

> To hear arching movement, one most likely recalls, subliminally, memories that incorporate the fine, continuous adjustments in muscle tensions needed to produce the smooth gesture: an initial impetus that increasingly opposes gravity as the arm rises, stretching to the point of fullest extension, then decreasing tension as the arm yields to gravity. (7)

The metaphor of arching movement is seductive because it is so versatile. Each and every musical parameter can be appraised in terms of rising and falling intensity: high and low pitch, fast and slow rhythm, tense and relaxed harmony. Invoking Todorov's concept of the "narrative curve" (1977, 108–19), Guck extends the arch metaphor also to the affective contour of musical discourse. Thus a musical narrative begins with the presentation of a situation, arches toward a climax via a series of developments and complications, and relaxes through a process of untangling and simplification.[7]

Despite its many attractions, the arch metaphor is full of problems. First, homogenizing the complexity of music to gradations of intensity turns it into a crude textural plasma (Penderecki may

compose in this way, but not Chopin). Second, it confounds third-person observation of contour as a visual sign with the first-person, physiological experience of creating a gesture. In other words, muscle tension does not necessarily result in the appearance of rising and falling (a hand clenches, a trunk sways). Third, it is not clear whether the arm gestures cited by Guck refer to the specific movements of a piano performance or to a memory in the observer of motion in general (including everyday nonmusical gestures). Last and not least, does musical contour really retain a vestige of its putative origin in physical movement? Guck is ambiguous: her claim that Chopin's arch "incorporates the movement and tension *qualities* of gesture" (7) leaves open the question of whether these qualities truly embody the physical aspect or are merely mimetic.

A theoretically more sophisticated attempt to explain the grounding of elaborate musical categories in the performer's bodily gestures is made in an influential article by David Lidov called "Mind and Body in Music" (1987). Lidov charts the series of removes from somatic immediacy to textual abstraction according to Charles Peirce's sign typology of index, icon, and symbol. Indexical gestures, such as "tempo, rubato, nuance of intonation, and dynamic level," are directly expressive of the body, whereas icons are "the isomorph or trace of some object or force not immediately in contact with it" (73). Conventionally formal aspects of the score are semiotically the most articulate and the most distant from the body: they are symbols. In a series of lectures on gesture published on the World Wide Web (1999), Robert Hatten has criticized Lidov's opposition between "the immediacy of gesture and the abstractness of musical categories." Hatten contends that music's motivic level does indeed retain a strong gestural profile, despite its remove from the body: "instead of sublimation, perhaps we should be seeking a kind of emergence whereby the gesture maintains its characteristic potency while gaining a factor of generalization or type-formation (rather than abstraction)" (lecture 2/3). But is this gesture an aspect of the corporeal body, or the quite different aesthetic body of the musical work? I have argued that these two "bodies" are distinct.

The metaphor of "gesture" is superior to that of "arch" because it shifts the analogy between music and (bodily) motion to a deeper level. Arch contours are primarily a visual sign, reliant equally on our impression of motion and the notational representation of melody. By contrast, the gestural in music appeals to less visible, more dynamic forces. With respect to the body, a gesture that seems simple is actually the product of complex muscular interactions. With respect to the music, the digital and discrete structure of notation misrepresents the temporal continuum as a series of time slices. What musical motion shares with gesture, then, is continuity, particularity, and analog character. A writer who has explored this relationship with rare imagination is the performance theorist Alexandra Pierce (1994). Whereas Guck and Hatten stop at the melodic surface of the score, Pierce pursues the body-music connection into the realms of the Schenkerian conceptualization of form. One might have expected this analogy to be made on the basis of contour, given that Schenker's concepts of directed tonal motion and voice leading are metaphorically so loaded. In fact, Pierce grounds the link at the profounder level of common structure. Rather than looking for the body in a Schenkerian graph, she discovers quasi-Schenkerian structural levels in our body:

> Our own physical and psychological structure, and its life in movement, is Schenkerian—we manifest structural levels in our daily activity. When we walk, legs swing to articulate the foreground into a series of steps; arms swing in sympathetic counterbalance; trunk and head move simultaneously a slower, continuous line through space—an undivided, more background, progression. Playing the piano, the deft actions of our flying fingers are connected to the slower, more generalized swayings of the trunk and are grounded by the supportive contact of pelvis to chair and feet to floor. (57)

Now, Pierce is interested in motion theory and analysis primarily as a means of teaching more sensitive performance. In this, she follows in the distinguished pedagogical footsteps of Émile Jaques-Dalcroze, another teacher of music through motion (eurhythmics). From Pierce's standpoint, getting in tune with our movements leads to better (more-analytical) hearing, which in turn leads to more-musical performance. The mapping between bodily motion and music is thus much more oblique and mediated than in Guck's theory. Pierce teaches specific movement exercises such as "spanning," "arcing," and "stepping," which help students imagine musical structure more dynamically. For example, spanning is an exercise in gradually stretching the hand open to its full

extent, "replicating on a small scale" the stretch of the body from trunk to limbs. Echoing Guck, Pierce suggests that "the spanned stretch is a distinct kinesthetic experience of the narrative curve, with an intensifying of motivation toward climax and then a denouement" (87). But Pierce's argument is more subtle: understanding a "span" as an event in "an entirety," an indivisible complex of actions, teaches us to conceptualize middleground harmonic rhythm as a continuum, a "melodic-harmonic progression whose chords coalesce, extend, and then give way to the next in a succession of energetic intensities peculiar to the context" (86). It also communicates to a musician the fluidity of performance phrases, which normally cut across regular formal groupings.

Guck, Hatten, Lidov, and Pierce all, to varying degrees, identify the bodily experience of a performer with an immediacy that is distanced from musical structure. To be sure, musical structure, with its abstract and articulated systems of internal relations, can still echo (Guck and Hatten) or be echoed by (Pierce) structures of bodily motion. Nevertheless, a commitment to somatic immediacy—the continuous, particular, and analog character of musical gesture—stands in the way of discriminating and categorizing the various types of bodily experience. Pierce's typology of exercises (spanning, arcing, and stepping), which correlates with aspects of Schenkerian hearing, is an interesting, if idiosyncratic, attempt to break out from the body/structure dualism. Furthermore, it would even seem to point toward a possible rapprochement between gestures and schemata, since both are patterns of bodily motion. And yet true convergence can never be possible. Performers are human first, musicians second; for all their concrete immediacy, performed gestures are nonetheless surface phenomena. Performance theorists are usually silent about the deeper principle that enables bodily thought, and that principle is schematism.

# 3
# *Poetics*

> Metaphor is to poetic language what the model is to scientific language.
> —Paul Ricoeur, *The Rule of Metaphor*

## *The Poetic Subject*

So far, we have dealt with metaphor in relation to music as it is interpreted by listeners and theorists, but not with surely the most important subject of all: music composed. Music presumably exists independently of how we receive it, notwithstanding the much-exaggerated "death of the author" conceit so beloved of postmodern philosophy. Aesthetic effects are not mere projections from our metaphorical imaginations. The thrust of my aesthetic excursus was that music structures thought as much as thought structures music, a symmetry at the heart of my bidirectional view of metaphor. This symmetry is actually implicit within the broad tradition of metaphor theory as a whole, as a split between conceptualization and poetics—between "metaphor as model" and "metaphor as figure." The poetic tradition is in fact the older, and stems from Aristotle's notion of metaphor as a tool of literary discourse. Paul Ricoeur's *The Rule of Metaphor* (1994), in addition to being far and away the richest and most comprehensive account of modern times, keeps faith with the classical, Aristotelian view of metaphor as creative. It seems to me that any approach to aesthetics that puts the craft of composition first and keeps interpretation firmly in second place is rather healthy. There is no denying, of course, that the constructivism of cognitive metaphor theory has been extremely beneficial in showing how reason is mediated (by bodies, by cultures). But somewhere along the line, down some sort of *sorites* slippery slope, mediation slides into solipsism and relativism, so that it becomes not just impossible but even unethical to defend the primacy of a tradition or the authority of a text (see Bloom 1995). This development is absurd: although conceptualization is admittedly "creative" in some respects, it cannot, by definition, be as creative as poetics. Composers are simply more creative than listeners, and that is why they are composers. Following Ricoeur, the present chapter proposes nothing less than a general theory of musical discourse, with an analytic methodology geared to metaphor in the common-practice period. I address the three pieces by Bach, Mozart, and Beethoven I examined in chapter 1, but now from the opposite angle of metaphor as compositional act. The chapter is organized in three sections. After a concise exposition of Ricoeur's theory, I then apply it to music. I conclude, in the third section, by analyzing specific musical discourses.

## 1. FIGURES OF DISCOURSE: THE BODY IN THE TEXT

Lest we forget, the original place of metaphor is in literary discourse, as a rhetorical figure. Aristotle tells us that "metaphor consists in giving the thing a name that belongs to something else" (in Ricoeur 1994, 13), thereby effecting a displacement (*epiphora*) of a word from its proper usage. When Homer writes of Achilles that "the lion leapt," "it is a metaphor—here, since both are courageous, he has transferred to Achilles the name of 'lion' (*Rhetoric* III/4)." Aristotle's example assimilates at least four additional characteristics of metaphor: substitution ("lion" for "brave"), comparison (Achilles with lion), deviation (the figurative use of "lion" deviates from its proper sense), and ornamentation (the figure decorates a concept). Actually, these four categories do not

exhaust the complexity of Aristotle's definition, which has kept writers on metaphor busy for more than two millennia. W. A. Shibles' bibliography on metaphor cites three thousand titles, and this was compiled in 1971, long before the subject became fashionable again. Taking the long view, recent theory is probably premature in dismissing metaphor's language orientation entirely. Or rather, the "linguistic turn" that the "cognitive turn" is supposed to have replaced denotes not language as a whole, but, more particularly, early-twentieth-century linguistics, on which structuralism was based. The writer who, more than any other, recognized the cognitive import of classical metaphor—thereby challenging facile distinctions between "traditional" and "modern" approaches—is Paul Ricoeur. Ricoeur's *Rule of Metaphor* is still the richest and most substantial text on the subject, even though it was written in the mid-1970s. Rather than claiming that Ricoeur anticipated the ostensible revolution in metaphor studies in the 1980s, it would be fairer to say that we are still digesting his ideas. The nature of his relationship to cognitive metaphor is problematic, however; for instance, although he was actually Mark Johnson's teacher, Ricoeur's work is not cited in Lakoff and Johnson's main writings. Ricoeur's erasure from these books is emblematic of the neglect of an entire tradition of European phenomenology and hermeneutics, including such major philosophers as Edmund Husserl, Martin Heidegger, and Maurice Merleau-Ponty. At the heart of this tradition is the text. Ricoeur's interest in metaphor is primarily as a technique of interpreting and justifying the grammatical license or "impertinence" that typically characterizes poetic discourse.

Ricoeur's lexical orientation makes him an Aristotelian, in marked opposition to the Platonic idealism of Jacques Derrida's "White Mythology" (1982), which is orientated more toward the metaphysics of the visual (and which I will touch upon in Part Two). The essence of Ricoeur's theory is plurality, and plurality is evinced in the sheer range of his references. The book is as much a critical survey of the literature on metaphor as a personal theory; that is, Ricoeur's theory is articulated very much in response to others. Nevertheless, the book does present a coherent argument, namely, by insisting on the dimension of lived human experience intrinsic to figured discourse. The book's original French title is *La métaphore vive*, living metaphor. Central to this human dimension is the aspect of embodiment. In an extraordinary way, the metaphorical text is a proxy for the human body. The metaphor of "text as body" develops issues presented in my previous chapter, but from a radically new angle. Rather than the bodily aspects of a text being the result of projection from the physical domain, there is something intrinsically physical about figurality itself. Ricoeur has grasped that the figurality of the text was always at the core of the rhetorical tradition, and, in a powerful sense, *The Rule of Metaphor* carries these classical debates over into the modern arena.

Ricoeur, of course, was not the first to see the body in the figure. The word *figura*, according to Auerbach's classic study, is cognate with a group of words denoting "plastic shape" and including *fingere, figulus, fictor*, and *effigies* (Auerbach 1973, 11). In the evolution of rhetoric, the meaning of *figura* shifts toward the more abstract concept of "form," analogous to the Greek *schema*. Thus Lucretius transposes the term from the plastic and visual to the verbal and auditory sphere, when he speaks of the *figura verborum*, "the figure of words" (Auerbach 1973, 16). Even when, in Quintilian's rhetoric, its meaning has settled into the technical term for the ornamental circumlocutions that we call "figures of speech," a sense of "copy," "imitation," and "image" still clings to it. Cicero's eloquence confers figurality upon his words, a figurality which imitates the very body of the orator. The figurality of figures survives well into the nineteenth century in Pierre Fontanier's *Les figures des discours* (1830):

> It appears that, originally, the word *figure* was to be said only of bodies, or, equivalently, of man or of animals considered as physical and with respect to the limits of their extension. And, in this first acceptation, what does it signify? Contours, features, the exterior form of man or of an animal or of any palpable object whatsoever. . . . In its different ways of signifying and expressing, [discourse] has something analogous to the differences in form and features to be found in real bodies. Without doubt, it was on the basis of this analogy that the *metaphor* "the figures of discourse" was coined. (In Ricoeur 1994, 143)

To this tradition, Ricoeur contributes the insight that a figure becomes "physical" to the degree that it infringes grammatical rules. A logically absurd or self-contradictory statement, such as "to live a

living death," cannot be understood on a literal level and so forces the reader to infer a second-order, metaphorical meaning. Once it is liberated from its first-order, referential level, language can be appreciated as a material in its own right: "the sign is looked at, not through. . . . Instead of being a medium or route crossed on the way to reality, language itself becomes 'stuff,' like the sculptor's marble" (Ricoeur 1994, 209). In one respect, Ricoeur is merely running with a theme made familiar by the linguist Roman Jakobson, who famously characterized the "poetic function" as a mode that accentuates the "message" at the expense of the "referential function." His idea also recalls the symbolist commonplace of *l'art pour l'art*, which raised the "music" of language over its sense. Nevertheless, whereas previous approaches to this question treated language's reification into "stuff" in poetry as an endpoint, a frontier of the ineffable beyond which criticism could not venture, Ricoeur begins with this phenomenon, and submits it to a probing analysis from the standpoint of a tension theory of metaphor.

When the poet says that "nature is a temple where living columns," there is a tension between words (between "nature" and "temple"), then between two interpretations (the literal and the metaphorical), and finally between identity and difference (tension in the copula "to be": in the sentence's literal sense, "is" means "is not," since nature is not a temple; metaphorically, "is" means "is like"). The trajectory from word to sentence to discourse reflects the path of Ricoeur's book as a whole, in line with a progression from predication to hermeneutics and from sense to reference. Language becomes most physical, most tied to the here-and-now of human experience, in the events of discourse; that is, at the end of this pathway. Only here does language break out of its system to connect with and refer to the world. Ricoeur's position, then, is markedly opposed both to French structuralism and to the nominalism of American contemporaries such as Nelson Goodman (1976), who holds that meaning is only an effect of conventionalized sign types. The plan of Ricoeur's book is indebted, rather, to Émile Benveniste's (1971) division between words (that is, "signs") and sentences (that is, propositions) as distinct fields of inquiry, characterized, respectively, as semiotics and semantics. Benveniste points out that a sentence constitutes a whole that is not reducible to the sum of its parts; nor does it relate to other sentences oppositionally as a linguistic unit or sign, such as the phonemes, morphemes, and semantemes that make up words. Conversely, though sentences might be serially arranged in discourse, propositions cannot be integrated into a higher-level unit of language. Benveniste's defense of the sentence's unitary status quickly leads to its recognition as the actual source of language—hence his claim that "the sentence, an undefined creation of limitless variety, is the very life of human speech in action" (in Ricoeur 1994, 68). We can never have an idea what a word or sign means until we have used it in conversation. Benveniste thus radically subverts the traditional assumption that sentences are products of words; now, words are shown to be derivatives of discourse. This prioritizing of discourse over words, of semantics (and, ultimately, hermeneutics) over semiotics, is extensively developed by Ricoeur into a theory which celebrates the creativity and imaginative quality of language that metaphor epitomizes.

Tension theory at the level of the sentence is defined by Ricoeur in opposition to the classical theories of metaphor, which are based not on discourse but on individual words. According to the old views, metaphor is a substitution of one word for another on the basis of a resemblance. It is a decorative trope that adds no new information. Ricoeur develops Benveniste's argument of the generative and contextual character of language by turning to three Anglo-Saxon theorists of metaphor: I. A. Richards, Max Black, and Monroe Beardsley. They all explain metaphors as a tension or interaction between two terms in a sentence, variously defined as "tenor" and "vehicle" (Richards), "focus" and "frame" (Black), or "principal subject" and "secondary subject" (Beardsley). In Black's much-cited example, "Man is a wolf," the focus, "wolf," acts as a screen or filter upon our concept of "man," suppressing some details, emphasizing others. Black's special importance for Ricoeur is that he finds a place for the old word-based view of metaphor in the new context theory. Metaphor for Black consists in the relationship between the sentence and a particular word—the focus ("wolf"). Black thereby interrelates metaphor's old lexical dimension as deviation from a

particular word with metaphor's new generative aspect as creation of a new "semantic pertinence." Black's notion of focus is important also because it demonstrates the affinity between metaphor and model: "wolf" organizes our view of man in the same way that a scientific model redescribes reality. Ricoeur takes from Black the idea that metaphor does not merely relate meaning, but creates it through "semantic innovation." By combining these two elements of Black's tension theory, Ricoeur comes up with his summatory definition: "metaphor is a semantic innovation that belongs at once to the predicative order (new pertinence) and the lexical order (paradigmatic deviation)" (Ricoeur 1994, 156–57). Tension and semantic innovation are reciprocally linked, in that metaphor effects a reduction of tension by creating a new semantic pertinence at the level of the sentence as a whole. The traditional view of metaphor is thus upended: metaphor denotes not deviation, but reduction of deviation at the level of understanding.

Ricoeur's second order of tension operates at the hermeneutic level, between a literal and a metaphoric interpretation. At this point, Ricoeur begins to reintroduce the concept of reference, which had been laid aside in the step from the semiotics of the word to the semantics of the sentence (in Richards's terms, the words of a sentence really only refer to each other, through what he calls "delegated efficacy," rather than to objects in the real world). In the play between literal and metaphorical interpretations, the referential realm is not abolished but only provisionally suspended, through a process termed *epochē* (after Husserl). The new meaning is constructed on the ruins of the old, which is preserved as a source of productive resistance. This device of taking up the old within the new suggests the Hegelian *Aufhebung:* denotative reference is both canceled and sublated to a higher realm. Ricoeur's theory, then, is negative in the dialectical sense that this secondary, metaphorical order of reference is defined in terms of its resistance to a primary order: "poetic discourse faces reality by putting into play heuristic fictions whose constitutive value is proportional to their power of denial" (Ricoeur 1994, 239). Similarity is apprehended in spite of and through the difference. Hence the "hard object, similar to sculpture, that language becomes once it is stripped of its referential function" (209) is not a static "stuff," as we first thought. Rather, it is animated by a "tensive aliveness" (250) and a "bi-polar tension." Ricoeur here introduces his crucial notion of metaphor's "split reference," which can be interpreted according to a "stereoscopic vision in which the new situation is perceived only in the depths of the situation disrupted by the category mistake [that is, the grammatical impertinence]" (231). With the return of reference to Ricoeur's argument comes a paraphernalia of visual analogies. He talks now of "seeing," "image," "the verbal *icon*." In short, only now is he in the position to do justice to the second branch of Aristotle's definition of metaphor—one I have so far failed to mention: "to metaphorize well," said Aristotle, "implies an intuitive perception of the similarity in dissimilars" (in Ricoeur 1994, 6). Moreover, "metaphor sets the scene before our eyes" (34). In his opening chapter, Ricoeur had remarked on the profound affinity Aristotle discovers between metaphor's ability to make visible and its capacity to render a description alive or active. Aristotle writes: "in all these examples the things have the effect of being active because they are made into living beings" (in Ricoeur 1994, 34). Ricoeur comments: "thus one and the same strategy of discourse puts into play the logical force of analogy and comparison—the power to set things before the eyes, the power to speak of the inanimate as if alive, ultimately to signify active reality" (34–35). Ricoeur is conscious that this second, visual branch of Aristotle's theory smacks of the "shameful traces" of Platonic metaphysics (34), whose idealism forms the basis of his quarrel with Derrida (see part II). *The Rule of Metaphor* is really a hugely elaborated exercise in filtering this visual branch through Aristotle's primary, lexical definition ("metaphor consists in giving the thing a name that belongs to something else")—or, rather, filtering reference through sense. Ricoeur achieves this synthesis, as we have seen, toward the end of his book, in chapter 7. Finally, Ricoeur is ready to fully engage with Hester and Wittgenstein's concept of "seeing as."

We now arrive at the most powerful level of Ricoeur's tension theory: the level at which metaphoric discourse redescribes reality. The sense of words in a sentence gives way to the reference of discourse to the world. Although metaphor is a creation of language, this move into the world

requires Ricoeur to bring out a cognitive dimension that in some respects transcends language. He does this by descending to fundamentals, by uncovering common ground between his theory of semantic innovation and Kant's notion of the "productive imagination": that is, schematism. As we saw in chapter 2, a schema is for Kant a transcendental image in the mind that allows us to mix concepts and intuitions and so imagine or construct a perceptual object, be it a triangle or a human face. The key points about schemata are that they combine perception and knowledge, being half thought, half experience; and that they are mechanisms for producing images. The first point suggests to Ricoeur an affinity between schemata and Hester's metaphoric "seeing as":

> "Seeing as" quite precisely plays the role of the schema that unites the *empty* concept and the *blind* impression; thanks to its character as half thought and half experience, it joins the light of sense with the fullness of the image. In this way, the non-verbal and the verbal are firmly united at the core of the imageing function of language. (Ricoeur 1994, 213)

Hester's earlier work on metaphor had opened the way for connecting Kant's conceptual orientation with the realm of poetic language. Kant's discussion of schemata in his First Critique stays within the bounds of scientific knowledge and does not encroach on matters either of art or language. Ricoeur's boldest move is to extend Kant's notion to the poetic understanding. This analogy between conceptual and verbal imagination is Ricoeur's defining metaphor and is well expressed in David Klemm's fine commentary: "just as the schema is the rule for production of a transcendental image, the iconicity of poetic language acts as a schema for the production of images that make possible the creative synthesis of emergent meaning" (Klemm 1983, 104). In the realm of perception, the productive imagination produces concepts; in the realm of language, it produces emergent semantic innovation.

The second key point is that a schema, like a metaphor, is a mechanism for producing images. Ricoeur's tension theory, with its principles of *epochē*, split reference, bipolar tension, and stereoscopic vision, is the engine that drives this mechanism. Verbal icons are constructed on the basis of a primary referential level; a secondary, metaphorical level of reference is emergent from an underlying semantic impertinence. In brief, a poetic "image" is only metaphorically visual, because it is based on, is tied to, the verbal level. Ricoeur elaborates:

> It seems to me that this notion of imagery tied by meaning is in accord with Kant's idea that the schema is a method for constructing images. The verbal icon in Hester's sense is also a method for constructing images. The poet, in effect, is that artisan who sustains and shapes imagery using no means other than language. (211)

Ricoeur means, in short, that the imagery of metaphor inspires thought; it sets into motion imaginative reflection in the reader. In Klemm's words, "metaphorical schematism indicates the point of emergence of conceptual thinking" (Klemm 1983, 105). Ricoeur holds that metaphor acts also on the body in the form of *feeling*, although he defines "feeling" in a way that blends the cognitive with the affective. Feeling is cognitive because it is referential, and it is referential because it fosters a "mood" that tunes the reader with the world of the text. Nothing promotes identification—that is, contact—between subjects more than emotion (Ricoeur's nuanced concept of attunement through mood is derived from Heidegger's *Befindlichkeit*, the ability of the subject to project himself into a situation). The mood of poetic language performs an *epochē* on bodily emotions; the figural body of the text supervenes upon the literal body of physical experience, in a direct reversal of the body-to-text trajectory of Lakoff and Johnson's model. The figural body of an aesthetic work emerges through a process of artistic understanding; it is not the same as the literal biological body, which supports conceptual schematism. Nor is it the same as the metaphorical body, which is projected through conceptualization onto more abstract domains, since there is nothing abstract about art. The integrity of art depends, rather, on a critical distance between these three types of "body." This notion of distance is fundamental to Ricoeur's hermeneutics, and it is associated with his concept of text.

A text can cast its effect on us, can open up new worlds of experience, precisely on account of its difference from us. This difference is partially an effect of the ontological condition of a work of art. Unlike oral discourse, a poem or a novel is worked on externally by the artist, like a physical sculpture. It is also a special instance of the "distanciation" peculiar to all written documents, artistic

or otherwise. A text circulates and is interpreted outside the place and time of its creation; its meaning is thus distanced from the intention of its author, from the social and historical contexts of its original audience, even from the linguistic codes operative in normal face-to-face communication. Its meaning is unfolded in the process of interpretation. This is certainly not to state that the text's meaning is entirely in the hands of the interpreter. On the contrary, interpretation is an act of opening up the mind to the novelty of the text, rather than imposing our limited views. The easiest way of grasping this idea, perhaps, is to revert to Ricoeur's favored analogy of poetic language with quasi-physical material: the stuff of language, like sculpted marble, has properties irrespective of authorial intentions and contexts. Opening oneself up to being restructured by the text leads to learning and self-development, which Ricoeur characterizes as a cycle of distanciation and appropriation. We lose ourselves in order to return to ourselves; in Ricoeur's words, "The issue of the text only becomes my own if I disappropriate myself from myself, in order to let the issue of the text be. Then I exchange the *I, master* of itself, for the *self, disciple* of the text" (Klemm 1983, 157). Ricoeur's language, with all its talk of the "I" encountering the "not-I," may suggest a rather unfashionable existential mysticism. But he is really only describing the dynamics of the learning process, and the theological tinge of his writing does not detract from the power of his analysis of how metaphor works.

In summary, Ricoeur's theory helps us understand how the force of an aesthetic text impinges on our lives to the same, yet contrary, extent that we project our lives upon aesthetic texts through conceptual metaphor. We need Ricoeur in order to construct a fully bidirectional model of musical metaphor, balancing conceptualization with poetics. I propose that we consider this metaphorical counterflow—text to body versus body to text—as a tension theory at a higher level. I represent this bidirectional model in figure 3.1. Before we turn to figures and music, let us briefly review how the conceptual and poetic branches mirror each other.

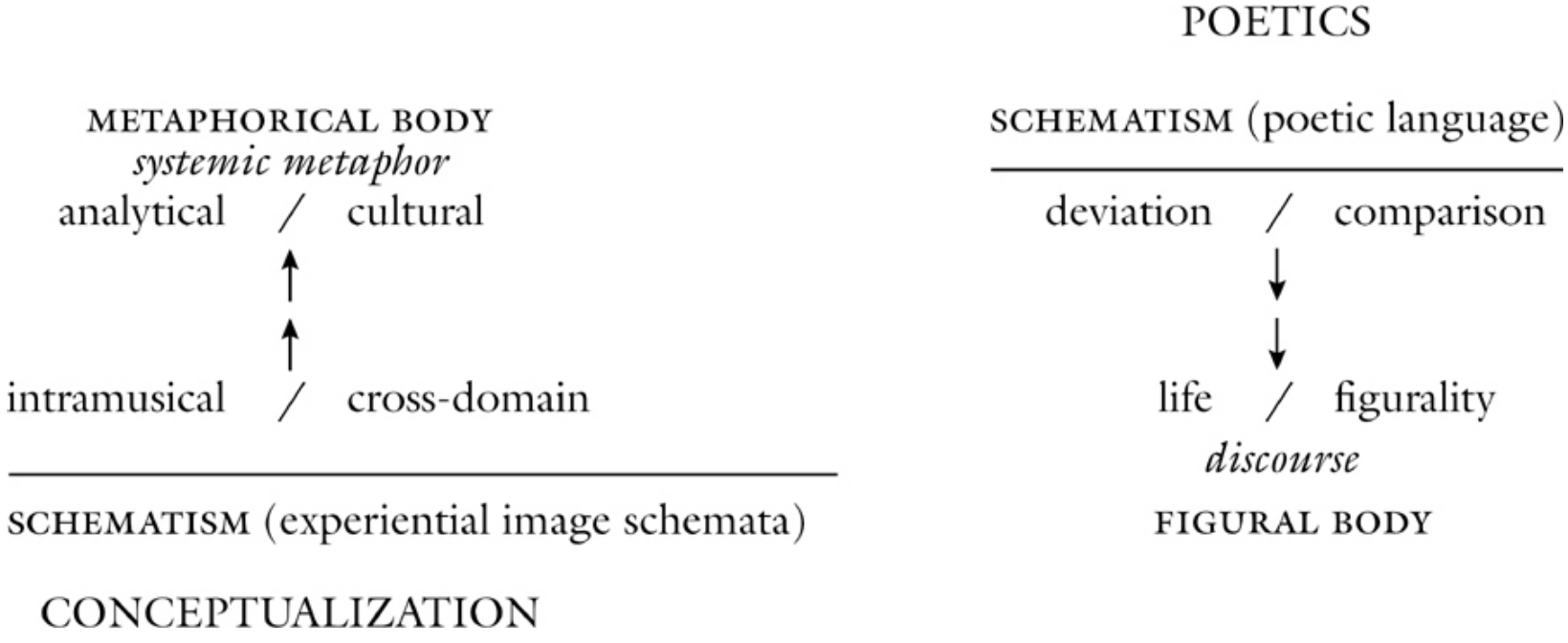


Figure 3.1

1. *Intramusical/cross-domain, deviation/comparison*. Ricoeur's poetics are predicated on the classical distinction between deviation and comparison theories. Deviation mirrors the CENTER/PERIPHERY structure of intramusical mapping; comparison also crosses between domains.

2. *System and discourse*. Ricoeur's progression from word- or noun-based metaphor to holistic discourse mirrors that from individual to systemic conceptual metaphor.

3. *Dual aspect: life and figurality*. The joint outcomes of metaphorical poetics—a discourse that is both "alive" and "figural" (like a body)—mirrors the split between analytical and cultural systemic metaphors.

4. *Body as source, body as goal*. The body is the source for conceptual metaphor; the figural "body" is the goal of poetics.

5. *Redescription of reality*. "Seeing as" and "hearing as" effects are as active in poetics as they are in conceptualization, but in opposite directions. Whereas conceptual metaphor redescribes music, the poetic metaphors of art music in turn redescribe the world. Music, like Greek tragic poetry, impinges on our lives by literally helping us to perceive reality in different ways.

6. *Schematism*. Ricoeur and Johnson adapt Kant's theory of schematism to complementary domains. For Johnson, this domain was bodily experience; for Ricoeur, it is poetic expression. In chapter 2 I discussed a basic kinship between bodily and aesthetic experience, in that both are preconceptual. For Johnson, concepts arise out of bodily image schemata; for Ricoeur, concepts are produced by what Hester had termed metaphoric "verbal icons."

## 2. MUSICAL FIGURES

At first sight, it is surprising just how neatly Ricoeur's poetics of word, sentence, and work maps onto the history of music poetics: word = baroque, sentence = classical, work = romantic. The seventeenth century is the golden age of music figuration, and its compositional poetics is institutionalized in a discipline called *Figurenlehre*. *Figurenlehre* addresses itself, typically, to individual notes or technical devices, as in the diminution of structural steps, or deviation from normative voice leading and dissonance treatment. Baroque music poetics seems ideally suited, therefore, to the substitution view of metaphor (musical figure substitutes for structural step). Thinking of music as a well-formed sentence, that is, a phrase (*Satz*, or *Periode*) only becomes possible in the highly conventionalized style of the eighteenth century. Classical poetics focuses on the tension between conventionalized grammar and moments of expressive lyricism and fantasy. Critics such as Sulzer identified such expression with nature and poetry, and ultimately with metaphor. The classical theory of metaphor is a tension theory: "natural" feeling filtered through "artificial" syntax within the sentence. In the nineteenth century, finally, the unit of metaphoric discourse is the work conceived as a living whole, whose meaning is divined by the listener (= reader) through an act of interpretation. A. B. Marx, the theorist of organic unity par excellence, was a student of the inventor of hermeneutics, Friedrich Schleiermacher.

Its neatness aside, this model is wrong. Valorizing the hermeneutic (organic) view of metaphor over the substitution view and seeing the history of music poetics as a drift from the latter to the former leads to the absurd conclusion that Bach was neither imaginative nor creative. Ironically, hermeneutics—a discipline that originates in theological exegesis—feels more at home with Bach than with any other composer. The problem, as I take it, has two sides. First, it is usually forgotten that the importation of terminology from rhetoric to music constitutes an act of metaphorical transfer in its own right. The affinity between the two domains is not a given; it is contested and renegotiated all the time. Second, and more serious, the assumption, deeply rooted in Ricoeur's book, that the conceptual progression word–sentence–discourse is also a historical progression is extremely suspect and is simply not backed up by the facts. Ricoeur misses out huge chunks of history, leaping from ancient rhetoric to the present day via brief stops with the romantic poets and Pierre Fontanier in the nineteenth century. Crucially, Ricoeur omits the history of metaphor in the German tradition, which is peculiar, given his sympathy with modern thinkers such as Heidegger. The historical narrative presented in *The Rule of Metaphor* resembles the circular schemes of departure and return typical of many "metaphorical" histories, schemes which I will critique in part II. In Ricoeur's eyes, the full wealth of metaphor's potential as a tension theory is implicit in Aristotle's originary definition. Metaphor thus became a word-based substitution view in the rhetorical tradition of Quintilian and Cicero and then underwent a long period of decadence, when metaphoric thought stiffened into mere taxonomy of figures. It was reborn as a tool of cognition in the late eighteenth century, with Archbishop Richard Whately's definition of metaphor as "a philosophic discipline aiming at a mastery of the fundamental laws of the use of language" (Ricoeur 1994, 76). Metaphor's hermeneutic turn was already implicit in Shelley's description of language as "vitally metaphorical"

(80). To all intents and purposes, tension theory or hermeneutics "arrived" in the early nineteenth century; it then awaited its rediscovery by the Anglo-Saxon critics Richards, Black, and Beardsley, followed by Ricoeur's own philosophical twist. To even begin sorting out what might constitute a musical figure means weaning Ricoeur's concept of tension theory, which is admirable in itself, away from his questionable historical narrative. In short, we must begin by finding true discourse in the baroque.

What defines a musical figure has traditionally been a matter of interpretation and debate. I will go into this matter much more deeply in chapter 4. Baroque *Figurenlehre*, which entails the wholesale transposition of terms from rhetoric to music, itself elaborates the metaphor "music is rhetoric," or, in Claude Palisca's nice phrase (1994, 295), the metaphor "ut oratoria musica" (a play on Horace's *Ut pictura poesis*, "as in painting, so in poetry"). The major question is whether figures contain any musical substance or are merely decorative. The answer lay largely in how the universe of language was carved up. Cicero divides rhetoric into five levels (Dreyfus 1996, 1–3): *inventio* (discovery of material), *dispositio* (arrangement), *elocutio* (style), *memoria* (the art of mnemonics), and *actio* (delivery). By this system, metaphor belongs to *elocutio*, or stylistics. It would be wrong, however, to draw the thoroughly modern conclusion, shaped by our notions of generative grammar, that style (i.e., ornament) was thus superficial. As we saw with Aristotle, classical poetics placed enormous importance upon the function of decorative imagery. Nevertheless, the history of music rhetoric is very much an ongoing attempt to shoehorn Cicero's scheme into a proto-Schenkerian (or crypto-Chomskyan) generative process. This tendency is apparent even in the seventeenth century, when Christoph Bernhard reduces Cicero's levels from five to three: "there otherwise belong to Composition three things: *Inventio, Elaboratio*, and *Executio*, which display a rather close relationship with oratory or rhetoric" (in Dreyfus 1996, 3). By this light, figuration consists in the elaboration and performance of a created idea ("invention"). This ternary scheme typically insists on a sharp line between figure and content: figures, while fine in moderation, should never cloud the matter of discourse. It was thus common to refer to melodic ornaments or graces as "figures," while at the same time urging their restraint. For example, Caspar Printz, in the ninth chapter of his *Musica Modulatoria Vocalis* of 1678, titled "Von Denen Figuren *in genere*" (Printz 1678, 42), compares figures to "the salt of melody": "like an unsalted dish, a melody without figures is hardly acceptable." Nevertheless, just as we should never overspice the dish, the deployment of figures should not be excessive.

But it was always artificial to pretend that musical figures were confined to decor. This definition was largely a by-product of the humanist endeavor to dignify the discipline of music poetics by modeling it on classical rhetoric. In reality, diminution processes infiltrate every level of musical creativity—the performer's elaboration of a score (*actio* or *executio*) as much as the composer's assimilation of performance practice into compositional material (*inventio*). The permeability between text and performance was recognized by Bernhard himself when he admitted that many compositional figures arose from the sedimentation of improvisatory devices ("artful singers as well as instrumentalists . . . have digressed somewhat from the notes here and there" [Hilse 1973, 90]). Moreover, figuration even penetrates the sanctum of supposed theoretical absolutes: the intervallic ratios and their disposition in harmonic syntax. Dissonance itself, according to Bernhard, is "the noblest *ornament* of a work" (Hilse 1973, 77). The idea of deviation, as in the deviation view of metaphor, was actually basic to the baroque concept of harmony. Complex harmonies, such as dissonances, were seen as deviations from a point of intervallic perfection, the unison (1:1). Although deviation was expressed as a mathematical ratio, the model predicates a quintessentially figurative, cosmological sense of the deviation of the world from God. The figurative, then, informs also the base of Ciceronian rhetoric, *inventio*.

Figures, in short, do not keep to their rhetorical station. The problem of deciding on which of the five (or three) levels they belong disappears when we give up on the substitution view, with its rigid distinction between the literal and the metaphorical, and move to an authentically creative view. We

need a tension theory of music predicated on sentencelike contexts, rather than isolated lexical units; a generative, rather than static, view of meaning arising from semantic impertinence. As with Black's and Ricoeur's tension theory, a musical metaphor is not constituted by a particular item or level, but by the interaction of all the elements in the whole (the metaphor is not "wolf" in itself, but the interaction between this word—the focus—and the entire sentence—the frame). A sense of musical context is afforded by grammaticality, that is, style. More particularly, style considered as an interpretational framework ("the rules of the game") that can make sense of seemingly nongrammatical expressions. For Bernhard, a figure denotes "a way of employing dissonances, which renders these not only inoffensive, but rather quite agreeable" (Hilse 1973, 77). A musical figure is a way of justifying deviations from strict compositional practice, departures from lexically codified usage—in Ricoeur's terms, not deviation per se, but the reduction of deviation.

A musical metaphor at the sentence level is thus an interpretational framework that legitimizes compositional license. (Robert Hatten comes to a similar conclusion with his notion of metaphorical trope as "higher-level organization" [1995, 381], although he reaches it via his distinctive path of markedness theory.)[1] Musical discourse, we will see presently, provides another kind of context for the understanding of impertinences. In grammar, this context is a differential system of rules (language and style); with discourse, it is the work considered in itself as a play of internal relations. Only in musical discourse does the work become a living being. But first we have to take on board Ricoeur's crucial distinction between metaphor's sense and reference. This distinction originates in Frege (the "morning star" and the "evening star" have different senses, but an identical reference—the planet Venus), and Ricoeur associates it with the concepts (sense) and images (reference) that are fused in the poetic schema. The distinction becomes particularly problematic, however, in a nondenotative medium such as music. Books have been written about the "sense" of music (even one with that title—see Monelle 1999). Yet what does it mean for music to have a reference?

### *The Problem of Reference*

The distinction between sense and reference maps onto the two ways in which grammatical impertinence, or compositional license, can be legitimized. Either deviation is reduced by constructing pertinence at a higher level (sense) or by objectifying the linguistic material into "stuff," which is then heard as expressing text or dramatic action (reference). Once again, we can turn to the baroque for illustration, although this duality holds in every period. Baroque compositional theory often explained breaches in regular contrapuntal practice (the *prima prattica*) by reformulating counterpoint from a more triadic perspective (the *seconda prattica*). Surface breaks in voice leading could thus be accommodated into a broader conception of tonal space. Hence, on the side of sense, pertinence is created at a higher level, triadic rather than linear. But a higher level of pertinence can be established also from the standpoint of reference. Here, apparent solicisms could be explained by going outside the music to a text or drama: Monteverdi's "second practice," after all, was associated with madrigals and operas.

Text-setting notwithstanding, we should not fall into the trap of thinking that musical meaning here consists in a reference to anything outside itself: if so, it would surely cease to be musical. The referential quality inheres, rather, in the very quality of musical material: the musical "sign system." When a musical figure is "heard as" expressing a text or dramatic action, it becomes appreciated qualitatively, as a "body" in its own right, with contours, features, and gestures. Notes that hitherto were understood purely as coordinates in a contrapuntal matrix suddenly become pertinent —"expressive"—in themselves. In Ricoeur's terms, music becomes corporeal "stuff"; it turns "bodily." Appreciating material in itself is quite different from grasping it functionally as part of an internal compositional logic.

The sense/reference distinction in music can thus be a wholly formal affair, with no need to bring in denotation of any external, objective reality. This accords with recent orientations in music semiotics, which treat musical signification as intrinsic to musical material. According to Raymond

Monelle, "musical codes are proper to music" (1999, 19). By insisting that music has "inherent signification" (11) irrespective of "sender" or "receiver," Monelle situates musical meaning at a "neutral level," in between poiesis and aesthesis. This move is surprising, since Jean-Jacques Nattiez (1975), the semiotician who originally applied Jean Molino's theory of the neutral level to music, expressly rejected musical semantics. But Monelle has grasped that Molino's notion of the neutral level is perfectly compatible with Hjelmslevian structural semantics—that is, Hjelmslev's insight that semantics has a structure too. Moreover, it is consistent also with Peirce's typology of signs (symbol, index, and icon), of which Monelle's *Sense of Music* avails itself with marvelous results, particularly for topic theory.

Viewing the sense/reference distinction as two varieties of metaphoric reduction (reduction of deviation) enables us to link Ricoeur's theory to the "hearing as" effects of chapter 1. As with the intramusical and cross-domain duality of conceptual metaphor, we can "hear" either the sense or reference of a poetic figure. The difference is that "hearing as" effects in poetics are driven by syntactic impertinence, rather than conceptual mapping. Despite this difference, their basic confluence allows me to cut a binary swathe through the history of musical metaphor in part II of my book. In other words, the sense/reference distinction appears to be institutionalized in rival schools of music theory. For example, on the "referential" side, one tradition of *Figurenlehre* follows Burmeister in seeing a figure as an objectification of musical material. Although a figure for Burmeister denotes deviation—it "departs from the simple method of composition" (1993, 155)—it can only be defined by custom, not functionally by rules. Bernhard follows in the tradition of "sense"; he thinks of a figure as "a way of employing dissonances, which renders these not only inoffensive, but rather quite agreeable." The referential tradition is antirationalist in some respects, in that it gives up on the possibility of truly explaining how figures work. Johann Joseph Fux, famous for organizing the species of counterpoint in rising steps—that is, in successive deviations from simplicity—does not extend this rationale to the supposedly free figures of recitative. Rather than attempting to explain their free dissonance treatment as an elaboration of a simpler structure, he appeals to the text alone: "in this style one should pay attention less to the harmonies than to the expression of the meaning of the words" (Mann 1965, 38). These dissonances are simply "considered good according to the nature of recitative." Fux's contemporary Friedrich Niedt keeps alive the opposite tradition in identifying "figure" with "variation." Variation for Niedt consists in "changing certain slow bass notes . . . into shorter notes" so that the passage "is embellished, partitioned, and divided in such a way that it receives more life, strength, gratefulness, and embellishment." According to Niedt, "this 'doubling' or 'varying' has, in a way, almost *the same quality as figures have in rhetoric*" (Niedt 1989, 74).

Vast and messy though traditions are, we must keep in mind that they body out an essentially simple binary operation. As with the rabbit/duck experiment, the listener can choose to adopt one perspective or the other over the musical material. Whether I pick out the voice-leading progressions buried within the figures (sense) or attend instead to the play of sonorities (reference) is subject to my volitional control. The crucial fact—and this leads us neatly from musical grammar into the deeper realm of discourse—is that *the choice is made by us* (be we listeners or theorists). One of the defining attributes of musical discourse, I argue, is that freedom of aspect perception is taken away from the listener and internalized instead by the composition. The unitary and vital experience of listening to actual music, as opposed to comprehending mere grammar, is captured, paradoxically, more faithfully by critics than by theorists. Wilhelm von Lenz's *Kunste-Studie*, a companion volume to his *Beethoven: Eine Kunst-Studie* (1855), contains one of the most beautiful of all musical metaphors. The sense/reference dualism is still there, in the opposition between the web of thematic interrelationships and the vegetal imagery. But it is integrated within a unified conception. Referring to the Allegretto of Beethoven's Seventh Symphony, Lenz writes:

> In the interrelationship of ideas of the whole, this tender web is like a final, difficult achievement over threatening powers, in reminiscence of a solemn church procession of an engaged couple, over which fate has tied its knot. Just as the branch of a weeping willow at the tombstone of a country cemetery decorates a beloved name, so the triplet figures of the *maggiore* section wave

> hesitatingly over the grief. With a backward glance at the wilted flowers of life, in comforting presentiment of the yet remaining hopes, these tones look out at the listener with a pair of eyes from which the world-soul smiles. (In Sipe 1992, 114)

Renaissance theorists such as L'Ottuso regularly called musical metaphors *fioretti*, flowers (see Palisca 1994, 78). Lenz's "flowers of life" nicely demonstrate how the ancient "flowers of rhetoric" metamorphose into the organic topos of romantic metaphor. The figure becomes alive, looking back at the listener "with a pair of eyes." It instantiates Aristotle's dictum that metaphors "have the effect of being active because they are made into living beings" (in Ricoeur 1994, 34). Evocative as it is, Lenz's metaphor nevertheless tells us nothing about the mechanics (poetics) of the music. By contrast, Ricoeur's theory helps us understand how metaphorical discourse plays out the sense/reference opposition within its internal dynamics. Ricoeur calls this process split reference through *epochē*.

# 3. MUSICAL DISCOURSE

A metaphor becomes properly alive only when it relieves us of some of the responsibility of interpreting and starts interpreting itself. This happens in discourse, which unfolds in time, is externalized like a self-contained object, and reflects upon its own material by splitting reference through *epochē*. I propose that musical discourse is defined according to three "symptoms": it is temporal; it is self-reflexive; and it moves toward the dense (see fig. 3.2).

1. Temporality: return of the paradigmatic, projected through time
2. Self-reflexivity: redescription of the past by future episodes
3. Density: trajectory toward the dense, via "blocked assimilation"

Figure 3.2 Three symptoms of musical discourse

This last symptom, density, is a term Ricoeur borrows from Nelson Goodman's *Languages of Art* (1976). Goodman defines aesthetic effects formally in terms of four semiotic symptoms: syntactic density, semantic density, syntactic repleteness, and exemplification (showing rather than saying). Ricoeur finds Goodman's approach useful in that it focuses on the materiality of metaphor without invoking anything outside the text (Ricoeur 1994, 231–35). Goodman is thus even more rigorous than Peirce, whose categories still depend on a notion of similarity (iconicity) or physical contact (indexicality) between a sign and its referent. Ricoeur's inspired move is to take Goodman's impeccably nominalist theory and give it a hermeneutic twist via his own tension theory. He thereby gets to have it both ways: density denotes the character of poetic material, and density becomes also a measure of tensive vitality—of *life*.

## *Temporality*

Time is the key here, since the progression from word-based metaphor through sentence to discourse moves us from the paradigmatic table to the syntagmatic chain. In the former, metaphor is a substitution within a paradigmatic table of lexical terms; in the latter, it arises from a sentence or discourse that, even when it is objectified as a "work," is still understood in time as a syntagmatic chain. This principle holds, however, only at the level of sense. At the level of reference, a paradoxical return of the paradigmatic occurs. According to Ricoeur, this return happens in line with the reactivation of the notion of similarity, a vestige of the discredited comparison theory of metaphor. The claim of comparison to be truly metaphorical is doubtful because, like its cousin simile, it suggests the existence of a literal level of shared properties. To compare Juliet with the sun is to claim, literally, that she is a fiery ball of gas. For this reason, comparison is really a form of the substitution view and is set aside with Ricoeur's turn to the tension theory of the sentence. In a paradigmatic table, a figure refers to the literal term on the basis of similarity, a vertical dimension

lost in tension theory. Tension, we remember, assumes grammar—that is, a horizontal disposition of terms. The vertical dimension of reference is recovered in discourse, which refers to the world and itself. This return of the paradigmatic is confirmed with particular clarity in musical discourse. We normally call musical discourse's paradigmatic dimension "variation form."

It is worth pointing out that variation procedure, whether in the relationship of a ritornello to an opening statement, or of a second theme group to a primary group, is different both from word-level figures and from sentence-level grammar. All involve elaboration of a model, but in contrasting ways. Let us go back to our baroque example. An isolated ornament is a word-based figure and deviates from a plainer model, according to the substitution view. At the level of grammar, figuration gives rise to syntactic impertinence. Second-order pertinence supervenes upon a first order that is coextensive with it; in other words, a structural step and its diminutions are given in the same time frame. In musical discourse, by contrast, the layers of the elaboration process are laid out as episodes in an evolving form. Hence figurative deviation returns, but now on the temporal axis. Model and elaboration are presented successively, as theme and variation, statement and ritornello, fugal exposition and episode. Structurally, the chain of transformations unfolded by musical discourse recuperates the paradigmatic dimension of the substitution view, the realm of reference and comparison. One could easily arrange the variants in a table—as indeed happens in many analytical methods. Nevertheless, musical discourse's paradigmatic aspect is very much a matter of second-order reference, of second-order verticality, since the variation process has been filtered through the tension theory of musical grammar, the intervening sentence level.

### *Self-reflexivity*

The return of the paradigmatic within the diachronic enables discourse to reflect upon itself. Typically, initial statements are reflected upon by future statements. Discourse, then, is a dialogue of the present with its past. The relation between model and commentary—"theme" and "variation"—is not literal but metaphorical, because it is now a function of discursive context: it involves second-order reference. Second-order reference brings us to the central notion of *epochē*. In a nutshell, musical *epochē* concerns the relationship between model and variation. In a paradigmatic table, the distance between model and figure is measured by similarity. In true discourse, however, model and variation may look outwardly extremely dissimilar; it is the job of discourse to produce this similarity. Literal first-order reference (similarity) is taken away, suspended through *epochē*; a second-order reference is constructed on top of, and in tension with, this primary order. Accordingly, discourse does not refer to reality; it creates it through an act of hermeneutic redescription.

Let us now consider what Ricoeur's theory of discourse adds to what we already know about musical rhetoric. It is important to grasp that the theory adds something substantively new to our technical notions of variation, elaboration, and development in music. We are not simply applying fresh jargon to procedures that might be explained more simply, and just as effectively, by conventional music-theoretical categories. Many of music's most fascinating properties emerge from what one might call music's unity of rhetorical space. Namely, figuration works both vertically, as counterpoint, and horizontally, as formal episodes, and there is a sense that these two axes flow into each other. It is this very property that motivates Schenker's theory of prolongation, whereby the horizontal *Urlinie* unfolds the vertical triad. It even informs how Schoenberg viewed the unity of atonal space, where (horizontal) motives and (vertical) chords are interchangeable. What Ricoeur's tension theory adds to the unity of rhetorical space is a trajectory toward the "dense," compounded of the tension between present (variation) and past (model). As musical discourse flows through time, its material becomes ever more corporeal, "figurative." Unlike the axis interchangeability in rhetorical space, this trajectory toward the corporeal is irreversible and unidirectional. I associate musical process with a process of becoming figuratively human. Following Ricoeur, I define this process according to Goodman's concept of density. I argue that hermeneutic density is achieved through a dialogue between present and past moments in the musical discourse.

## *Density*

Goodman's categories of "differentiated" and "dense" broadly parallel the sense/reference distinction of musical figuration. Differentiated and dense signs are exemplified, respectively, by texts and images, by digital and analog clock faces, by graduated and ungraduated thermometers (see Mitchell 1986). When musical material is objectified into "stuff," it becomes painterly, and can be read a little like the way we read an ungraduated thermometer. Every curve of its lines, every nuance of color is loaded ("replete") with semantic potential. It is not composed of "disjoint" or "articulated" characters (Goodman 1976) like the letters of an alphabet, a differentiated sign system that works by gaps and discontinuities (there are no intermediate characters between the letters "a" and "d" that have any function in the system). In contrast, as with our reading of pictures, our understanding of aesthetic or metaphorical statements call for "maximum sensitivity of discrimination." Goodman stresses how his classification method penetrates effects previously deemed ineffable: "density, far from being mysterious and vague, is explicitly defined; and it arises out of, and sustains, the unsatisfiable demand for absolute precision" (Goodman 1976, 253). So far, musicology has taken up Goodman's sign typology only in relation to performance theory; that is, to describe the peculiarly "differentiated" notation of a performance score (see Raffmann, in Krausz 1993). This is a curious limitation; density can be just as useful a tool of music semiotics as Peirce's "indexicality," a category with which it has much in common.

Just as Ricoeur filters Goodman's categories through his tension theory (1994, 238–39), before his final move into hermeneutics in chapter 8 (257ff.), I consider density as the final outcome of a theory of musical poetics. We have already encountered a form of density in the referential aspect of musical grammar, when syntactic impertinence congeals into stuff. In line with the general trajectory of Ricoeur's poetics from sense to reference, from language to "the world," density gradually comes to the fore of musical hermeneutics. At this final stage, hermeneutic density, as a symptom of the musically "human," arises from the self-reflection of musical discourse unfolded in time. This claim nudges my definition of musical structure away from our traditional preoccupation with symmetry, return, and closure. We like to talk of form in terms of "resolution," "recapitulation," and restoration of "equilibrium," ideas epitomized by sonata-form reprise and the normative closure of tonal music in the home key. But Ricoeur's theory of metaphorical discourse pushes us away from the symmetrical toward the open-ended. Yes, return is implicit within the self-reflexive. Yet the latter assumes the temporal situatedness of formal episodes and the ongoing progress of a hermeneutic consciousness. There never really is any going back in music, a constraint it shares with time (of course, music repeats; but each repetition is also an accretion, a further step down the road). Technically, the symptom of this unidirectional course is an increase in density. I define musical discourse as a unidirectional trajectory toward ever-increasing hermeneutic density: the "human."

As with grammatical density, hermeneutic density is worked out in the interaction between the sense (concept) and reference (image) of the poetic schema. Earlier, I argued that grammatical sense and reference are blended together and are separable only when these categories are intellectualized, typically in music theory. I claim now that discourse problematizes the relationship between sense and reference, to the point where the concept and image cannot be grasped in a unitary experience. Instead, concept and image "flicker," like the dual aspects of "seeing as" effects. Discursive "hearing as," which we can also call "stereoscopic listening" and "split reference," bestows upon musical experience a tensive quality that is not present in grammar. We can identify precisely, therefore, just how the stuff of discourse seems to come alive. To borrow Goodman's phrase, the tensive can be selected as the "cardinal symptom" of the musical aesthetic (252–55). I define this symptom technically as *blocked assimilation*. Impertinent predication can no longer be assimilated into an overarching interpretational context, as was the case with grammar. With this path blocked, the listener's only resort is to relate to the music in a mode that is open, dynamic, and self-critical. By denying closure, the work questions our existing assumptions and clears new spaces for experience. This is the impact musical metaphor has on our lives.

# 4. BACH, MOZART, AND BEETHOVEN

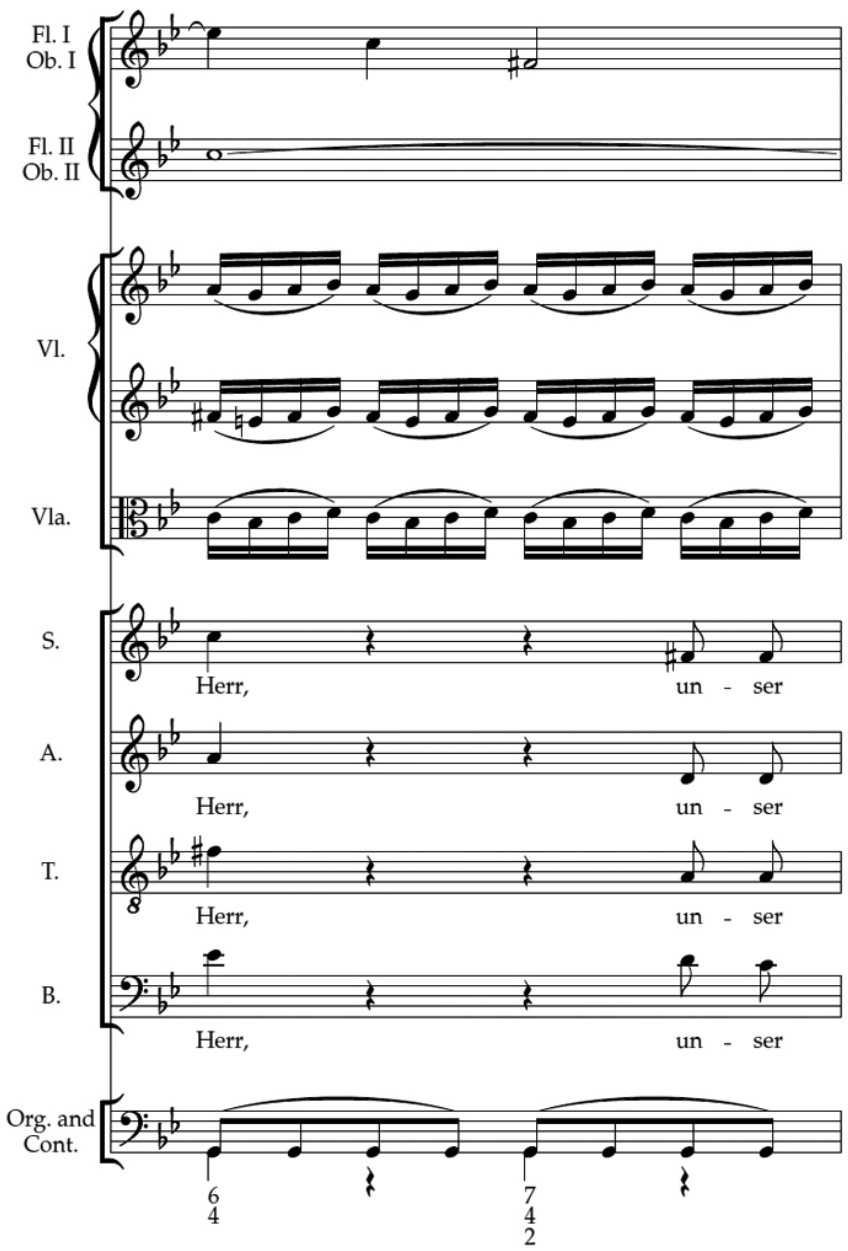
The three symptoms of musical discourse are semiotic categories and are thus applicable to a wide variety of materials. Just as Monelle finds "indexicality" in multiple musical topics, density takes on changing colors in differing historical and stylistic contexts. I want to pick up again the three pieces I discussed in chapter 1: the Bach chorus, the Mozart sonata, and the Beethoven quartet. The range of styles could hardly be greater, yet they all exemplify the three symptoms of musical discourse. I propose that metaphor is intrinsic to musical discourse throughout the common-practice period. Blocked assimilation is evinced differently in each style, in terms of the nonassimilation of diminution into structural steps (Bach), of material into syntax (Mozart), and of shape into pitch (Beethoven).

## *Bach:* The St. John Passion

The figure of Christ is invoked by the first entry of the chorus, "Herr, Herr, Herr," at measure 19 (ex. 3.1):

Example 3.1. Bach, *St. John Passion*, first movement, mm. 18–20






The entry effects hermeneutic density in three ways. By reworking the opening instrumental ritornello so as to include the choir, Bach embodies the music with human voices. Second, this moment enacts an incarnation of the figure of Christ, who steps forth into the drama for the first time. The descending C minor triad is Christ's theme in the entire *Passion*—it is projected with particular clarity by the outer movements (no. 2, Recitativo, "Jesus ging"; and no. 67, "Ruht wohl"). Third, the choral entry problematizes the dissonance treatment of the original ritornello (see example 1.2 above), raising the ritornello's grammatical impertinences to the higher level of discourse through *epochē*. The choral entry is built on top of the original material but takes away the original's primary reference. Measure 19's first-order reference (measure 1) was to hear the flute and oboe's D suspended against the E♭. Now, the soprano's theme reinterprets the E♭ as part of a descending C minor arpeggio, G–E♭–C. In this new context of Christ's arpeggio (Jesus' theme), E♭, the note that was originally so dissonant, is stabilized; the D, by contrast, is pushed back. Bach's trick is wonderfully adept, since nothing in the harmony is changed at all. The illusion is created simply by filling in the original harmony with a top G. Yet this G is enough to create the phantom of a descending C minor arpeggio in measure 19, an arpeggio that contradicts the measure's G minor framework. Since nothing in the harmony is really changed, the phantom C minor harmony is a trick of reinterpretation. Primary and secondary references are interlocked in a stereoscopic tension. The ear can only flicker between them.

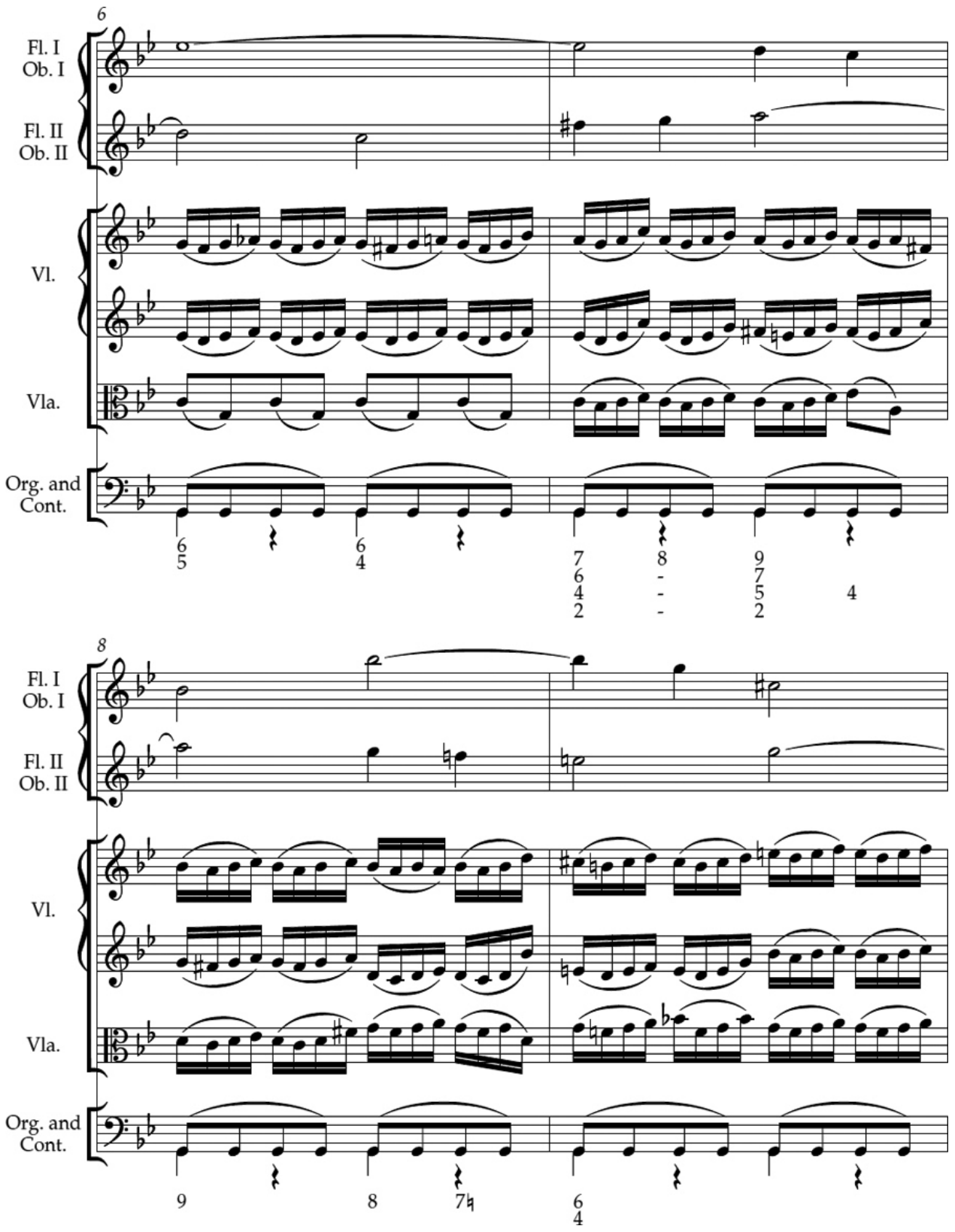
The sort of functional assimilation we saw earlier (chapter 1), whereby we incorporate Bach's broken textures into a higher-order interpretation of triadic counterpoint, is no longer available to us. Grammatical impertinence (primary reference) yields to blocked assimilation (secondary reference), splitting the density of Bach's figures from their erstwhile functional differentiation. The music's

image can be perceived for the first time as separate from its sense. This image is identified with the figurality of Christ. Technically, Bach's trick boils down to the projection of the accented appoggiatura C from measure 20 a measure forward to measure 19. There is not really any C in measure 19, but the G–E♭–C arpeggio makes it seem, retrospectively, as if there were. The notes C and G, the harmonies C minor and G minor, and the sonorities of appoggiatura and consonance are paradoxically folded into each other. This notion of Christ as stabilized appoggiatura should give us rich occasion for thought. It goes to the heart of the baroque composer's beliefs about musical redemption, the interanimation of sin (dissonance) and salvation (resolution). Christ is invoked as a redeemer (*Herrscher*).

Although the trajectory of density is associated with the arrival of text, voice, and concepts at measure 19, it is actually grounded in musical material alone, interwoven into Bach's contrapuntal fabric like a thread from the very outset of the piece. If the opening material's first-order reference is toward regular dissonance treatment, then this normativity is also expressed in its referencing of the conventional fugal exposition. But even at a local level, the order of entries runs aground very quickly. The flutes and oboes outline a subject that Bach used normally in the G minor fugue of Book II of *The Well-Tempered Clavier* (the same key). Here, however, the regular, dominant answer is tucked, in disguise, into the *Fortspinnung* episode at measure 8 ([G]–B♭–G–C♯–D), after having been displaced by a subdominant answer at measure 3 (ex. 3.2). Moreover, the tail end of this answer elides into a hidden da capo of measure 1, reinterpreted in the subdominant: the D at measure 5 is suspended against the E♭ of measure 6, which, paradoxically, is the note of resolution of the previous F. In other words, the D–E♭ suspension of measure 1 is reinterpreted at measures 5–6 in C minor, so that E♭, the erstwhile dissonant note, is stabilized. The E♭'s stabilization prefigures, *in nuce*, the phantom C minor entry of measure 19. It also splits the order of fugal entries into two conflicting "logics." From the perspective of the opening, the C minor answer is deviant. From the opposite perspective, the end of this answer introduces a hidden tonic statement of the subject and so connects normatively with the dominant answer of measure 8.

The upshot of this analysis is that grammar and discourse cannot really be separated. How deeply must we delve into Bach's textures in order to put our finger on a "properly" grammatical detail? Even the seemingly innocent sixteenth-note neighbor-note figures of measure 1 are loaded with discursive import. After all, it is the very turns in the first violins, with their miniature resolutions from E♭ to D, that set up the pattern the fugal subject breaks: the subject's E♭ *never* resolves to D. The trajectory toward the dense, then, is a gradient, an increase in degree, not a shift from the grammatical to the discursive. Bach's music is discursive through and through, and self-reflexive from first to last.

Example 3.2. Bach, *St. John Passion*, first movement, mm. 6–11






*Mozart: Piano Sonata in G Major, K. 283*

The classical style is predicated on formal articulation rather than the diminution of counterpoint. How can there be figures without figuration? In the mid-eighteenth century, the basis for figurality changes from decoration to pattern disruption. The subversion of symmetry becomes associated with expressive lyricism and fantasy, and its location comes to be conventionalized within the second halves or middles of units at rising levels: consequent phrases, transitions, secondary groups, and development sections. But pattern disruption entails far more than, say, the extension of a four-measure phrase to five. It serves, ultimately, to emancipate the materiality assimilated within a phrase's functional, artificial character.

In measures 1–4 of Mozart's sonata (see example 1.3 above), the musical content is literally immaterial, since it is subsumed into the $\hat{1}$–$\hat{7}$ . . . $\hat{4}$–$\hat{3}$ schema's conventional syntax, a syntax encapsulated in the tonal cues G–F♯ and C–B (this syntax would survive if the "buffer" between the cues were changed, as of course happens throughout the hundreds of other instantiations of the $\hat{1}$–$\hat{7}$ . . . $\hat{4}$–$\hat{3}$ schema). In the consequent phrase of measures 5–10 (repeated in measures 10–16), this material becomes dense. Take the appoggiatura, the standard token for expressivity in so many styles. The G–F♯ appoggiatura across measures 1–2 is used grammatically because (1) it is harmonically supported by chords which change across the barline, and (2) it is answered by a complementary appoggiatura in measures 3–4. Its grammaticality is constituted by congruence (between melody, harmony, and meter) and conformance (between the two subphrases, outlining complementary I–V and V–I progressions). Congruence and conformance are abrogated in measures 5–10, producing the effect I called "blocked assimilation" in the earlier context of contrapuntal dissonance. The F♯–E appoggiatura at measure 5 is no longer congruent with its bass (C); it has become an *expressive* accented passing note. Rather than a tonal cue marking the end of a subphrase, as in measure 1, it is pushed to the front of the phrase as an expressive feature in its own right. Similarly, in terms of conformance, it is no longer answered by a functional consequent. Instead, it is immediately repeated in a descending, and theoretically open-ended, sequence: F♯–E, E–D, D–C (telescoped as a second between treble and tenor voices), and C–B (left hand). As with Mozart's appoggiatura, all the other elements that are initially assimilated in measures 1–4 are foregrounded as dense features. The two skips of a third (D–B and A–F♯) become the sixteenth-note arpeggios of

measure 9; the implicit note repetitions across the barlines (D–D in measure 1; A–A in measure 2) are especially pervasive, as in the reiterated Ds of measure 7; the hidden scale of the contrapuntal voice leading (D–C–B) blossoms into the sixteenth-note passagework of measures 8–9.

Mozart echoes, and develops, this strategy at the global level of his exposition, where there is an even more radical trajectory toward the dense from the first theme group to the second. The dominant-key group, measures 23–53, comprises three highly oblique variations on the tonic group, dispersing its features in kaleidoscopic permutations. On the surface, the proportions between the two groups would appear to be neatly symmetrical, the first group's sixteen measures roughly doubled into the second group's thirty-one. But the symmetries are broken by irregular subdivision in both sections: in the former, a four-measure phrase is answered by the same six-measure consequent phrase twice (a phrase structure of ABB), whereas the latter section breaks down into 8 + 12 + 8 + 3. It is this central twelve-measure panel I want to focus on, because it critiques measures 1–16 in an ingenious way.

As with Bach's choral ritornello, Mozart's "variation" is laid over the opening material so as to "take away" its first-order reference. Whereas Bach's contrapuntal framework remained the same, Mozart's variation is identified largely by its ABB phrase structure (ex. 3.3):

Example 3.3. Mozart, Piano Sonata in G Major K. 283, first movement, mm. 30–42

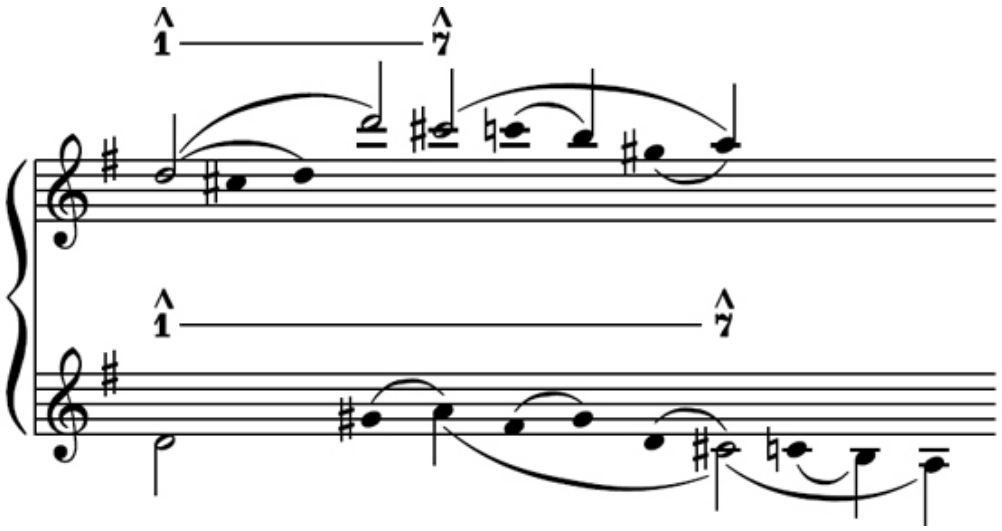



A three-measure opening phrase (measures 31–33) outlining a rising arpeggio to the full octave dovetails into a repeated five-measure consequent (measures 33–37 and 38–42), which climbs down again to the cadence. The phrase structure, however, throws into high relief the functional chaos of its contents. The three components of the tonic group—the first cue (G–F second cue (C–B), and consequent descending scale (G–F♯–E–D–C–B–A–G)—are scrambled and intercut, moreover, in a way that cuts across the phrase divisions.

COMPONENT I: FIRST CUE (1̂–7̂)

Measures 31–35 elaborate 1̂–7̂ in D major, D–C♯. The D step is decorated with miniature, harmonically noncongruent statements of the schema in full (D–C♯, G–F♯), unfolding a tonic arpeggio (D–F♯–A–D) that reworks the one in measures 1–4 (G–B–D–G). The C♯ step is elaborated by a skip of a third to A, filled in with passing-note progressions in invertible counterpoint (ex. 3.4):

Example 3.4. Elaborated $\hat{1}$–$\hat{7}$ step



The texture in measure 34 is remarkable. Three factors conspire to give it the heaviest "density" in the entire exposition: (1) pairs of tonal cues, originally used grammatically as syntactic punctuation, are interlocked as a melodic "slide," D–C♯–C–B; (2) this slide interlocks cues from different keys: $\hat{1}$–$\hat{7}$ in D (D–C♯) with $\hat{4}$–$\hat{3}$ in G (C–B); and (3) the invertible counterpoint between the outer voices (the slide gets transferred to the bass, and the bass G♯–A–F♯–G crosses to the top) exploits the tritone relationship between steps $\hat{7}$ and $\hat{4}$ of the cues (e.g., F♯ and C). The two cues, originally disposed successively as antecedent and consequent, are verticalized into a single chord. The measure is dense, then, because Mozart "folds" functional space both tonally (cues in two keys, D and G) and structurally (antecedent and consequent telescoped into a verticality) and presents the effect as a thematic line, a slide.

COMPONENT 3: CONSEQUENT DESCENDING SCALE

In the tonic group, the consequent phrase, initiated by the descent from high G (measure 4), is divided cleanly from the antecedent phrase. In the dominant group, the descending octave scale from high D (measure 33) cuts across the elaboration of $\hat{1}$–$\hat{7}$. The chromatic slide D–C♯–C–B thus occupies two "spaces" at the same time: the space dedicated to the initial cue, corresponding to measures 1–2; the space dedicated to the consequent phrase, corresponding to measures 5–10. Paradoxically, the intervening event, component 2 (the $\hat{4}$–$\hat{3}$ cue), has leapfrogged over the consequent to occupy third position: the G of measure 35.

COMPONENT 2: SECOND CUE ($\hat{4}$–$\hat{3}$)

It is not enough that the $\hat{4}$–$\hat{3}$ cue has been displaced so as to come *after* the consequent phrase. Its difficulties are further compounded by an evaded resolution: rather than the G of measure 35 being allowed to resolve to F♯, it climbs *up* a third to B. The voice leading at the descent of measure 37 is "squashed"—the sixteenth-note $\hat{4}$–$\hat{3}$ on the second quarter note lacks adequate harmonic support to be convincing. This problem is actually *never* resolved in the remainder of the exposition: Mozart pointedly eschews a strong $\hat{4}$–$\hat{3}$, G–F♯, progression, leading, perhaps, to the most dramatic paradox of the piece: denied $\hat{4}$–$\hat{3}$ closure in the second group, the schema turns back on itself to connect with the tonic group, after the da capo repeat. The suspended G in the second group, a $\hat{4}$, mutates into the $\hat{1}$–$\hat{7}$ of measure 1. The $\hat{4}$ becomes a $\hat{1}$. Dominant seventh and tonic—the harmonic poles of Mozart's discourse—are identified, and the music swallows its tail. Mozart creates poetic density by turning the logic of his music inside out.

## *Beethoven: String Quartet in A Minor, Op. 132*

If Mozart's second subjects are expressively denser than his opening themes, then Beethoven's tend to be "subjects" in a very human, characterful sense. At measure 48 of the A minor quartet, the predominantly contrapuntal texture (see example 1.4 above) thins out into the soloistic texture of an operatic aria, a violin cantilena supported by a vamping cello bass (ex. 3.5):

Example 3.5. Beethoven, String Quartet in A Minor, Op. 132, first movement, mm. 48–59






Beethoven's second group really sings, and it luxuriates in a body of sixteenth note figurations. It sings, though, through a syntactic cage set up in the introductory phrase, measures 1–10—what in chapter 1 I called an arch progression. To appreciate the tensive quality of the aria's density requires us to understand the profound changes in style between Beethoven and Mozart.

Syntax for Beethoven functions in an opposite way to Mozart's grammar, although both are usually defined as "classical." The tonic group in K. 283 is articulated according to a rigid distinction between phrase endings and the content they subsume. Beethoven's arch, on the contrary, predicates permeability between grammatical levels. Measures 1–10 move, very broadly, from tonic to dominant (the dominant represented by a diminished-seventh chord, with F—the submediant scale step—at the top). But I and V do not designate abstract syntactic markers, as they did for Mozart; rather, they are fully continuous with the shape of the phrase, its arching contour. Harmony is here continuous with the so-called secondary ("statistical," in Meyer's phrase) parameters of rhythm, register, texture, and dynamics. In fact, measures 1–10 afford a perfect example of what Meyer calls a "statistical climax," an extremely common pattern in romantic music: "gradual increase in the intensity of the more physical attributes of sound, the arrival at a tensional "highpoint," followed by a usually rapid decline in activity" (Meyer 1989, 207). In addition to these technical parameters, Beethoven's shape also embraces stylistic topics (see Agawu 1991, 110–26): it unfolds a progression from the strictness of the "learned style," with its alla breve counterpoint (measures 1–8), to the

expressive freedom of cadenza figurations (measures 9–10). It is entirely appropriate that the cadenza fall at the apex of the arch, the dominant harmony. Like the dominant in relation to the tonic, the cadenza is stylistically marked in opposition to the more stable and conventional pole of classical syntax, as marginal, parenthetical, or external (as is best seen, of course, in piano concertos).

What is so remarkable about Beethoven's phrase is that the three levels of pitch, statistical parameters, and topic march in step with each other, such that to separate them is to miss the organic thrust of the music. Nevertheless, there does remain a compelling impression that Beethoven's pitches are somehow coerced to "fit in," that the motivic arch G♯–A–F–E is dragged along by the coarser, yet more forceful, secondary parameters. This lack of fit has led many commentators (Dahlhaus 1991; Agawu 1991) to speak of a radical disjunction in Beethoven's late style between a "surface" level and a "sub-thematic" (or voice-leading) level, whose "abstraction" transcends and "critiques" the music (this observation is, essentially, the heart of Adorno's approach). Yet it would not do to exaggerate the supposed incoherence, or misfit, of Beethoven's opening, because it would leave us with nowhere to go in the rest of the movement. Certainly, the affinity between metaphorical and Adorno-inspired critical-theoretical approaches is real and deep. Nevertheless, I prefer to focus on the essential normalcy of Beethoven's procedure, which simply reworks the same kind of grammatical impertinences we saw in Bach and Mozart. With Bach, blocked assimilation operates between figuration and scale step; with Mozart, between syntax and material. With Beethoven, blockage occurs between pitch, the privileged domain of motivic logic, and the secondary and topical parameters (coarser parameters that cannot be organized as precisely as pitch). As with Bach and Mozart, similarly, Beethoven creates *epochē* in future episodes of the piece by reflecting upon and problematizing elements implicit at the opening. Here, as with Mozart's sonata, hermeneutic density is achieved chiefly in the second half of the exposition, which constitutes a critical variation on the first half. If *epochē* is immanent at the opening, then the difference between primary and secondary orders of reference appears at first to be a graduated one. Nevertheless, the dramatic rhetoric of sonata form, which accentuates oppositional contrast between the two halves of the exposition, projects a sense that this distinction is not a matter of degree but of substance. Somewhere along the line, then, quantitative difference flips over into qualitative. The point of this flip is, as one would expect, the entry of the second theme group, the aria. Beethoven's trick is breathtakingly simple: the base and the apex of his arch exchange positions. The F–E appoggiatura, which initially marks the expressive crux, is grounded when Beethoven tonicizes F as the key of the second group (C major, not F, would have been more conventional). Additionally, the sixteenth-note figurations, which had been introduced as cadenzalike interruption, become internalized into the frame of the second group, which revels in the sheer beauty of texture. This role reversal, however, simply brings to a head a relay of incremental shifts in the tonic group, and it is instructive to follow these through.

The march accelerates to what Meyer would call a "statistical climax" at measure 18, yet not on a sixteenth-note cascade, as expected, but on a descending Neapolitan fanfare (ex. 1.4 above). Although the harmony is B♭, the fanfare begins on the same high F as the cadenza of measure 9, and its resolution also projects the cadenza's F–E voice leading (the F of measure 18 connects with the first violin's E of measure 21). Beethoven has abstracted the cadenza's pitch component and given it to a new topic, the fanfare (since fanfares conventionally ascend, in the tonic key congenial to eighteenth-century brass instruments, a descending Neapolitan fanfare is as expressively marked as a cadenza too). Beethoven shuffles pitch, texture, and topic in a musical kaleidoscope, producing eccentric combinations. For example, measures 30–39 mimic the arch contour, yet they begin with the march on the dominant of F, that is, with the F–E crux as a base (viola, measure 31) (ex. 3.6):

Example 3.6. Beethoven, String Quartet in A Minor, Op. 132, first movement, mm. 30–47






Measures 38–47 comprise two cadenzas (actually, a bizarre blend of cadenza and fanfare figures) interrupted by a gavotte in D minor. The submediant scale step had been originally associated with the cadenza; to interpolate a submediant dance between two cadenzas is to reverse the status of structure and ornament.

The kaleidoscope seems to have settled down with the aria's stable phrase structure. But actually it has turned full circle, installing the F/E–B♭/A crux pitches of cadenza and fanfare at the head of the group and absorbing their figurative textures from the periphery (where cadenzas belong) into the center. The aria is really the cadenza/fanfare hybrid in disguise. From measure 49–55, the melody stakes out a descending scale between two B♭s (with octave transfers), while the cello circles the F. Note the care with which Beethoven avoids resolving the F of measure 51 and B♭ of measure 55, both on dominant sevenths (see also the suspension of B♭ across measures 49–50 in the second violin). The crux pitches are sublated into lyrical yearning. As it proceeds, the aria is saturated with cadenza figurations. From a syntactic marker, the cadenza has turned into lyrical material—the very body of music.




Engraving for the song “Bend your head, Thumb,” from the collection *Mutter- und Koselieder* (1st ed., Berlin, 1844), by Friedrich Froebel. Froebel, an early-nineteenth-century German pedagogue and follower of Pestalozzi, pioneered child-centered teaching regimes oriented to bodily experience. He devised simple songs to be paired with activities such as dancing and gardening. Here, the children are depicted singing within a giant sunflower:

“Baby feels his limbs indeed
So his hands and fingers play
Mother’s love will give good heed
As his mind wakes day by day
What is stirring faintly there
Mother fosters with her care.”

# *Part II*
# *The Metaphorical Tradition*

## *Sunflowers: Toward a Metaphorics of Music History*

> As flowers turn toward the sun, by dint of a secret heliotropism the past strives to turn toward that sun which is rising in the sky of history.
> Walter Benjamin, *Theses on the Philosophy of History*

### 1. THE HELIOTROPE

The seventeenth-century Jesuit polymath Athanasius Kircher, though no mean scientist or musician himself, was nevertheless fond of talking about music figuratively. "Nature and the entire world," he wrote in his *Musurgia Universalis*, "appears to be nothing less than a perfect music and a musical harmony" (1988, 252). He believed the "harmony of lower objects" to be an "echo or repercussion" (277) of the music of the stars, which "in the firmament are separated like the strings of an instrument" (299). Hitting on a beautiful metaphor, he compares the "magnetic attraction" (*Magnetische Zugkraft*) between the two orders of music to the orientation of the heliotrope, or sunflower, to the sun (161). The florid, of course, is the traditional figure for figuration, in music as well as rhetoric, so Kircher is really talking about the workings of metaphor itself—its orientation toward the source of light, sound, and meaning.

Derrida maintains that the heliotrope is privileged above all figures, because it is the metaphor for metaphor (1982, 245). As it tracks the circular course of the sun through the sky, it symbolizes the circular trajectory of language: from the sensory to the conceptual, and then, via a detour through figuration, back to the sensory. "Metaphorization," as Derrida puts it, is a movement of "idealization," transposing the sensible to the spiritual, the concrete to the abstract. The figural trope, as the word originally suggests, marks a point of *turning*, a de*tour*, when the process of idealization turns back upon itself toward the physical. The concept is now grounded in a visible or sensory image, a metaphor. "Metaphorization" thus alternates with "metaphor," a movement away from the physical followed by its reappropriation. The sun, moreover, is the archetypal metaphor for the source of this movement; not only does it turn, it is, in Aristotle's words, "the source of life and visibility, of seed and light" (242). From the sun Western philosophy also derives its foundational metaphor equating the visible with the intelligible. The very etymology of the Greek *theorein* (theory) reveals this equation, with its conflation of *thea* (the outward look or aspect of an object) and *horao* (to look at something attentively) (255).

The trajectory from sun to reason to sunflower suggests to Derrida, then, the reciprocity between metaphor, philosophy, and the history of Western metaphysics: "the movement which turns the sun into metaphor" is the same movement which "turns philosophical metaphor toward the sun" (Derrida 1982, 242). The philosophy of metaphor turns in a circular manner to the metaphoricity of philosophy. Readers of Derrida will recognize the deconstructive impulse propelling these dizzying circles, which threatens to send the individual terms of the comparison crashing down into an abyss of infinite regress, rendering them *en abîme*. The paradox, of course, is that one cannot look at the sun; "one looks at it directly on pain of blindness and death," says Aristotle (242). Aristotle's telescope, as we saw in Plate I, is strictly figurative. Hence the prime mover of any chain of

metaphorical substitutions, be this the "sun" or some other symbol for presence, can never be properly known in itself. Derrida's deconstruction of metaphor in "White Mythology" serves a single basic point: the proposition that there is no nonmetaphorical standpoint from which to survey the history or theory of metaphor. For everything is metaphorical, surely, is it not?

No, it is not, at least not in the way Derrida suggests. The final chapter of Ricoeur's *Rule of Metaphor* contains a devastating critique of Derrida's essay, in which Derrida is taken to task for privileging the trope of resemblance over that of grammatical impertinence ("Metaphor has always been defined as a trope of resemblance," claims Derrida [1982, 215]). Ricoeur's contention is very simple: the range of metaphorical devices is in fact far greater than Derrida has shown, and he has unjustifiably selected a single aspect (resemblance) over many others. Ricoeur can thereby demonstrate that, far from metaphysics absorbing metaphor, it is metaphor that provides the techniques from which metaphysics borrows:

> So it is not metaphor that carries the structure of Platonic metaphysics; metaphysics instead seizes the metaphorical process in order to make it work to the benefit of metaphysics. The metaphors of the sun and the home reign only to the extent that they are selected by philosophical discourse. The metaphorical field in its entirety is open to all the figures that play on the relations between the similar and the dissimilar in any region of thinking whatsoever. (1994, 294–95)

By the same token, it is possible to conceive of a metaphorics of history more plural than Derrida's metaphysical model, eternally circling between idealization and metaphorization. Before I sketch an alternative metaphorics, Derrida's model should be examined, since it summarizes the prevailing Enlightenment philosophy of history, from Rousseau and Hegel through to Adorno and Benjamin.

## 2. METAPHORIZATION/LITERALIZATION

Derrida's striking insight is that the history of thought "rhymes" with the structural mechanisms of metaphor. *Meta* (to rise) informs both the passage from physis to "meta"-physis (a process of "raising up," as in the Hegelian *Aufhebung*) and the action of "meta"-phor ("a movement of spatial translation," giving a thing a name that belongs to something else [1982, 253]). According to this narrative, language was originally figurative, so that concepts such as "to grasp" or "to apprehend" carried a metaphorical sense of physical action. Gradually, with the growth of metaphysics, this metaphorical sense becomes erased, worn away, and used up through use, usury, and custom. A properly abstract meaning is established through the effacement of the originally metaphorical meaning. These dead or dormant metaphors can, however, be reawakened. When German philosophers such as Hegel or Heidegger use words such as *fassen* and *begreiffen* (to grasp, to apprehend), they often purposefully reactivate the underlying manual metaphors. The question, therefore, is the extent to which abstract or literal notions hide sensory figures, and to which these can be recuperated. What is to be gained by knowing that "muscle" originally meant "little mouse" in Latin? And yet much is to be gained from understanding how the basis of an argument can be a "ground" (or *Grund*).

The subtlety of Derrida's narrative is that it coordinates three separate axes of metaphoricity. First, originary language is metaphorical because figurative. Second, the historical passage from metaphorical to abstract thought is a process of metaphorization; the relationship between the figurative and the conceptual is the same as that between proper and improper. Notice the paradox here: conceptual language is metaphorical *because* it is an improper (i.e., abstract) usage of metaphorical language. Both terms of the process, the figurative and the conceptual, are marked as metaphorical. And third, language is metaphorical when it reactivates the dead metaphors buried in concepts. It is this threefold notion of metaphor, with its many attendant tensions, that drives Derrida's dynamic of idealization and reappropriation.

"Reappropriation" aptly describes the nostalgic, antistructuralist stance of much recent writing about musical metaphor. After the sort of figurative language favored by Kircher is pushed out by the ascendancy of instrumental music and formalism, to be finally discredited by a structuralist analytical methodology associated with Schenkerism, metaphor is restored when the "body" is put back into

music. The story, at its simplest, is thus a tale of figurative language lost and regained. It is told best, for music, by Lydia Goehr.

In an historical narrative that owes much to Rousseau and Wagner, Goehr (1998) recounts how, through a process of abstraction, music gradually lost an ethical and philosophical aura that had been associated with the Socratic idea of *mousikē*. Goehr calls this process of abstraction "literalization," a concept that corresponds to Derrida's "idealization." By this light, the emergence in the nineteenth century of a concept of absolute or autonomous music is contrasted with an earlier time when music was largely discussed as a metaphor for songlike expression or universal order. Musical literalization or idealization is thus linked to Goehr's influential notion of the "work concept." I think her theory of the work concept is wrong.

In *The Imaginary Museum of Musical Works* (1992), Goehr chronicles the evolution of the musical work as a "regulative concept," according to which musical production and reception came to be understood in the nineteenth century. Through an imaginative act of "projection," institutionalized in the ideology of the period, listeners ascribed to musical works such as symphonies and string quartets an "object existence" (1992, 106). Given that music unfolds in time, representing it as a spatial object, a "work," is thus metaphorical. Goehr demonstrates the comprehensiveness of this metaphor, showing how the root metaphor (or regulative concept) of the work is elaborated by a set of associated concepts. These are the familiar staples of romantic music aesthetics. A work is a structure determined by a fixed score, whose identity is thus invariant through repeated performance. As an ideal structure, a work is susceptible to analytical interpretation, and to being theorized as a self-regulating hierarchy of formal relations. The work's structural coherence transcends the contingencies of its compositional process, leading to the view of the work as a metaphysical, autonomous object. It thus becomes possible to enshrine the work in a canon of isolated, timeless, exhibits, an "imaginary museum of musical works."

Now, the problematic nature of this work concept comes to the fore once we consider its application to early music. According to Goehr, J. S. Bach and his predecessors did not write works, and to think so entails a retroactive importation of a nineteenth-century model (1992, 115). This claim cuts two ways. First, it may be interpreted as a critique of anachronistic representations of early music which skew aspects that fall outside the purview of absolute music—its dependence on social context, its design as a functional practice rather than as an aesthetic object of quasi-religious contemplation, its symbiosis of compositional process with performance practice, and the rule-bound generativity of its musical language. Second, and more radically, this claim may be construed as a critique of the work concept itself. In this regard, given that early music is more in tune with music's supposedly temporal, context-bound, and performance-orientated nature, the early tail may be said to wag the romantic dog.

Goehr is correct in her claim that our understanding of music is mediated by a regulative concept, and she makes an admirable case for the imaginary status of our historical and theoretical categories. Where I think she goes wrong is in confining the scope of this imagination to a single regulative concept. Surely there are others. What about imagining music as painting? As language? Goehr's historical survey is conducted, however, solely from the standpoint of the crystallization of a particular paradigm circa 1800, another side of her "literalization" thesis. To be sure, the concept of the musical work may well have been unavailable until the invention of aesthetics in the late eighteenth century. But "work" is hardly the entire story, and it is wholly untenable to suppose that musical imagination had to wait until the invention of aesthetics, as is claimed in any number of other contemporary accounts. Writers who portray the story of music, however circumspectly, as the march of abstraction and organic unity invariably conclude that music comes of age with Beethoven (and loses its innocence with Schoenberg). And so they must bend over backward to show that Mozart and Haydn were not mere precursors, and that the timeless Bach does not fall out of history altogether. This story is more trouble than it is worth.[1]

As I have already argued, and will argue much more fully below, the work concept is actually part of a trio of dual-aspect systemic metaphors: harmony/painting, rhythm/language, melody/life. Viewing music history in terms of a set of conceptual metaphors, rather than as the literalization of a single concept, liberates us from a faded narrative and finally lays to rest the exhausted debate between absolute music and the so-called extramusical. The tale of a single sunflower grows into a florilegium of three: a metaphorical anthology.

## 3. MAP TO PART II: THREE SUNFLOWERS

My sunflower florilegium is arranged as a ternary metaphorics of history. The following "map" outlines the structure of the second, historiographical, part of my book.

Sunflowers

| I | | | II | | III |
|---|---|---|---|---|---|
| CULTURAL METAPHOR | | | PEDAGOGICAL METAPHOR | | DISCOURSE |
| 1 | 2 | 3 | 4 | 5 | 6 |
| Intramusical | Cross-domain | Poetics | Intramusical | Cross-domain | Density |
| *harmony* | *painting* | *figure* | *voice leading* | *figures* | *hypotyposis* |
| *rhythm* | *language* | *sign* | *form* | *syntax* | *poetry* |
| *melody* | *life* | *symbol* | *process* | *narrative* | *organism* |

This map needs some comment. Each chapter describes a single metaphor, whose scope follows through the expanding spiral begun in chapter 1. Hence the progression—(1) dual-aspect perception, (2) basic-level mapping, (3) analytical metaphor, (4) historical metaphor—is continued to the level of systemic cultural metaphor: networks of interlinked values, symbols, images and ideas associated with an historical epoch. Confronted with the potentially limitless data in each period, I have sought to organize my materials as a "developing variation" around the base of this spiral. Accordingly, chapters 4, 5, and 6 are all subdivided along the same pattern into six separate, albeit interdependent, studies that build up into a composite picture. The initial two studies elaborate the principle of dual-aspect perception: first, intramusical metaphors (unfolding the deontic-to-epistemic shift described in chapter 2), then cross-domain. Hence, in chapter 4, I explore how metaphorical thought in the baroque mapped from harmony, on the one hand, and painting, on the other. These two axes are not sharply divided; as well as denoting a prototypical, basic-level musical category, "harmony" also signified many extramusical values (as do "rhythm" and "melody" in the following chapters). By pairing the intramusical and cross-domain in this way, I make the case that so-called technical and programmatic accounts of music really comprise two perspectives on the same object. These perspectives share the same image-schematic structure: thus harmony and painting evince the baroque propensity for radial, CENTER/PERIPHERY schemata; rhythm and language prefer more formal schemata such as PART/WHOLE, LINK, and IN/OUT; melody and life emphasize dynamic, pathway schemata.

The third study of each chapter is dedicated, respectively, to baroque, classical, and romantic theories of metaphor. I recuperate obscure yet fascinating figures such as Harsdörffer and Sulzer, and rethink more familiar ones such as Kepler, Kant, and Goethe. In each case, I show how theories of metaphor are kindred with the prevailing cross-domain metaphors of the time; hence the seventeenth century thought of metaphor as a pictorial "figure," the eighteenth as a poetic "sign," and the nineteenth as an organic "symbol."

These three studies form the first section of each chapter. The second section is devoted to the work of particular music theorists of the time. I develop my argument from chapter 2 that the

pedagogical sequence of a theoretical treatise enshrines a metaphorical mapping from basic-level to abstract categories. This middle section is in turn divided into intramusical and crossdomain processes. For example, in chapter 4, I demonstrate how theorists such as Bernhard and Scheibe construct metaphors of voice leading (intramusical) and musical-rhetorical figure (cross-domain).

The third and final section analyzes parts of various canonical works, such as the opening chorus of Bach's *St. Matthew Passion* and Mozart's String Quintet in C Major, K. 515. I introduce the hermeneutic method developed in chapter 3 into the context of each period's distinctive metaphorical system. Hence, Ricoeur's and Goodman's concept of metaphorical density is inflected, in turn, by the painterly, poetic, and organicist paradigm. For example, a baroque work's trajectory toward the dense is at the same time a trajectory toward hypotyposis—an illusion of seeing. Conversely, a classical work becomes progressively poetic, a romantic work increasingly alive.

The three sections of each study thus amount to a synoptic overview of a systemic metaphor.

## 4. THE SECRET HISTORY: STRUCTURE WITHOUT STRUCTURALISM

My metaphoric map might well suggest an affinity with Foucault's *Order of Things*, a book that famously interprets intellectual history as a sequence of epistemological fields called "epistemes" (1972, xxii). Actually, my approach is more in line with the peculiarly German hermeneutic traditions of *Begriffsgeschichte* (conceptual history), *Rezeptionsgeschichte* (reception history), and *Toposforschung* (topos research). These are associated with writers such as Ernst Curtius, Hans Robert Jauss, and Hans Blumenberg, and tend to focus on constants and continuities in history rather than change. Curtius's magisterial *European Literature and the Latin Middle Ages* (1948) systematically explores recurrent rhetorical topoi that underlie thought and writing in the Western tradition. Although the notion of musical topics has been popular since Ratner (1980), only Raymond Monelle's *Sense of Music* (1999) avows the link with Curtius's methodology. Jauss's concept of "reception constants" illuminates patterns in historical writings on aesthetic texts and has been particularly fruitful for Beethoven studies (Eggebrecht 1972; Sipe 1992; Burnham 1995).

Nevertheless, topic theory and reception-constants have so far proved peripheral to musicology, mainly due to the difficulty of extracting them "from the context of intellectual or social history" (Dahlhaus 1985, 162). Gadamerian sensitivity to the differing ontologies, horizons, and "life-worlds" of each epoch tends to overrule obvious commonalities. Thus, despite Wagner's regular use of the baroque *pianto* (see Monelle 1999, 71–73), it cannot be presumed that the topic meant the same things in the seventeenth and nineteenth centuries. Similarly, as Dahlhaus points out against Eggebrecht, catchphrases of Beethoven and Wagner reception such as *per aspera ad astra* or "art as religion" actually "reappeared in extremely changeable light" (1985, 162).

The solution is to shift the ground of these identities from substance to function. A constant is not a nugget of historical reality handed down from sender to receiver; it represents, rather, a common way of doing things. To this end, I follow the example of Blumenberg's historical metaphorics, as demonstrated in his monumental intellectual history, *The Legitimacy of the Modern Age* (1995). Blumenberg rejects the "historical substantialism" of Curtius, with its "substantialist conception of historical identity" (29). Since "constants bring a theoretical process to an end" (29), Blumenberg looks instead to an identity not "of contents but of functions" (64). His functionalism approaches intellectual history as a system of "positions" that are "occupied" and "reoccupied" by ideas. Blumenberg's object is not the genealogy of isolated tropes but massive analogies between the three great intellectual epochs of the ancient, Judaeo-Christian, and modern worlds. Some of these are commonplaces, such as the cliché that the modern idea of progress is a secularization of Christian eschatology. This canard, which is rehearsed uncritically in the many books of M. H. Abrams (see especially 1971; 1973), is traced to the secularization thesis presented in Karl Löwith's *Meaning in History* (1949). In this particular case, the notion is false because modern progress is immanent,

emerging through human struggle, whereas Christian salvation is a transcendent intervention by God. In terms of substance, therefore, progress and eschatology have nothing in common. In terms of function, by contrast, the two ideas occupy the same position—namely, that of accounting for an epistemological problem. A further difficulty with Löwith's secularization thesis is that, like Goehr's and Derrida's literalization thesis, it predicates an unbalanced historical model either of authenticity or teleology, depending on one's leanings. Either the ancient world is "enchanted" with respect to the modern age's "enlightenment" (Adorno and Horkheimer), or modernity is an "illegitimate" mutation of an "authentic" Christian world (Löwith). Can one defend the legitimacy of modern humanism without losing the value of historical research?

Blumenberg's balancing act resonates sympathetically with my own project of harmonizing modern metaphor theory with an ancient practice of metaphor going back to Quintilian and Aristotle. What, then, *is* the nature of this identity? For Blumenberg, it is not a panhistorical substance but a universal human activity of inquiring. Blumenberg elsewhere (1960) associates this activity with a "metaphorical" imagination that steers people's interactions with their (Husserlian) *Lebenswelt*. This "life-world"—the horizon of the world as we actually experience it prior to scientific concepts—is very much the progenitor of Lakoff's metaphorical body. The metaphorical imagination, I argue, is universal, and *that* is both starting-point and upshot of my functionalist historical model. In brief, the purpose of my map is to reveal not common structure, but common humanity. And this, ultimately, is why my method is worlds away from Foucault's structuralism, which reduces human subjectivity to a coordinate within a semiotic system of codes, governed by impersonal archaeological forces.

As an historical metaphorics of music, my approach is distinctive also because it is written from the vantage point of the individual musical categories (as opposed, say, to a perspective from general style [see Rosen 1972]). I thus sidestep a further problem with Foucault's structuralist history: although his system purports to be semiotic, it actually privileges linguistics as the model for how all discourse operates and thus overlooks possibilities of nonlinguistic sign-systems such as "pictorial representations or bodily movements" that "equally support statements" (see Brown and Cousins 1986, 45). To this list of nonlinguistic signs may also be added music. As I have maintained constantly in this book, rather than importing inappropriate linguistic models to music, one can and must do musical mapping immanently, "in house." By letting music structure itself, we obtain (musical) structure without structuralism.

So what, getting down to brass tacks, is to be gained? The answer is a secret history of music, hitherto obscured by linear or monolithic histories. A plural history reveals, first and foremost, music's lost visual culture, identified with the metaphor of painting. We habitually talk of musical "imagery" without really knowing what we mean. Second, a plural metaphorics gives early music—that is, earlier than the 1800 aesthetic watershed—its own theoretical paradigm, so that the absence of a work concept is no longer prejudicial to the conceptual integrity of a Schütz or a Bach. Third, linguistic and organicist models are relativized and pinned down to specific periods, thus affording semiotic and hermeneutic approaches deeper historical motivations. Fourth, I explore the impact upon periodization of the intrinsic conservatism of the German tradition. This tradition always seems about a century behind the European mainstream and yet manages to use its belatedness to progressive advantage. The culture of universal harmony persisted into the mid-eighteenth century in Germany (most spectacularly in Bach), whereas most French-speaking intellectuals espoused melody. When the German paradigm did shift, in the late eighteenth century, it was not to melody but to rhythm, reflecting the endurance of Leibniz's baroque rationalism. Rousseau's advocacy of melody *contra* harmony did not persuade many Germans until the mid-nineteenth century—thus in the entirely new context of romantic organicist aesthetics.

I cannot resist, by way of *envoi*, mentioning one startling fact about sunflowers, namely, that they are native to the Americas and were unknown in the Old World until they journeyed east across the Atlantic after Columbus (the first to bloom on European soil was cultivated in the royal botanical

garden in Madrid in 1510; see Mancoff 2001, 29). This is why the English botanist John Parkinson chose the sunflower to represent the continent of America in the frontispiece to his *Theatrum Botanicum* of 1640 (see plate 3). The European heliotrope, of course, was another matter, being a generic term for all sun-loving flowers and plants (including the common pot marigold, *Calendula officinalis*), as well as the purple, scorpion-tailed *Heliotropo magiore* itself. Only in the seventeenth century did the floral lore associated with Helios and the New World sunflower fuse. That is the hybrid specimen Kircher knew—a rather good analogy, it would seem, for the grafting together of the American and European metaphorical traditions. Hegel and Derrida were wrong, then; metaphors do not always move east to west, in line with the historical drift of Oriental "figurative thought" toward Western "white mythology." Sometimes they travel, as Don DeLillo would say, "with the sun coming up ass-backwards and the trees casting shadows in the wrong direction" (1999, 413).

# 4

# *Harmony and Painting*

Heinrich Schütz was so fond of the Eighth Psalm that he set it three times.[1] "O Lord, our Lord," with its colorful account of the "flocks and herds, and the beasts of the field, the birds of the air, and the fish of the sea," gave Schütz free rein to indulge his taste for madrigalian word-painting and the figurative vocal display he had learnt from the master of the new Italian style, Claudio Monteverdi. The last and most intricate version of this psalm is found in the collection of *Deutsche Konzerte*, which Schütz dedicated to Christian V of Denmark, the *Symphoniae Sacrae II* of 1647. "Herr unser Herrscher" is studded with brilliant musical imagery, the most ornate being an eight-measure-long melismatic sequence depicting the moon and stars sparkling in the firmament. The text gives: "when I consider [*werden sehen* = see] your heavens, the work of your fingers, the moon and stars, which you have set in place." It is worth putting ourselves in the position of Schütz's observer, because this particular image sits very near the center of baroque musical thought. What we see, at first glance, is a long melisma on the word *Sternen*, aptly representing the scintillation of the stars by means of oscillating sixteenth-note figures (ex. 4.1):

Example 4.1. Schütz, SWV 343, mm. 53–66






For the purpose of this sermon in tones, the figures help make the image conveyed by the text more palpable. At the same time, we can look beneath the physical light of these stars to the intellectual *lumen* of an underlying order that governs them, a harmony. The sixteenth notes elaborate the structural notes of a contrapuntal skeleton, indicated by Schütz's basso continuo. To penetrate these figures means to "see" an underlying sequence of thirds—E♭–C, D–B♭, C–A, B♭–G—with its implicit voice leading, a scale falling from E to G. Furthermore, it is to recognize that these stars are not static, but in orbit around a tonal center. They circumscribe "tonal space" via a harmonic circle of fifths around the key of C minor: C–F–B♭–E♭–A–D–G–C. The motion of the stars "set in place" (*die du bereitest*) in their spheres is enshrined in the circle of tonality. Schütz paints a picture of a centered and functionally differentiated tonal universe.

To understand Schütz's figures means to practice "hearing as" both crossmodally (music as painting) and intramusically (figuration as harmony). We must hear the figures as stars; we must also hear them as an elaboration of a contrapuntal model, circumscribing an imaginary tonal space. In more conventional terms, to comprehend musical style in the seventeenth century is to grasp the expressive and technical faces of the Monteverdian *seconda prattica:* how composers' growing interest in dramatic expression was enabled by an increasingly harmonic perspective on counterpoint, epitomized in the basso continuo. Without such stylistic understanding, Schütz's figures might otherwise seem just empty noise, as he himself recognized in his "Discourse to the Reader," appended to the basso continuo part-books of these works (see Bittinger 1964, XVI): "this same contemporary Italian music," writes Schütz, "and pieces composed in a like manner, together with their customary measure and black notes which are introduced," cause great difficulty to the Germans, to the extent that "pieces written in this way . . . could awake nothing other than aversion and disgust in a discriminating ear" (Bittinger 1964, XVI). Only through "instruction" will the coherence of this style be apparent: "before they presume to use one or other of these pieces in public, [discriminating musicians] should not be ashamed to seek instruction from someone who is familiar with this style."

The nature of this instruction is the topic of the present chapter. In the first instance, it comprises the sort of instruction provided by Schütz's pupil Christoph Bernhard, whose *Tractatus* codifies the analytical principles implicit in Schütz's compositional practice. Step by step, as we shall see, Bernhard conducts the student from "literal" counterpoint to the more imaginary realms of intervallic "space" and voice-leading reduction. His treatise unfolds a metaphoric mapping from literal to imaginary counterpoint. Its intention is to foster in the student an awareness that the old and new styles are compatible—to "hear" the one as a transformation of the other. But my broader purpose in this chapter is to situate Schütz and Bernhard in the context of baroque metaphorical thinking as a whole. The chief German critic of the period, Georg Philip Harsdörffer, thought of poetic metaphor in visual terms, as an agent of *Bildlichkeit* (pictorialism). Metaphors organize an abstract domain of experience by means of a more figurative domain, thereby expressing concepts in images. So too, the

compositional tradition of *Figurenlehre* originates with the mapping of rhetorical terminology onto musical material. *Figurenlehre*, by attending to the specificity of musical material, helps us "see" the musical figure as if it were a plastic image, by analogy to painting. Seventeenth-century scientists such as Johannes Kepler and Marin Mersenne opposed the figurality of metaphor to the supposed objectivity of models. Models were rational and subject to empirical verification. A model for Kepler is the "harmony" or fit between perceptions of the world and geometrical musical archetypes in the mind. A model for Mersenne is his generalized theory of vibration, drawn from his observation of a sounding string. Kircher brings together Kepler's notion of "attunement" between mind and percept and Mersenne's concept of vibration. But in applying them to music, Kircher aestheticizes these models, to the point where the distinction between metaphor and model becomes highly problematic. Bernhard is the first theorist to apply this aestheticized model to the cognition of figurative counterpoint.

In the seventeenth century, musical structure was compared to painting, to rhetoric, to mathematics, and to cosmology. The relationship between line and figure in music (or counterpoint and diminution) was thought to be analogous to that between drawing and color, between concept and expression, between simple and complex proportion, and between spirit and matter. Finally, theorists conceived of complexity as a deviation from perfection, according to CENTER/PERIPHERY and SCALE schemata. These schemata were intrinsic to baroque cosmology, with its notions of the levels of creation, the "chain of being" (a mystical hierarchy connecting the Supreme Being with its baser creatures), and the disputes between proponents of heliocentrism and geocentrism. As befits an essentially visual culture, it was a picture that best captured the force of these schemata. The image of "The Divine Monochord" in Robert Fludd's *History of the Macrocosm and Microcosm* (1617–26) became the proving ground for seminal debates between the major European intellectuals. Fludd's picture pulls together and syncretizes diverse strands of thought (see plate 1). Note the number of "centers" present in this picture. The monochord is a source of sound. The hand of God, which tunes the string, is the source of perfection, from which divine light emanates (in Fludd's other engravings, the hand is replaced by the triangle of the holy trinity, the divine eye, or the tetragrammaton). With the division of the cosmos into three domains (empyrean, celestial, and sublunar), the sun (the source of created light) represents the perfectly equal mixture of spirit and matter, of light and dark (Fludd's sun is central only in this symbolic sense, since he rejected Copernicus). The earth anchors the monochord and is the ground for the acoustic fundamental. Fludd's scale schemata also stretch in opposite directions. The monochord is a thread of continuity coterminous with the chain of being. It is also a measure of proportion, marking off the intervals of the universal hierarchy into two "octaves" (a "formal octave" and a "material octave"). Hence the scale simultaneously climbs from the fundamental and descends from the hand of God. Nobody, of course, could mistake Fludd's picture for a coherent model of the universe. And yet it was this very scattershot approach that gave his images their suggestive richness.

# 1. THE DIALOGUE OF HARMONY AND PAINTING

> Music is not to be regarded as other than the sister of painting, in as much as she is dependent on hearing, second sense behind that of sight. She composes harmony from the conjunction of her proportional parts . . .—no differently from the linear contours of the limbs from which human beauty is generated. (da Vinci 1989, 34)

The comparison of painting with musical harmony is an historical commonplace among theorists in both fields: each invokes the other to explain ambiguous concepts of proportion or color. In his discussion of perspective in painting, the fifteenth-century scientist Luca Pacioli drew an exact analogy: "If the one art exploits harmonic proportions, the other exploits arithmetical ones" (in www.groveart.com). The association endured, even when the sense of harmony shifted from numerical proportion to color. Nicolas Poussin, writing to his patron Paul Fréart de Chantelou in 1647, appeals to Zarlino's theory of modal character from *Istitutioni Harmoniche:* "I hope by the end of year to have painted a subject in the Phrygian mode" (in www.groveart.com). On the other side of

the canvas, Zarlino himself had written in 1558: "just as a painting in many colors pleases the eye more than a monochrome, varied consonances and melodic movements please the ear more than the simple and invariant" (Zarlino 1968, 61). Zarlino may have been referring to ideas expounded by another Venetian advocate of color, the art theorist Lodovico Dolce, whose *Dialogo della pittura intitolato l'Aretino* had been published the previous year (Lichtenstein 1993, 152). In the dispute between advocates of color and line, Dolce defends the theoretical legitimacy of painting, as against drawing, by insisting on a distinction between color as it comes out of a tube (*color*) and color as it is worked by the painter (*colorito*). Similarly, Zarlino legitimizes the use of coloristic diminutions in contrapuntal composition by differentiating them from the figures freely improvised by singers. The analogy between painting and harmony thus runs much deeper than a linguistic trope to embrace the interrelationship of their technical categories, and even the theoretical disputes that regulate them. At a level deeper still, music, like theories of language, thought, and perception, was governed by the painterly paradigm of the age. Perception was understood as light falling upon the retina as if it were a canvas. Thoughts, according to Descartes, were "like images of objects" (cited in Lichtenstein 1993, 130). By extension, words were pictures of thoughts, as Bernard Lamy argued in his *L'art de parler:* "since words are the signs of things that occur in our mind, we can say that they are the picture of our thoughts, that the tongue is the brush that draws this picture, and that words are the colors" (Lichtenstein 1993, 129).

## *Harmony*

"Harmony" is the most loaded term in baroque thought, denoting much more than just a technical musical category. We can identify five levels of harmony: the compositional, the theoretical, the cosmological, the scientific, and the metaphorical. The last represents in many ways a return to the first, compositional, level, but it is now commuted to an imaginary model. This dynamic of circular return is itself part of the "rhythm" of harmony, as expressed in the many harmonic cycles of the universe: the orbit of the planets, the oscillation of a string, the return of a spirit to God.

At its most practical level, harmony is, by Zarlino's definition, a "diversity of moving parts and consonances, brought together with variety" (1968, 52). For Bernhard, harmony, counterpoint and "composition" were the same: "composition is a science which erects a harmonious contrapuntal structure out of well-disposed consonances and dissonances" (Hilse 1976, 31). On a theoretical level, harmony's two strands—the consonances and their combination—are subject to a hierarchical ordering. It is here that the radial schema (or deviation model) that structures harmonic thought comes to the fore. The center for this model is the sun, as the symbol for order, clarity, perfection and truth. According to Zarlino,

> The part nearest to its origin and cause, which is the sun, has more clarity, shines more brightly, and is more perfect than more remote parts. So the interval nearest to the cause and origin of consonance—the unison—which is contained in the proportion of equality and is among the *unisone* combinations is more perfect than any other consonance. This is the octave, which takes its ratio from the duple proportion. (1968, 17)

Zarlino derives the primary ratios by dividing a string into two, three, four, five, and six parts and ranks them by the complexity of these ratios. Hence at 2:1, the octave falls nearest the center; next come the fifth at 3:2, the fourth at 4:3, the major third at 5:4, and, at 6:5, the minor third (the major sixth is a compound of a major third and a fourth, the minor sixth of a minor third and fourth). The remaining intervals (seconds, sevenths, and augmented) are counted as dissonant. Zarlino arranges contrapuntal species similarly according to deviation from simplicity. "Simple" counterpoint is comprised solely of consonances; "diminished" includes passing notes and suspensions. Beyond this order comes compositional license.

Zarlino organizes musical style in this way because his notion of harmony is a subcategory of his conception of the order of things in general, universal harmony: "speaking universally, music is nothing but harmony, and we may say that it is that opposition and agreement from which Empedocles proposed all things were generated; it is a concord of discords, meaning a concord of

diverse things that can be joined together" (1968, xviii). This speculative tradition persisted well into the era of the new science. Thus the linchpin of Kircher's theocentric music theory is that "God Allmighty is a fount and origin of all harmony and concord" (in Scharlau 1969, 169). Andreas Werckmeister, a contemporary of Bach, claims in his *Discourse* of 1707 that "the nearer an object is to its origin, the more perfect it is," just as "the further proportions deviate from their origin in unity, the more imperfect they are" (Werckmeister 1970, 13). Yet intervals constitute only a single facet of the vast realm of analogies described by universal harmony. The *Arte Prattica et Poetica* (1653) by Johann Andreas Herbst, a contemporary of Schütz, attests to the continuing influence of Renaissance magical thinking in seventeenth-century German music theory:

> Harmony is in all things the most beautiful, and is to be perceived everywhere, in heaven and on earth, just as in the three-in-one God, the maker and origin of all Creation itself, as well as in the choir of good spirits and holy angels, in the Macrocosm, the heavenly bodies, elements, meteors, metals and precious stones, in the plants and beasts of the earth, no less than in the Microcosm or Man. . . . And just as disharmony and disunity is a cause of the fall of all things, thus, conversely, everything is saved through harmony, by virtue of which everything exists, indeed whatever is fallen is raised up, and through its harmony and unity is put on firm feet . . . and can be restored once more into a harmonious image of God. (In Eggebrecht 1959, 42)

Herbst's portrayal of harmony is strongly influenced by a poem by the Lutheran Johann Walther, his *Lob und Preis der loblichen Kunst Musica* of 1538 (see Eggebrecht 1959, 42). Walther's poem is a narrative of paradise lost and regained, in which man is consoled for his fall with the joy of music. Earthly singing is both an echo and a foretaste of the heavenly singing man will attain to in the resurrection. The notion of "echo" (*Wiederhall*) combines two senses of image. First, it suggests distance from perfection: earthly music is a mere imitation, a pale shadow, of the divine. Second, it carries a sense of return, of restitution and redemption. This fusion of the synchronic and diachronic dimensions of imitation (synchronic shadow, diachronic "re-sounding") was fundamental to the Lutheran conception of the *musicus poeticus*, whose calling was to turn music as the delectation of man into praise of God. Hence the tension in Herbst's account between a static and a dynamic vision of harmony; between harmony as a state of nature, a freely perceptible phenomenon intrinsic to the order of things ("to be perceived everywhere"), and as a state that results from an act of harmonization ("everything is saved through harmony . . . whatever is fallen is raised up"). In Herbst's Lutheran poetics, harmonization denotes the process of creativity, by which the *musicus poeticus* imitates the creativity of God. Following Listenius's precepts, the composer is charged with the creation of "a new song," an *opus perfectum et absolutum* (Eggebrecht 1959, 33). The essence of such artistic perfection, however, is the mediation of the spiritual via the worldly, the contemplative through the active. This theological work ethic blends smoothly into the new empiricist currents of seventeenth-century science. The coexistence between the Christian and Neoplatonist cosmologies and the new science is epitomized by Kepler's *Harmony of the World* [*Harmonice Mundi*], a book that mixes speculation on the music of the spheres with probing astronomical observations. Moreover, what helps make the work, according to Ernst Cassirer (1911, 330–34), one of the founding texts of German rationalist philosophy is Kepler's conception of harmony as an irreducibly cognitive activity. Harmony exists only as it is mediated through the processes of the human mind. Kepler proposes two types of harmony: "sensible harmony" and "pure harmony." Sensible harmony entails the comparison and ordering of objects of sensation, such as "a sound or a ray from a star" (Kepler 1997, 290). Harmony is "a thing of reason" (291); it only emerges through an activity of the soul (mind). Harmony is thus not an attribute that is freely and immediately sensible. Rather, it arises through an act of cognition, which draws relationships between seemingly unconnected objects on the grounds of a common unit of measurement. Pure harmony, by contrast, exists in the soul alone and comes from innate mathematical categories. Perception, therefore, involves an act of comparison between emanations from sensible things into the mind and innate archetypes within the mind, between sensory emanations and innate categories: in short, the bringing of sensory harmony before the tribunal of pure harmony.

Kepler's object is the understanding of counterpoint in the broadest sense, in the heavens and on earth, and although he largely bypasses practical music, his cognitive approach had enormous

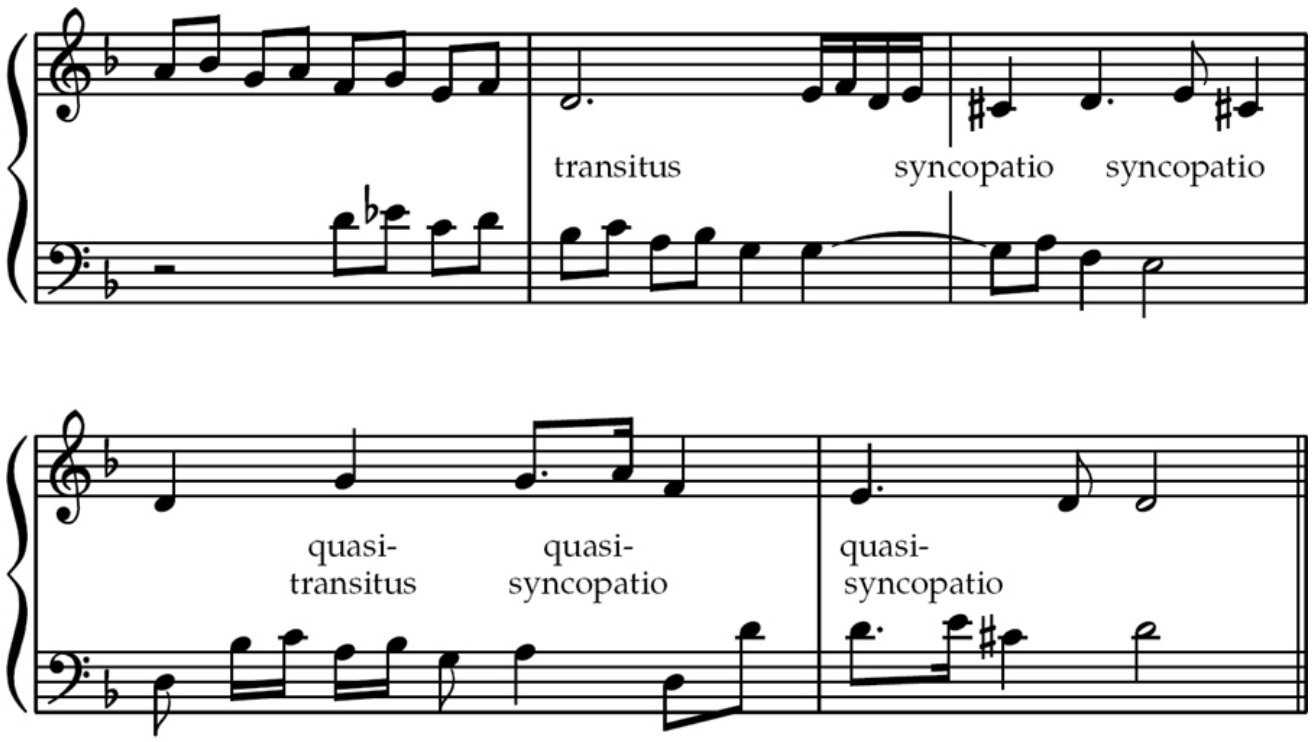
resonance with later music theorists. He grounds his analogy between celestial and sublunar counterpoints on a fourfold circular model: the orbit of the planets, the rotation of polyphonic voices, the geometric proportions of a circle, and the operations of the soul, which is also conceived as a circle. Unlike previous advocates of the music of the spheres, Kepler reaches his conclusions through scientific observation, determining the scale unfolded by the extreme speeds of each planet in its orbit around the sun:

> The motions of the heavens, therefore, are nothing else but a perennial concert (rational, not vocal) tending through dissonances, through as it were certain suspensions or cadential formulae (by which men imitate those natural [i.e., celestial] dissonances), toward definite and prescribed cadences, each chord being of six terms (as of six voices), and by these marks (i.e., the cadences) distinguishing and articulating the immensity of time. (In Walker 1967, 250)

Of course, Kepler concedes that the alignment of the six orbits in a cadential unison probably only takes place once in the entirety of creation. Man's sublunary counterpoint ("the artificial symphony of several voices)" plays out "in a brief portion of an hour the perpetuity of the whole duration of the world" (in Walker 1967, 250). He grounds the analogy between the two counterpoints in the proportions of a circle and discovers the seven elementary harmonic proportions (1:2 = octave; 2:3 = fifth; etc.) by inscribing into the circle's circumference a series of regular polygons.[2] Kepler emphasizes "that *this comparison is not only a metaphor*; through the geometrical archetypes there is a real causal connection between the two polyphonies, a connection which accounts for their likeness" (in Walker 1967, 250; emphasis mine).

Kepler's scientific conception of harmony marks a crucial move in the history of music theory, because it establishes a link between harmony as a compositional category and a more abstract sense of it as an epistemological model. A model is a mental picture that the understanding projects upon reality, and counterpoint becomes a model when it is psychologized as a way of hearing or as an analytical tool. Such a model is seen in the middleground progressions by which Bernhard demonstrates, in Kepler's terms, a "connection between two polyphonies," that is, the figural counterpoint on the foreground with the stricter, more "scientific," kind. Bernhard defines a musical figure as "a certain way of employing dissonances, which renders these not only inoffensive, but rather quite agreeable" (Hilse 1976, 77). The heart of Bernhard's theory is a notion of structural level that can take both melodic and contrapuntal forms. The first, melodic diminution, is summarized in Bernhard's *Tractatus* by his figure of variation, by which "an interval is altered through several shorter notes" (Hilse 1976, 96). In Bernhard's earlier treatise, *The Art of Singing*, diminution is discussed in relation to the performance practice of *coloratura*, whereas the *Tractatus* assimilates figures into the contrapuntal fabric of the composition. For example, Bernhard defines the figure *superjectio* (or *accentus*) as "when a note is placed next to a consonance or dissonance, a step above" (92). Bernhard underlays an analytical model beneath his figured example, showing how it can be reduced to a contrapuntal skeleton in the traditional *stylus gravis* (ex. 4.2):

Example 4.2. *Superjectio*




This example would naturally stand thus:



Bernhard internalizes the geometry of counterpoint in much the same way that Kepler had commuted the harmony of the world into the mental geometry of archetypes. Zarlino's "diversity of moving parts and consonances" becomes in Bernhard's hands a second-order, metaphorical harmony, which is held up against figured music as a mental template. Bernhard's metaphorical harmony is a world apart from universal harmony. Although an abstraction, it is a narrowly delimited, technical category grounded in compositional practice. Bernhard makes no mention of Kepler in his *Tractatus*. Nevertheless, Kepler had himself suggested the applicability of his method to the liberal arts with his claim that "the faculty which hunts for harmonic ratios is the same as that which also embraces the remaining branches of knowledge" (1997, 307).

## *Painting*

When theorists discussed the dignity of music as a liberal art, they compared it to painting and poetry. Baroque poetry received most praise when it attained to the condition of painting according to the Horatian precept of *ut pictura poesis*. Music, the Cinderella of the sister arts, mediates between the two terms of *ut pictura* as a kind of painterly rhetoric. Harsdörffer formulates the classical view in a pithy triangle: "poetry is a picture, painting is a mute music, and the latter is itself an animated [*beseelte*] poetry" (1641–49, 3:242). Representations of music in the baroque may tend to one or another point of this triangle, but given the prevailing picture-theory of language, poetic and pictorial expression were mutually defining under the banner of mimesis. When Burmeister compares music to language, it is as an ornamental illumination of the text, an *ornatus*. While the foreword to his *Musica Autoschediastike* claims that "there is little difference between music and the nature of an oration," Burmeister's *Hypomnematum Musicae Poeticae* talks of "the manner in which music's wonderful 'ornatus' which surrounds the text shines forth" (in Bartel 1997, 94). Burmeister, typically for his time, makes no attempt to differentiate the three arts as sign systems; rather, they flow into each other on the level of bodily affect, the "passions of the soul." For Burmeister, a phrase in music is directly iconic of an emotion: "a musical affection is a period in a melody or in a harmonic piece, terminated by a cadence, which moves and stirs the hearts of men. It is a movement or something that brings joy or sadness" (Burmeister 1993, xlix). But Burmeister's concept of the phrase as an objectification of an affect is double-edged, and this opens up a much clearer axis of comparison between music and painting. On the one side, Burmeister's purpose is to focus the attention of the compositional student upon the individual properties of the musical material, irrespective of its textual or emotive referent. This is to treat music as paint: to objectify it as a substance. On the other side, when Burmeister speaks of musical material as a stimulus to the passions, he is identifying its workings with the influence of light and the immediacy of vision, a commonplace of baroque aesthetics. The analogy between sound and light, between acoustics and optics, underwrites Harsdörffer's elaborate image of Queen Music: "her throne is in the heavens, to which all her rays of sound [*Tonstrallen*] rush through the air: she is the queen of the noble arts; a mistress of our senses" (in Krapp 1903, 71). But sound impinges on the soul more acutely than light: "[music] has immediate influence upon every affection. . . . Since the soul is a spirit, which may not be aroused by physical things, so all its respective powers—reason, will, understanding, cultivation—can only be mastered and moved through the sense of hearing" (Harsdörffer 1641–49, 4:47). The astral geometry of Kepler's *Harmonice Mundi* compares the sound emanating from its source with "a ray from a star" (Kepler 1997, 290), and this astronomical trope percolates down to Schütz's courtly encomium to music (in the dedication of his *Kleinen geistlichen Konzerte I* of 1636) as the sun of the artistic firmament: "no less than the Sun among the seven planets," writes Schütz, so music "shines bright and far among the seven liberal arts" (in Eggebrecht 1959, 6).

Painting's main gift to music was thus not the problematic of resemblance; theorists were perfectly aware of music's limitations as a mimetic art. Rather, it established a common interest in expressive immediacy based on the perceived analogy between the dynamics of light and sound. The status of both painting and music as "natural" sign systems was thereby established in opposition to a comparative lack of immediacy in the language arts: language was "artificial." At the end of the baroque, in a treatise that characteristically leaves music out of its title (*Réflexions critiques sur la poésie et sur la peinture*), the Abbé Dubos will define the musical sign in terms of the paradigmatic natural/arbitrary opposition between painting and language. "Painting works on us by means of our sense of sight," writes Dubos, since it deploys "natural signs," unlike the "arbitrary signs" (*signes artificiels*) of poetry (Dubos 1993, 133). Music becomes like painting when it imitates the passions: "just as the painter imitates the features and colors of nature, so the musician imitates the tones, accents, sighs and inflections of the voice, in fact all those sounds through which nature herself expresses her sentiments and her passions." These tones are possessed of "a marvelous power to move us because they are the signs of the passions, created by nature, from whom they have received their energy"; by contrast, "articulated words are merely the arbitrary signs of the passions" (150). Of

course, Dubos limits his discussion to vocal composition, in which music, for all its affinity with painting, is no more than a dependent sign whose value is to render the signs of language more natural. Musical setting is simply the "third way" of naturalizing a text, after recitation (the immediacy of the voice) and theatrical staging (the immediacy of spectacle).

Philosophers from Harsdörffer to Dubos, perhaps because of a lack of technical training in this field, discuss music in a simplified, impoverished form and reduce the comparison with painting to the level of expressive immediacy. Yet the analogy extends to technical categories. When seventeenth-century music theorists investigate expression, they explore how figurative textures relate to the contrapuntal frame and how the music as a whole relates to the text. The text governs the music, because it has conceptual content, just as counterpoint is stricter and more rationally ordained than the figures. This double axis of elaboration—figures to counterpoint, and music to text—matches the way art theorists talked about color's relationship to drawing, and painting's to subject. Jacqueline Lichtenstein, in her study of baroque art criticism (1993), has shown how painting's dispute with poetry is reflected in the categories of painting itself. In the academically prestigious genre of history painting, imagery is at the service of narrative, just as it is drawing, not color, that defines a picture as a story. Drawing has primacy over color because it represents the rational, geometric design (*dessein*) of the world, and because it is subject to rules that can be taught. Painting's claim to be a mimetic sign that resembles its referent thus rests on the primacy of drawing. Color, by contrast, is open to the same critique that Plato had leveled at rhetoric in relation to reason: it is at best a decorative supplement, at worst a meretricious cosmetic and a lie. The academic debate between proponents of drawing and color (*disegno* versus *colorito, dessein* versus *coloris*) thus parallels that between partisans of counterpoint and musical figures. Line and counterpoint stand on the side of reason, color and figure on the side of rhetoric.

It is striking that, in the case of both music and painting, the terms of the argument are reversed as a result of a total reappraisal of rhetoric's status. At the turn of the seventeenth century, Plato's rationale of truth and resemblance was rejected, and rhetoric came to be understood, following Aristotle, according to aesthetic criteria intrinsic to art itself. Both painting and music now aspire to the eloquence of the orator, which stirs the emotion by the power of illusion and the suasive quality of the image. In each case, this rhetorical turn originates in Italian intellectual circles and is developed elsewhere, achieving maturity a century after its inception. On music's side, Zarlino's championship of figurative composition inspires the German *Figurenlehre* tradition, which culminated with Christoph Bernhard's *Tractatus* of circa 1660. Bernhard was the first theorist to legitimize Monteverdian dissonance treatment by revealing its solid grounding in *prima prattica* counterpoint. On the side of painting, Dolce's defense of *colorito* in his *Dialogo della pittura* is surpassed by Roger de Piles's *Dialogue sur le coloris* of 1673. Rhetoric aims to paint with words, yet no discourse, contends de Piles, can match painting's ability to *show*. It is color, not drawing, that best expresses painting's material specificity as an art form. The triumph of color is in the depiction of human flesh, as in Rubens's nudes. It is here, in the eloquence of the body in painting, that art emulates the eloquence of the orator's physical gestures.

Rhetoric is a rogue art because it is not defined by any one medium. If painting aspires to rhetorical eloquence, then poetry persuades by creating in the listener the illusion of seeing, and music partakes freely of both effects. A strange consequence of painting and music's rhetorical turn is a new alignment between the arts. Music now sides with poetry against painting, because their imagery is both of an illusory, second-order, "metaphorical" quality. The figure for imagery is hypotyposis, described by Quintilian as "a presentation of a thought which is expressed through the oration in such a fashion that it is perceived as though it were seen rather than heard" (in Bartel 1997, 309).[3] The classical example of hypotyposis in action is Quintilian's tribute to Cicero's ability to paint the object of his discourse:

> Does not Cicero, in his description of the scourging of a Roman citizen, in a few brief words stir all the emotion, not merely by describing the victim's position, the place where the outrage was committed and the nature of the punishment, but also by praising the courage with which he bore it? . . . Again does he not throughout the whole of his statement excite the warmest indignation at

> the misfortunes of Philodamus and move us even to tears when he speaks of this punishment and describes, or rather shows us as in a picture, the father weeping for the death of his son and the son for the death of his father? (In Lichtenstein 1993, 100)

Hypotyposis is the chief figure in baroque musical drama, and is at its strongest when used to foster identification with a suffering subject. In the aria "D'aspri legato" from his oratorio *I pellegrini al sepolcro di Nostro Signore* (1742), Johann Hasse brings the scourging of Christ to life with textural figuration. The strings' rushing, percussive figures illustrate the Guide's description of Christ "bound with harsh, humiliating bonds, tormented in a thousand ways." The visual nature of this procedure is underscored by a remarkable framing device. Hasse interposes a slow, contemplative commentary section four times into the picture, with increasing pathos, instructing the pilgrims (and us) to "here see Jesu in your imagination." The Guide indicates not one but two referents: more obviously, the second-order image of Pallavacino's libretto (a function of *word*-painting), but also the musical material. Baroque tone-painting is predicated on the ability of texture to capture and elaborate a mood and to operate as a medium between text and emotion. The listener's attention is thus directed toward the textural figures themselves, which are contemplated quasi-visually. Although the music unfolds through time, the texture and affection are constant, creating the illusion of a spatial object with physical extension. This procedure endows baroque musical imagery with a split reference, in accordance with music's joint alliance with the two branches of *ut pictura poesis*. In its objectification of its own material, music imitates the physicality of the plastic arts; in its evocation of a second-order image, music is an auxiliary of poetry.

## *Baroque Poetics*

Seventeenth-century science defined its models in staunch opposition to figurative representation: scientific models make truth claims that are falsifiable, whereas metaphors do not. A favorite target for these attacks was Robert Fludd's many engravings, of which "The Divine Monochord" is nowadays the best known (see plate 1). Is Fludd's picture a metaphor or a model? Judged in relation to Kepler's 1619 *Harmonice Mundi*, Fludd's work is thus either a deeply reactionary relic of Renaissance scientific thinking, or not science at all.

Since the books of Frances Yates, the traditional view (associated with Cassirer [1911]) that seventeenth-century "science" broke firmly with the age of Renaissance magic has become much more nuanced. Kepler believed in the music of the spheres, Newton in astrology, and the persistence of Renaissance thinking is particularly explicit in baroque music theory. Moreover, the intrinsically hybrid status of music—part liberal art, part branch of mathematics—makes the distinction between metaphor and model extremely tenuous. This hybrid quality is epitomized by the central text of baroque music theory, Kircher's *Musurgia Universalis* (Kircher 1988). Kircher is "progressive" in his awareness of acoustics and *seconda prattica* (Fludd, Kepler, and Mersenne confine their discussion of music to Pythagorean ratios and Renaissance polyphony). And yet he embeds his survey of figured music within an ostensibly conservative model of the musical universe, based on a Fluddian system of analogies between the three realms of creation. Kircher's Fluddian cosmology is encapsulated in the *Musurgia*'s frontispiece (see plate 2). As in Fludd's picture of the Divine Monochord, J. Paul Schor's engraving divides musical space into three levels. At the top, a symbol of the Trinity shines on nine choirs of angels, who sing a thirty-six-part canon. In the middle, a terrestrial sphere surrounded by the zodiac is surmounted by Musica, holding Apollo's lyre and the panpipes of Marsyas. The lower level depicts a landscape bearing different varieties of music-making: dancing satyrs, a shepherd demonstrating an echo, the muse Polymnia with her instruments, and Pythagoras pointing to the subterranean blacksmiths hammering their anvils (a reference to his discovery of the relationship between pitch and weight).

Despite its debt to a magical iconography, Kircher's picture is freighted with progressive theoretical meaning, in particular its representation of Musica (i.e., composition) as mediating between the extremes of divine abstraction (counterpoint) and human performance (dance, song, instrumental music, and raw sound). In short, it is a model. Kircher conceptualizes a unified musical

space as a system of levels, with a middle level that reconciles *musica theorica* and *musica prattica*. This visual model faithfully represents the theory of musical figuration expounded in Kircher's text, and this, in turn, becomes elaborated in late-seventeenth-century "middleground treatises," such as Bernhard's *Tractatus*. Extraordinarily, one of the most seminal tools of modern analytical thought, the concept of a contrapuntal middleground, turns out to supervene upon a magical cosmology.

## *The Fludd-Kepler Polemic*

The metaphorical turn of Pythagorean universal harmony was enriched in the Renaissance by an occult philosophy called Hermetism (after the apocryphal Egyptian sage Hermes Trismegistus). To the Pythagorean harmoniousness between microcosm (man) and macrocosm (universe), the hermetic philosophers added an emphasis on the power of imagery to effect influences between celestial and sublunar objects. Fludd's pictures represent Hermetism's last great flowering. It is a measure of their power that they became much better known than his actual writings, emerging as the main topic of contention in Fludd's dispute with major European intellectuals such as Kepler, Mersenne, and Pierre Gassendi over scientific method.

It was extremely easy, although essentially beside the point, to attack Fludd from the perspective of the new science. In the fifth book of his *Harmonice Mundi*, which carries his famous third law of planetary motion, Kepler rejects every aspect of Fludd's "Great Monochord" pictures. The monochord is calibrated arithmetically, while the pyramids are geometrical. Light and matter are incommensurable, since they cannot be analyzed according to a common unit. Fludd divides the universe into three equal parts, yet "knowing well that these parts are not equal" (in Ammann 1967, 211). Mersenne titles theorem XII of his *Traité de l'harmonie universelle* (1627) "To determine whether the harmony and consonances that Robert Fludd puts in the spiritual, celestial, and elementary worlds are well established." Mersenne finds "no solidity in all this discourse" (1627, 421), since Fludd's facts are plainly wrong. Thus the distances from the sun to the Empyrean and from the earth to the sun are not equal; following the hypotheses of Tycho Brahe, Mersenne establishes that they are 12,858 and 1,142 miles respectively. Kepler's most damning reproof is that Fludd's model is merely figurative: "to [Fludd], the subject of universal harmony is the picture which he himself fashions of the universe; to me it is the universe itself, or the real planetary movements" (in Ammann 1967, 211). So too, in his *Traité*, Mersenne claimed to be "of the opinion of Kepler, who maintains that all the harmonies of Fludd and the Platonists are only analogies and comparisons and which have almost no other foundation than the imagination" (1627, 421). In a letter to Joachim Tankius written in 1608, Kepler attempted to clarify the gap between figurative and scientific representation: "I too play with symbols, . . . but I play in such a way that I do not forget that I am playing. For nothing is proved by symbols, nothing hidden is discovered in natural philosophy through geometric symbols; things already known are merely fitted [to them]" (in Walker 1967, 245).

It would seem plausible, therefore, to narrate the evolution of scientific thought in the seventeenth century in terms of a rejection of occult symbolism, a view advocated most influentially in the twentieth century by Cassirer (1911). Elaborating this view, the historian of rhetoric Brian Vickers (1984a) characterizes the difference between Hermetism and science in terms of opposing usages of "analogy"; that is, between analogy proper and identity. Analogy constitutes an explanatory model or a heuristic tool, which can be tested, corrected, or rejected as needs be ("falsified," in Karl Popper's sense). "Identity" denotes complete identification between symbol and referent, such that manipulating one entails the manipulation of the other. Identity occurs when analogy has become reified and rigid: "one no longer uses analogies: one is used by them" (Vickers 1984a, 95). Kepler continuously reasons analogically, but his analogies are mobile rather than rigid: they are transformed or put aside in the light of experience and experimentation.[4] He contrasts his own use of analogies with Fludd's "symbolisms," which are "poetical and rhetorical, rather than philosophical or mathematical" (153). Nevertheless, the persistence of occult elements in Kepler's own work (such as

the belief in a "world soul" and the music of the spheres) severely qualifies his distinction between the two uses of analogy.

More generally, Vickers is wrong to suggest that the Hermetic and scientific traditions can be differentiated so easily by their methods or assumptions. Arguing from the standpoint of commonality rather than difference, Robert Westman (1977; 1984) has convincingly shown that Fludd and Kepler are alike in subscribing to the new mechanistic interpretation of the universe, although they draw different conclusions from the same set of principles (such as the Hermetic metaphor of light as a type of force).[5] It emerges, therefore, that Hermetic and scientific approaches are differentiated not so much by method as by goal: Fludd employs mechanical metaphors to reinforce the Hermetic worldview, whereas Kepler uses them to explore the post-Copernican universe. The object of Fludd's models is thus not a kind of truth that can be cross-checked against empirical facts. It appeals, rather, to a form of consciousness that we would today call *aesthetic*. The Hermetic cosmology depicted by Fludd enshrined truths that would continue to prove heuristically useful for music theorists at least as late as Werckmeister, even Schenker. They are to be judged, therefore, not as representations of the cosmos, but as maps of symbolic thought. In particular, as we will see with Kircher, they laid down the coordinates for the universe of musical style—the distribution of music's abstract and physical extremes, its "light" and "matter," around a conceptual center.

Stepping back from the entire debate between so-called figurative and scientific models, it becomes clear, then, that both parties are ultimately concerned with creating "pictures." Both Fludd and Kepler are in the business of relating the invisible realm to perception. To explain means to render visible, while understanding entails a metaphorical "seeing." In the preface to the *Harmonice Mundi* (1997, 1), Kepler asserts that the human mind can grasp the finite and circumscribed, but not the infinite and indeterminate. Geometry, for Kepler, is a ground for projecting from all that is finite and knowable in the real world. Kepler comprehends "seeing" in its intellectual sense of "measuring." But his polemic against Fludd blindly discounts the vast rhetorical tradition of rendering knowledge concrete and palpable through visual images. Westman (1984) has made a strong case for Fludd's "visual epistemology," of understanding through pictures: "the true philosophy," says Fludd, "will diligently investigate heaven and earth . . . by means of pictures [*imaginibus depinget*]" (in Westman 1984, 179). Fludd cites Dürer's *Four Books on Human Proportion*, which ground an "art of seeing" in both an understanding of geometry and the experience of the human form. Indeed, the monochord corresponds to the central axis, the spine, in Dürer's diagrams of human proportion. In moving from art to metaphysics, "Fludd has transformed Dürer's instructional account of painting three-dimensional objects into a general account of the creation of *all* beings by the Creator" (191). The painter's act of illustration and God's act of creation (Genesis) are profoundly analogous. Fludd's engravings, so many of which depict the dissemination of light through the universe, follow in the train of the huge proliferation of Genesis commentaries in the late Renaissance. The creation of the world, by which God separated the principles of light and dark, was an act of painting. The human painter emulates God by making things visible. By adding pictures to words, he creates a consciousness that did not exist before.

If Fludd employs the visual paradigm in terms of the creation and contemplation of pictures, then Kepler turns it upside down to denote the process of vision itself, the physiological *perception* of light: "vision is brought about by a picturing of the thing seen being formed on the concave surface of the retina" (Kepler 1997, 205). Kepler's optics is cognate with his correspondence theory of truth, whereby sensations (or emanations from sensible objects) are matched with archetypes innate to the brain. Kepler calls this process of matching "symbolization" (*symbolatio*) (204). Symbolization is another variant of harmonization, by which "to recognise is to compare some external sensible thing with ideas which are internal, and to judge that they are congruent" (307). This cognitive notion of harmony blends the optical model of matching percepts to archetypes with the acoustic model of

attunement of systems and entrainment to a source. It is this aspect of harmony that resonated so powerfully in Mersenne's acoustic theory, and, later, in Kircher's aesthetics of musical "sympathy."

## *Mersenne*

Much of Mersenne's two great treatises is devoted to analogies between music and the world. Unlike Fludd or previous Hermeticists, Mersenne conceptualizes sound as a physical object, at home in the material universe of weight, length, volume, color, and even taste. Book 2 of the *Traité de l'harmonie universelle* (1627) is, by its title, devoted to "all relations and analogies that harmonic intervals can have with other physical objects." Some of Mersenne's more ingenious correspondences are:

*Meter:* The intervals are compared to metrical feet, following Jacobus of Liège's *Speculum Musicae*. Thus the major third, which comprises two whole tones, is a *spondee* (long-long), and the fourth, which is formed from a semitone and two tones, is a *bacchean* (short-long-long).

*Color:* Mersenne cites the authority of the astrologer Girolamo Cardano (1501–1576), who declared that the seven colors correspond to the seven consonant intervals. Mersenne believes that white and black are analogous to consonance and dissonance, and to music and silence. Consonance and dissonance are also referred (in *Theoreme III*) to sickness and health (1627, 333).

*Taste:* Mersenne compares the octave to sweetness, the most agreeable flavor. Next in his order of consonance is the flavor of fat (perfect fifth), salt (perfect fourth), followed by astringency (major third), insipidity (minor third), bitterness (major sixth), and sourness (minor sixth). Especially ingenious is Mersenne's attempt to explain the compatibility of flavors with reference to intervallic combination: "One compares the fourth with that which is salty because saltiness is disagreeable when it is joined with sweetness, just as when a fourth is joined with an octave; but if it is joined with a fifth, it is as pleasant as salt with fat" (1627, 316).

*Space:* Mersenne conceives of sounds with physical extension, in part by association with their physical means of production (strings, pipes, etc.), in part because of his acoustic model of sound as a disturbance in air. Hence strings and organ pipes that produce deep notes are long or large, just as bass singers who wish to produce a deep note sing from their stomachs and open up their windpipe. Similarly, a note can be related to speed, since the faster a hammer hits a nail, the louder the resultant sound. Mersenne thinks that this sound would be naturally round: if one separated the part of air that receives a sound, "one would have a sphere as large as the sound was loud" (45). Mersenne discovers the same ratios of the harmonic intervals in the geometry of a cube and then projects the geometric categories of line, plane, and solid back onto musical categories. Thus a sense of line is conveyed by music produced by strings, a monophonic choral chant, or by solo song. A sense of plane results from music produced by metal sheets (brass), by simple counterpoint, and by duets. A sense of solid, finally, is imparted by music produced by resonating bodies (organ, human voice), diminished counterpoint, and pieces for several voices.

*The heavenly spheres:* Following Kepler, Mersenne sees the extreme speeds of the planets in their orbits (*aphelie* and *perihelie*) as outlining a rising and falling scale around the various modes. Thus the earth unfolds a semitone neighbor-note figure, *mi, fa, mi*, "comme si la terre ne chantoit autre chose que *mi*sere et *fami*ne" (1627, 381).

As well as playing with these analogies (as Kepler occasionally plays with symbols), Mersenne also directs them toward experimental ends. There is no real contradiction in this, since baroque scientific method absorbed and adapted the "proportionality" underlying Renaissance analogical thinking. Aristotelian proportionality mutated into discovery through measurement: "that which leads us to the knowledge of an unknown quantity must be known to us," and "it must be noted that measurement is a known quantity by which one measures an unknown quantity" (Mersenne 1627, 46). In Mersenne's analogical argument, musical acoustics operates as the known term, through which we are led to a knowledge of other terms. For instance, given that "consonances are found in all the parts of this universe" (1627, 1), Mersenne discovers that "consonances are similar to *statics*, and to other parts of mechanics" (392). From this premise he infers that, just as the pitch sounded by a string increases with length, so the weight of an object increases the further it is moved from the center of a balance.

Mersenne's later treatise, *Harmonie universelle* (1636), is more significant, because it is the first work to elaborate a systematic model of sound as motion. According to Mersenne, "all movements that occur in the air, in water, or elsewhere, can be called sounds, inasmuch as they lack only a sufficiently delicate and subtle ear to hear them" (1636, 2). Since the physical world is characterized by motion, musical harmony participates in universal harmony via the motion of sound. Mersenne grounds his dynamic model of sound in a highly influential "vibration theory" of acoustics (after Giovanni Battista Benedetti), according to which pitch increases with frequency. Consonance arises when the pulses emitted by the vibration of two strings chime regularly with one another. By showing the periodic coincidence of pulses to be a cause of the sensation of consonance, vibration

theory opens up a link between physics and aesthetic affect. The concept of "vibration" thus entered Kircher's musical aesthetics on the ground of an easily generalizable model of "sound as motion."

## *Kircher*

Kircher's *Musurgia Universalis* is the first major seventeenth-century treatise to advocate a rhetoric of musical emotion, a *musica pathetica:* "the single goal of pathetic music is to arouse all manner of affections in men" (in Scharlau 1969, 149). A correspondent of his fellow-Jesuit Mersenne, Kircher adapted the former's acoustic theory into an agent of musical expression. The passions of the soul vibrate sympathetically to music, according to Kircher, by analogy to a vibrating string. This physical sympathy is, in turn, an index of Kircher's chief Christian virtue of *Mit-Leid* (sympathy), which fosters brotherly identification through emotion. Kircher's assimilation of acoustics into rhetoric is extraordinary, in view of Mersenne's rejection of impassioned music as a distraction from the contemplative life.[6] Mersenne had placed his acoustic theory on the side of science and the mind, and practical music on the side of emotion and the body. Kircher, by contrast, absorbs acoustics squarely into his *Affektenlehre*. The dualism of Mersenne's aesthetic position, which privileges the mind above the ear as the best judge of music, is dissonant with the materialism of his scientific method. Moreover, it is profoundly out of step with the Aristoxenian revival sweeping through Europe and with the dissemination of Galilei and Mei's empiricist aesthetics and Monteverdi's *seconda prattica* of composition (see Palisca 1994). Kircher's *Musurgia* accommodates the *seconda prattica* into a rationalist model predicated on deviation from purity. In this respect, it is conformant with the Lutheran binary prescription of music as both delectation of man and praise of God. But Kircher is a quintessentially baroque thinker, and I will argue that the pull in his theory between the opposite ideals of purity and variety, of reason and emotion, creates a torsion or warping effect, analogous to the transgressive aesthetics of contemporary painting. Indeed, returning to the frontispiece of the treatise, it will be possible to relate this to the painterly style of Schor's engraving.

There were many Kirchers: the scientist, the magician, the philosopher, the theologian. Kircher the scientist was perfectly aware of Mersenne's discoveries on the connection between pitch, string length, and frequency of vibration. Kircher the magician seized upon the phenomenon of sympathetic vibration as evidence of the Hermetic principle of "action at a distance," together with magnetic attraction and the radiation of light.[7] The Hermetic side of Kircher celebrated the universality of "sympathy" through all realms of creation: the orientation of the heliotrope to the sun; the attraction of iron to the magnet; and the attraction of beasts, plants, and rocks to Orpheus's lyre. He defines music's ability to agitate the human heart as its "magnetic attraction" (*Magnetische Zugkraft*; 161). There is little to divide Kircher's discourse here from the old universal harmony: "nature and the entire world appears to be nothing less than a perfect music and a musical harmony" (Kircher 1988, 252); "the harmony of lower objects is nothing less than an echo or repercussion" (277); "the stars in the firmament are separated like the strings of an instrument" (299); "when man is perfectly healthy, so the motion of spirits in the liver chime [*consoniren*] with the movement of the heart at the interval of the octave" (301). Perplexingly, Kircher is at pains to stress that "this concordance operates in all parts of the body not merely *metaphorically* [*analogē*], but literally," if only we had ears to hear it.

Kircher the philosopher slides back into the world of science, but only marginally. Drawing on a strange mixture of anatomical research and Hermetic conjecture, he speculates on the mechanics by which sound is communicated through the medium of air to the eardrum, and from there to the passions of the soul. Kircher argues that the eardrum is the partition dividing the outside air (*aer extrinsecus*) from the air-filled inner chamber of the ear (*aer internus*). He believed that the frequency of a string's vibration was directly proportional to the frequency of impulses striking the eardrum, which was in turn in a direct ratio to the vibrations of air within the inner ear: "the external air is related to the inner 'string-air' [*Saitten-Lufft*] in the same way as one tensed string with another. . . . It so happens that the air agitates the air of the inner ear in a proportional relationship" (1988, 164). The sensation of tone results from the perception of vibration impulses [*Schwingungsimpulse*].

It is the soul's role to count impulses and compare their proportions. In contrast to Mersenne, Kircher contended that the mind was too imperfect to count them. Only the soul, whose power is God-given, and hence beyond human volition, is in a position to do this. In modern terms, Kircher held that our experience of pitch is not accessible to introspection. From pitch Kircher proceeds to the affections, and transfers the model of string tension to the domain of emotional arousal: "the nerves and muscles in the human body are moved by music like the strings of an instrument" (225). Thus we experience joy when the spirits of life are extended, and sorrow when they are contracted. Kircher's theory of *musica pathetica* portrays the body of the listener as an object assaulted by sound, in a state of constant excitement and agitation. It predicates a stylistic universe filled with dramatic rhetorical figures: unmediated contrasts of material, interruptions and exclamations, and collisions of antitheses. Whereas Mersenne's Augustinian theology shied away from the *seconda prattica*'s corporeality, Kircher embraced emotion as the very vehicle of Christian identification through *Mit-Leid* ("suffering with," *misericordia*, com-passion, sympathy). This notion of listening as a Christlike body's passive sufferance of sound leads to a warping of Kircher's emotional spectrum. On the one hand, compassion lies at the opposite extreme to joy (*laetitia*), with serenity (*remissio*) occupying the middle as a desired point of balance. On the other, compassion is the privileged mode of religious participation. And yet, to twist things even further, all emotions, even pity, are facets of joy, since music is part of life, and life belongs in the realm of joy.

A similar warping afflicts Kircher's codification of musical material, his *Figurenlehre*. The crown of *musica pathetica* is *symphoniurgia*, Kircher's name for figurative composition. Kircher catalogs a plethora of musical-rhetorical figures, such as *pausa, repetitio, anaphora, noema, prosopopoeia, climax, anabasis, circulatio*, and *abruptio*, terms that he borrows from theorists in the German Kantor tradition (Johannes Nucius and Joachim Thuringius) and returns, with interest, to later writers (Bernhard and Scheibe). But Kircher also puts into sharp relief a distortion, a quasi-optical anamorphism, in what I have called "musical space," a quirk that informs the mapping of musical material in the entire period. The question, in brief, is how *symphoniurgia* fits into the scheme of universal harmony. Kircher associates figurative composition with *contrapunctus coloratus*, after Nucius's *Musices Poeticae* (1613). Nucius's and Kircher's tripartition of contrapuntal textures into *simplex, floridus*, and *coloratus* is paradoxical. From the standpoint of purity, *simplex* enshrines the intervallic proportions at their most perfect, and the deviation from note-against-note counterpoint toward increasingly florid textures unfolds a successive deviation from divine perfection. From the standpoint of *musica pathetica*, however, *coloratus*, the most interesting and difficult species, is the most effective in arousing the emotions of the listener. Conceptually, the only exit from this aporia is to assume that Kircher's musical space is not flat but curved, even spherical. *Musica pathetica*, in the tradition both of hermeticism and Lutheran theology, is both a deviation from and a return to God. We can see this in Schor's frontispiece engraving (see plate 2). Kircher treats canon at the end of his composition treatise in Book 8 of the *Musurgia*, but he installs it at the top of his hierarchy in the Empyrean: the nine choirs of angels sing a thirty-six-part canon by Romano Micheli. The place reserved for mathematical perfection is thus occupied by a symbol of *compositional* perfection; the human is folded over the divine. The circularity of this scheme is aptly symbolized in the rotation of the canonic voices, which traditionally stand for the revolution of the planets.

But Kircher's conceptual anamorphisms are distributed across the entire plane of his picture. As we have seen, the division into three domains is indebted to Fludd's cosmology, but there are some instructive changes. Where the sun should be, at the center of the cosmos, there is a second earth, eerily suspended within a real atmosphere rather than empty space. And the sublunar earth at the base of the picture is not simply an abstract coordinate in the chain of being, but a fully realized, three-dimensional landscape. The rays emanating from the divine eye vividly suggest the diffusion through the clouds of sound. In contrast to Fludd, Kircher in his writings argued that it is the proportions of the air, rather than of the intervals themselves, that are the efficient cause of changes in human temperament. Where the monochord used to be, there is now an atmosphere; the

emanations are communicated through an ether, rather than across a line. Linear counterpoint gives way to the tonal space of triadic harmony. Schor's three-dimensional relief serves only to accentuate the anamorphism, particularly the tension between the two earths. But is the central sphere a second earth, or a displaced sun? Which is the center—the divine eye at the top or *musica* in the middle? Kircher subscribed to Tycho Brahe's hybrid model of the solar system, whereby the sun and moon circle the earth and the other five planets orbit the sun. This combined geocentric-heliocentric outlook corresponds to the double orientation of his music theory: around the sun of canonic perfection (itself a symbol of divine and human confluence) and the central earth of *musica poetica*. Just as Fludd's sun had mediated the formal and material octaves of his cosmos, Kircher's central earth, his displaced sun, represents the harmonization of theory and practice, of strict counterpoint and figured music.

It is hard, in fact, to preference any of the three domains in the picture. The eye settles, in turn, on the center, on the foreground landscape stretching back to the horizon, then moves from the horizon up to the vanishing point in the divine eye, from which the circular rhythm of the picture begins again. Schor's engraving epitomizes the physicality and dynamism Wölfflin (1984) ascribed to the baroque's painterly style. Its freedom of line transgresses the rules of perspective; this, together with a chiaroscuro of light and shade, creates both an impression of heavy physical relief and the illusion of movement.

Schor's visual rhetoric is entirely characteristic of early-seventeenth-century allegorical painting, which typically grappled with the problem of integrating sacred and profane orders of being into a unified composition. In Rubens's *Miracles of St. Francis Xavier*, for example, the missionary saint's upraised arm bisects the picture into two planes, dedicated respectively to an agitated crowd of heathens below his platform and a couple of angels bearing a cross suspended on a cloud floating above. Yet, in Christopher Braider's analysis, Rubens fails to reconcile the two orders within a single convincing perspective:

> The very otherworldliness Rubens gives the celestial apparition in order to avoid compromising its heavenly character winds up doing just that. Insofar as it fails to unite with the rest of the picture, the apparition comes to look not just painterly, as Wölfflin would say, but *painted:* a scenic backdrop for a theatrical machine. (1993, 165)

Indeed, Schor's style is reminiscent of nothing so much as the painted theatrical backdrops of baroque opera. The negotiation of sacred and profane musics in Kircher's visual model reflects, therefore, on the site of their corporeal interactions: the operatic stage.

## *From* Bildlichkeit *to Opera*

The baroque mind understood metaphor in visual terms. To be sure, Aristotle had defined metaphor as "an eye for resemblance." But this classical definition was founded on a straightforward concept of visual perception, where things are always as they appear. In the seventeenth century, this relationship between vision and metaphor was turned inside out. The metaphorical effects of poetry were seen as a reflection of the problematic nature of vision itself, as evinced by optical devices such as telescopes, mirrors, and magnifying glasses, and the manipulation of Albertian perspective in contemporary painting. Most spectacular of the baroque treatises on metaphor is Emanuele Tesauro's *Il cannocchiale aristotelico* (The Aristotelian Telescope) of 1654, whose frontispiece, as we have seen (reproduced here as the frontispiece to Part I), shows a telescope pointed at the sun. Tesauro's optical slant is everywhere in evidence:

> Metaphor packs everything tightly into a word: and in an almost miraculous way makes you see one thing inside another. Hence the greater is your delight: in the same way as it is a more curious and pleasing thing to see many objects through a perspective aperture [*per un' istrafóro di perspettiva*] than the originals themselves pass successively before the eye. (In Gilman 1978, 81)

Ernest Gilman relates this to the baroque fashion for anamorphic (perspectively distorted) images. Tesauro's *istrafóro di perspettiva* suggests "the aperture designating the special point of view from which an anamorphic picture must be seen" (Gilman 1978, 84). Seeing "one thing inside another" is identified with wit, a device that goes under many names: *ingegno* (Tesauro), *ingenium* (Harsdörffer),

*agudeza* (Gracián), *acutezza* (Stieler), and *Witz* (Gottsched). In each case, metaphoric vision, be it in poetry or painting, denotes the substitution of one term with another according to an underlying analogy. Analogies, however, can be either discovered or created. It is tempting to align this with a distinction between science and art. Nevertheless, as with baroque scientific models, it is problematic to disentangle the analytic and imaginative strands of metaphoric thought. Both are in fact operative in Tesauro's literary theory, under the rubrics, respectively, of "perspicaciousness" (*perspicacia*) and "versatility" (*versabilità*). Through perspicaciousness, the material is analyzed into its proper logical categories. Its underlying order is here *discovered*. Analogies are *created*, by contrast, by means of versatility, through which materials are thrown into unexpected combinations. Images and ideas release their full energy only through dynamic interactions and juxtapositions. The metaphoric telescope thus affords two kinds of vision: the analytic view yields a clear perception of properties, while the synthetic, combinatorial view engenders fresh perspectives. Metaphor is no longer a matter of revealing truth but of creating fiction: "for just as God brings forth that which is out of that which is not, so wit makes something out of nothing. . . . It places a woman on top of a fish and invents a siren as the symbol of adultery" (in Gilman 1978, 74). The creativity of the poet is seen as an imitation of God, whose own *ingegno* is revealed in the flowers of the field and stars of the sky. Inventing a metaphor, like any scientific observation, is an act of discovery, an exploration of the network of correspondences underlying the world.

I want to keep hold of Tesauro's two categories of perspicaciousness and versatility when considering the writings of the most important German writer on metaphor at this time, Georg Philip Harsdörffer. But first, by way of stage-setting, let me outline the similarities and differences in the two critics' cultural positions. Harsdörffer's chief works, the massive eight-volume *Frauenzimmer-Gesprächspiele* (1641–49) and the *Poetischer Trichter* (1650), were both published before *Il cannocchiale aristotelico* (1654). Although there cannot be any question of direct influence between the two, Harsdörffer and Tesauro did draw upon a common body of sources, famous Spanish and Italian treatises on wit such as Baltasar Gracián's *Agudeza* and Pietro Sforza-Pallavacino's *Considerazioni sopra l'arte dello stile e del dialogo*. More important, they belong to an essentially Renaissance tradition, stemming from treatises such as Baldassare Castiglione's *Il libro del cortegiano* (1528), which associated intelligence with the courtly art of conversation. The light and quick rapier thrusts of wit demonstrate a courtier's mastery of rhetorical devices. Although subject to rules, the conversation ethic emphasized the dynamic and creative aspect of thought and hence was cultivated in opposition to more rigidly didactic approaches to education. In Tesauro's Italy, wit continued to be regarded chiefly as an instrument of pleasure, whereas in seventeenth-century Germany it became assimilated to a much more frankly pedagogical ethos. This difference is not immediately obvious from the design of Harsdörffer's earlier treatise, which, like many contemporary texts, is cast in the courtly form of a dialogue or *entretiens* (compare this with the easy, conversational tone of Descartes's *Discourse on Method*). Yet Harsdörffer's works are stamped by a pedagogical drive to codify and rationalize. (As we shall see, this tendency also informs the *Figurenlehre* tradition of compositional theory.)

The educational slant of German poetics was shaped primarily by the country's sense of cultural inferiority and a desire to raise German literature to the level of that of Italy, Spain and France. Ironically, this project entailed the purging of the German language of foreign words simultaneously with the importation of foreign literary models. The process occurred under the guidance of literary societies, or *Sprachgesellschaften*, which attempted to emulate the humanist Italian academies (see Bircher and van Ingen 1978). As well as forums for discussing the new literature, these societies offered practical instruction on how to write in a variety of forms and genres. Harsdörffer was the leading figure of the Hirten- und Blumenorden an der Pegnitz of Nuremberg, so called because the members chose flora and fauna as their symbols and their names from pastoral poetry.

Like *Il cannocchiale aristotelico*, Harsdörffer's treatises center on metaphor or *Gleichnis* (simile). Harsdörffer calls metaphor "the queen of figures" (1650, 3:57) and, like Tesauro, he adopts a visual

standpoint: "metaphor is equivalent to the color of the painter, on the basis of Horace's *ut pictura poesis*" (1:19). Metaphor thus heightens representation, "rendering the beautiful more beautiful, the repugnant more repugnant" (1:6). Anticipating Tesauro's analogy of metaphor with a telescope, the *Frauenzimmer-Gesprächspiele* likens its effects to a "fire-mirror": "that which we pay dearly for, and take trouble to understand, is closer and more valuable to us. In the same way, when I express myself with a metaphor, it is like glimpses of truth, which, when heated by a 'fire-mirror,' radiate back with much more power" (1641–49, 1:17).[8] Also like Tesauro, Harsdörffer expresses a metaphorical vision that looks in two directions. From one viewpoint, it can bring unfamiliar objects nearer, by comparing them with that which is known. For example, the emotion of a subject can be explained through a concrete object. Harsdörffer takes a passage from the *Aeneid* (1.4), where a distraught yet steadfast Aeneas is compared to a firmly rooted oak tree buffeted by the north wind: "in these metaphors, the oak tree is known and the emotions of the aforementioned people unknown, though metaphorically explained and constructed" (1650, 1:58). Harsdörffer further explains, "that which we cannot name we can find and describe by coupling it with that which is similar; and our mind gains pleasure when, through this process, it grasps what it previously could not understand" (1641–49, 8:193). From an opposite viewpoint, metaphor can render familiar objects strange by comparing them with objects that are apparently dissimilar, such as a head with a balance: "a balance comprises a pair of scales, two beams, and a pointer [*Zungleine*, little tongue] which speaks the weight, just as a head has two ears, into which all matters enter equally, before they are appraised by the eyes and then reported by the tongue" (1641–49, 1:32). With analogies as exotic as this, the mind is forced to search beneath overt dissimilarity to an underlying unity. The reader must construct a conceptual framework broad enough to subsume terms as outwardly different as a head and a pair of scales.

Metaphors of grounding (the oak tree) and metaphors of estrangement (the scales) thus flow in opposite directions. With the former, the mind moves from concept (Aeneas's feelings) to image (oak tree); with the latter, it moves from image (head) to concept (the head's structure as analyzed by the scales). The two types engage "seeing," respectively, of the visual and intellectual kind; understanding an object by grasping its concrete particularity, or by perceiving its abstract universality. They also involve opposite varieties of aesthetic effect. Through the first, "the mind gains pleasure when . . . it grasps what it previously could not understand"; through the second, "the mind gains pleasure from holding together two analogous objects and contemplating their similarity and difference" (1650, 3:57).

Harsdörffer's two types of metaphor share many aspects with Tesauro's *perspicacia* and *versabilità*, but the analytical and combinatorial functions do not line up in the same way. Their typologies, though kindred, are not strictly homologous. It is more helpful, rather, to see Harsdörffer's categories in relation to the duality of painterly poetics in the German baroque. Images were used to externalize and objectify inner thoughts and feelings; they were also harnessed in order to train the imagination. *Bildlichkeit* (pictorialism) is epitomized in the German preoccupation with emblems (*Sinnbilder*), allegorical images illustrating an epigram or maxim. It lies also at the heart of the tradition of allegorical poetry, whereby a religious or philosophical concept such as "faith" or "love" is identified with a visual image. The didactic nature of allegory points to the regulative function of images and their ability to structure thought. Harsdörffer stresses metaphor's pedagogical objective: "metaphor is the lever and crane which, through artistic application, raises up from the mire of ignorance that which would be left at a standstill without such a mechanism" (1650, 3:57). The seventeenth century was the great age of teaching through pictures. The illustrated children's book, a pedagogical tool taken for granted today, was invented by the great educational reformer Jan Amos Komensky (Comenius) with his *Orbis Sensualium Pictus* of 1658 (see Praz 1964, 16; Eco 1995, 214–16).[9]

Pictorialism and pedagogy exploit the dual aspects of *Sinnbilder*—that is, their ability both to ground and to structure thought. It must be stressed that both aspects interpenetrate at each extreme of German poetics—the writing of specific literary works, as well as the orientation of the

educational project at large. At both levels, imagery is conceived as a metaphoric field of entailments. To apply this field to the target concept constitutes a process of organization whereby one domain structures another. Harsdörffer provides examples of metaphoric structuration at the level both of the poem and of the curriculum. In the first respect (1650, 1:13–14), he concocts an intentionally poor poem on the topic of faith (*Glaube*). The poem describes how good works will not please God without faith. The writing is unsuccessful, because too abstract. Harsdörffer then writes a much more extensive poem, mapping onto its argument the image of a harp, with its various conceptual entailments of frame, sounding strings, music, and listener. Harsdörffer's harp has no strings, and so its music can no longer reach the ears of heaven. This generates a more sophisticated and pictorially grounded allegorical poem on the basis of the metaphor: "good works without faith is like a harp without strings" (1650, 1:13). The *Sinnbild* of the harp is not a unitary image but a cluster of concepts ("frame," "strings," "performance," and "listener") organized by another cluster around the notion of faith ("man," "faith," "good works," and "ears of God").

Metaphorical mapping also informs the pedagogical enterprise as a whole. Volume 5 of the *Frauenzimmer-Gesprächspiele* teaches the three liberal arts of the trivium (grammar, dialectic, and rhetoric) through allegory. For grammar, the various word-classes are personified as soldiers, who can only fight when they are well regimented. For logic, Harsdörffer characterizes the processes of reason as stage characters playing different roles and situations within a novel, where the dialectical intrigues are resolved at the conclusion (1641–49, 5:33). Whimsical as these examples may be, at a more serious level it is self-evident that all pedagogy involves metaphorical mapping of a general kind; that is, students are expected to draw precepts from the contents of the treatise (its emblems, poems, and theatrical scenarios) and apply them to their personal experience. At the broadest level, the *Frauenzimmer-Gesprächspiele* is a pedagogical regime dressed up as a humanistic parlor game. There is a circular, performative quality to Harsdörffer's theory of metaphor, by which examples and definitions of metaphoricity are made in a conversational idiom that itself constitutes a mapping from one genre (the courtly dispute) to another (the poetic treatise). The performative cut-and-thrust of the interlocutors becomes positively contrapuntal when the discourse turns to music. To give a flavor of the *Gesprächspiele*'s ludic quality, I will look at the opening games, which involve the six protagonists in the discovery and construction of metaphors.

After the initial civilities, the proceedings begin at part five with a game entitled *Die Gleichnis (sic;* the modern form is neuter, *das*). Four characters, Angela, Vespasian, Reymund, and Julia, dispute the nature of representation, before the remaining two, Degenwert and Cassandra, initiate a game of metaphor in action. Harsdörffer starts by giving Angela, the youngest and most naïve player, a "straw man" view of representation that is to be easily knocked down. "One can easily demonstrate," ventures Angela, "that all metaphors [*Gleichnisse*] are superfluous and unnecessary, since a painting never corresponds to Nature in all its detail, nor does a shadow to a shape or a print to an image. Just as an unconcealed object is perceived better and more clearly than one that is veiled or covered up, so, perhaps, something cannot be well recognised by being compared with a foreign object" (Harsdörffer 1641–49, 1:16). Vespasian, the voice of wisdom, responds that a painting can actually be more truthful than reality: "the image of a ragged beggar, an unkempt gypsy or a picaresque rascal is regarded by art-lovers more highly than the actual original." He launches into an eloquent defense of the value of figurative decoration: "an object can be brought out into the light much better through being united with its image, and appears, when wrapped in the costly garment of a charming metaphor, so much more marvelous and beautiful, so much more moving and impressive, so much lovelier and comelier, than the naked state of the thing in itself [*der Sachen selbsten*]" (1:17). Reymund pitches in, taking Angela's side and countering with the argument that the world actually consists in things that are dissimilar, indeed of mutually antagonistic oppositions, such as cold and hot, dry and wet, heavy and light, or high and low. In this respect, "a labored analogy" (*eine schwere Gleichniss*) obscures more than it enlightens, like a distorting mirror (*ein falscher Spiegel*). Julia, the fourth speaker, now enters, opposing Reymund's agonistic model with a more conciliatory

one by which oppositions are mediated systematically: "the world consists not in a war of mutually conflicting objects but in differences regulated with each other in measured proportions" (1:18). For example, "the heavy earth, the wet water, the light air and the hot fire of the sun" are regulated like the bass, tenor, alto, and discant of musical harmony (1:19). The image of universal harmony is used to bring the disputants into a temporary accord.

Next Degenwert and Cassandra are called upon to initiate a game whereby the four other speakers are characterized by analogy with other quadratic systems, such as the seasons, elements, the winds, and the chief virtues. Angela is compared, respectively, to the morning wind, wisdom, autumn, and fire. A riddling game follows, requiring the players to describe one object in terms of another.

> *Reymund:* What is God?
> *Vespasian:* A light.
> *Reymund:* What is man?
> *Julia:* A mirror. (1:24)

These four terms are then combined, in Aristotelian fashion, into a quadratic analogy: "God is to light as man is to mirror." The games become increasingly sophisticated. Julia starts a new game in which the players must interrelate two seemingly disparate objects (1:29). She instructs Vespasian to discover the connection between a measuring balance and a human head, while Angela must interrelate love and water. Love and water, she answers, are alike with regard to their origin: "water comes from heaven just as heavenly love falls from above upon unworthy humanity. . . . And such water is either sweet, like love grounded in virtue, or bitter salt-water, like the charm that flows into sensual pleasure" (1:33).

The games take an important turn when the treatise progresses from words to other media, namely, pictures and music. The *Frauenzimmer-Gesprächspiele* is packed with beautiful engravings and contemporary songs. The songs and pictures are integrated into the games in a way that shows, first, how the relationship between a text and a picture can be deemed metaphorical, and, second, how this relationship parallels that between text and music (music is like a picture). The players have so far been confined to analogies between the kinds of concepts that are readily expressed in words, such as "head," "scales," "love," and "water." Now, charged with the task of allegorically interpreting emblems and melodies, they must extend the metaphoric process to nonverbal domains. The interpretation of emblems can be played in two ways. The contestants can either seek out an epigram to a given emblem, or they can begin with an epigram and match an emblem to it. The first game moves from an image (emblem) to a concept (epigram), the other from a concept to an image. This option tallies with Harsdörffer's two types of metaphor discussed above, pertaining, respectively, to visual and intellectual "seeing." But the relationship between text and picture is not at all clear-cut. For the baroque viewer, an allegorical image was as structured and conventionalized as any verbal language (see Benjamin 1998, 174–79). In Benjamin's pithy phrase, "the allegory of the seventeenth century is not convention of expression, but expression of convention" (176). Conversely, a textual epigram was viewed as an "image" of the moral or religious truth it contained. But "the written word tends toward the visual" (Benjamin 1998, 176) also because of the hieroglyphic ornateness of its typography. Both emblem and epigram are thus structured images, and they interpret each other. This interpenetration of text and image (in the broadest sense, distinct from literally linguistic or visual media) is absolutely central to baroque poetics. It also determines the function of text and music in the cross-modal metaphoric game par excellence: opera.

It is peculiarly fitting that the *Frauenzimmer-Gesprächspiele* happens to contain, among its many texts, the libretto, music, and accompanying images of the very first surviving German opera, *Seelewig* (Schütz and Opitz's *Dafne* of 1627 having been lost). *Seelewig* is an allegorical opera, and the words, songs, and painted backcloths interpret each other metaphorically (see Wade 1990). The work is found in volume 4; volume 5 includes the most elaborate musical game proper, an allegorical masque on the "planet virtues," *Die Tugendsterne* (see Haar 1965). Here, the players must relate the seven planets to the seven human virtues, the seven colors, and the seven musical modes as described

by Glareanus. While Reymund sings of the seven planet virtues (to the somewhat indifferent music of Harsdörffer's collaborator, Sigmund Theophil Staden), the players regard engravings in which the virtues are depicted. Reymund begins: "now comes the first person of the pageant, Faith; her star is the sun, her tone or mode D, her song the following," and Staden's music follows (Haar 1965, 35). The subsequent conversation unpacks the metaphors enshrined in the engraving and song (fig. 4.1). Julia observes that "in this song Faith is compared to the sun" (35). Vespasian adds that "the planets should be clothed in heraldic colors, and indeed the sun should be fire-colored, or in a golden cloth . . . edged by flame; in the way that one for that matter usually depicts Faith." Angela remarks that "the sun, or Faith, sits on a noble triumphal chariot, the two wheels of which might be named Unbelief and Superstition." According to Degenwert, "The mode D, otherwise called Dorian, is splendid and majestic. The landscape might be of churches and vineyards." Vespasian adds, "The animals drawing the sun's chariot could be lions, since the sun is at its hottest in the constellation of Leo, and this beast is, besides, the strongest and most admirable of animals" (Haar 1965, 36).

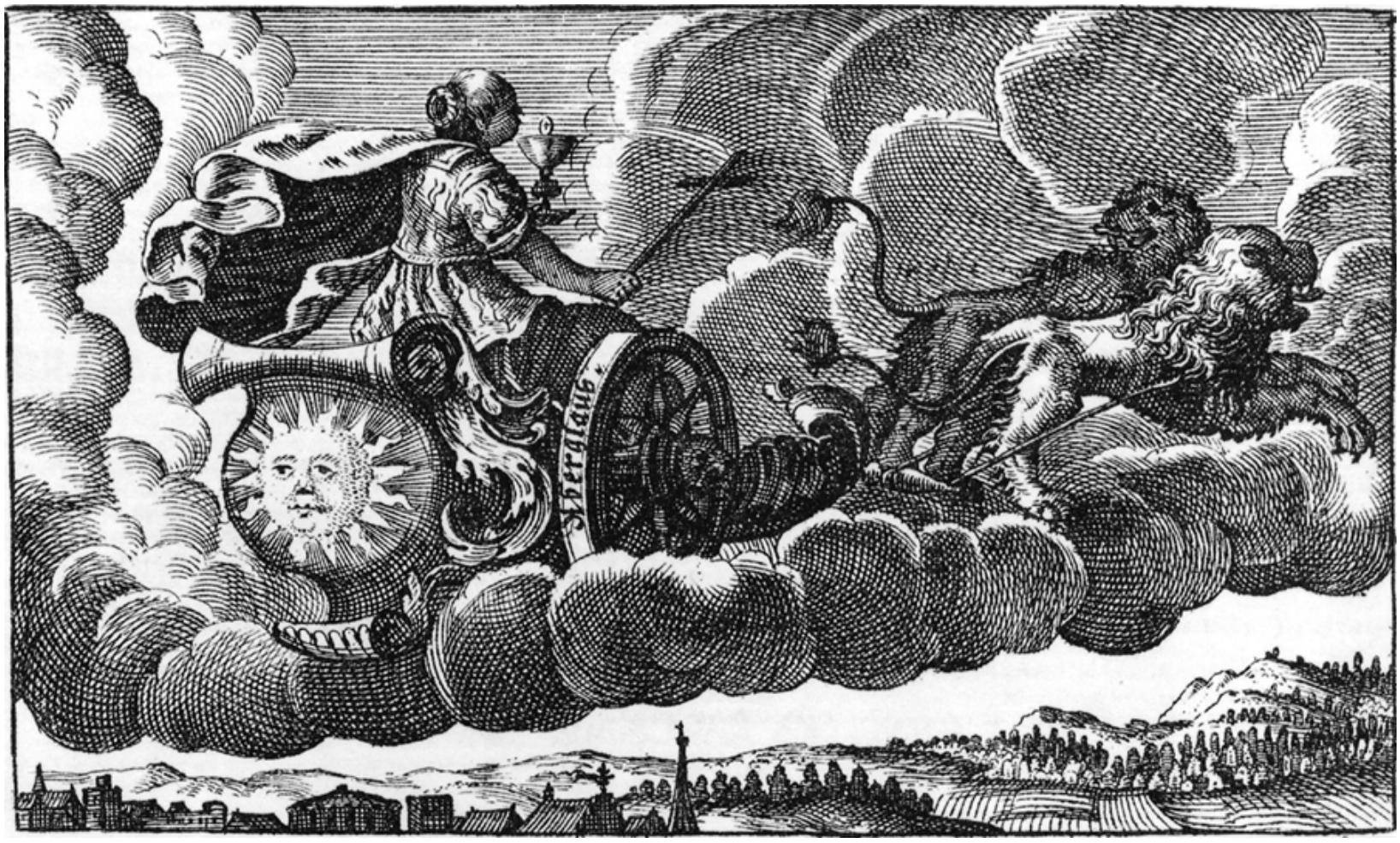


Figure 4.1 Engraving from Georg Philipp Harsdörffer, *Frauenzimmer Gesprächspiele* (1st ed., Nuremberg, 1641). This emblem of the sun, from his allegorical masque *Die Tugendsterne*, is a visual analog of the many circumlocutions that fill Harsdörffer's lexicon of metaphors, the *Poetischer Trichter* (1650): "The Sun is the servant of nature, the ruler of the year and seasons, the source of all light, the treasure-keeper of the day" (3:428).

The allegorical masque or opera was the logical climax of Harsdörffer's game of correspondences. Such masques were in themselves not unusual. For example, the *Balet de la cour de soleil*, performed at the court of Louis XIII in 1628, made the planets dance on stage, while the six notes of the hexachord were personified in the *Balet de l'harmonie* of 1632 (see Haar 1965, 3). What is remarkable about Harsdörffer's masque is that it emerges naturally out of his performative theory of metaphor. On reflection, Harsdörffer's link is a natural one: drama, after all, is only a game. The analogy between *Spiel* as game and *Spiel* as stage play was of course part of the baroque commonplace of the *theatrum mundi*, the theater of the world. "What is life, then?" asks the playwright Gryphius. "It is a tragic drama [*Trawrspiel = Trauerspiel*]" (Barner 1970, 107). The metaphor "Die Welt ist ein Schauspiel" is most famously elaborated in the often-quoted *Widmungsgedicht* from Daniel Caspar von Lohenstein's *Sophonisbe:* "in every case man is time's

plaything [*ein Spiel der Zeit*]. Fortune plays with him as he does with all objects" (Barner 1970, 145). In keeping with his philosophy of *Bildlichkeit*, Harsdörffer calls the stage a "living and speaking picture" (1641–49, 5:26). A play with music is a multidimensional emblem.

The emblem/epigram dynamic corresponded to the alternation of action (*Abhandlung*) and moralistic choruses (*Reyen* or *Sententien*) in German tragic drama (*Trauerspiel*) (see Schöne 1964, 178–79). The *Sententiae* were often printed in bold type in the dramatic text, and they related to the action as an epigram to a pictorial emblem. The identification of picture with action, rather than with static moral, may seem counterintuitive to us. But it brings home the tensions implicit in the very notion of the emblem. The emblem, like the baroque image and the rhetorical figure, can never be reduced to the condition of supplementarity. It always exceeds the limits set upon it by a rationalist philosophy that sees painting as "merely" an illustration of a concept. By the light of Harsdörffer's theory of metaphor, an image is irreducible for two reasons. First, it is material, and materiality is ipso facto noncommensurable with *ratio* or the spirit. Second, it is structured and structuring and feeds back into the concept it is supposed to be subordinated to in order to regulate it from a position of rhetorical strength. To claim that *images organize thought* is to radically overhaul the traditional priority of concept (*res*) against expression (*verba*), structure against ornament. But the same scheme is transferred to the understanding of aria and recitative by later writers on opera, such as Erdmann Neumeister, Barthold Feind, and Christian Hunold.

We might expect the aria, as an elaborate musical expatiation on the tenor of the plot, to function as a metaphoric image, an emblem. In fact, it was identified with the emblem's epigram, or *subscriptio*. Hence Neumeister writes that "arias must in each case encapsulate the *Sententiam Generalem* which is previously or about to be spoken, or a special affect or moral" (Neumeister 1707, 409). Neumeister commends Antonio Cesti for replacing the old *sententien* with arias in his operas. The aria/recitative dichotomy also parallels the soul/body dualism implicit in the opposition between epigram and emblem. In Neumeister's view, "arias are the soul of the opera" (408), because they reflect on the action, which, like a picture, constitutes the "body." According to Harsdörffer, "the picture or figure is in itself the body, whereas its signification is the soul of the image" (in Schöne 1964, 179). Since arias are both reflective and figurative, one is not surprised to see much confusion in how these two functions are demarcated. Feind has it both ways, arguing that the aria carries the decor as well as the moral. On the one hand, arias are "the explanation of the recitative, the most decorative and elaborate of poetry, and the spirit and soul of the drama" (1708, 95). On the other, "they must bear a moral, allegory, proverb and simile with some subsequent application: either to what is said in the recitative, or as an object of instruction or council" (95). Hunold lumps together the aria's conceptual and decorative aspects: "I gladly admit that if one wishes to employ gallantry in one's arias, it is advisable to make exceedingly good use of pleasing simile, emphatic aphorism [*Sententia*], deft metaphor, allegory and the like" (in Schöne 1964, 176). Hunold thinks of musical metaphor as unfolding *within* the aria, rather than *between* the aria and recitative. Yet this interpretation runs counter to the Harsdörffer tradition, according to which the metaphorical comparison takes place between two concepts, or between a musical image and a text. The arias in Harsdörffer and Staden's *Seelewig* are simple strophic songs in the Nuremberg style, without the formal sophistication to support internal, that is, intramusical, metaphor. With the advent of the baroque allegorical aria, however, it became common to compare terms inside the aria itself. Examples are legion. The aria's text may compare one object, such as the soul, to another object, perhaps a storm-tossed sea. Furthermore, the text itself is set to the musical picture elaborated by the textural figuration, which enshrines the *Affekt* of the words. Hence the aria's dual role, reflective as well as figurative, allows one to view this interaction from either side of the emblem-epigram dynamic, and from both ends of the metaphorical telescope. From the standpoint of imagery, the musical figures decorate the aria's text in the same way as the aria as a whole decorates the recitative. From the standpoint of *Sententia*, the aria distills the message of the recitative, just as the aria's own text comments on its textural figuration. Hence the fascination of baroque music drama. The

opposition of text and image is not schematic but dialectical, spiraling out with the ever-increasing complexity of a recursive fission, until every particle of the figurative body is interanimated with musical spirit.

Over and above its tragic apotheosis in baroque drama, the theatrical metaphor also regulated the mundane protocols of day-to-day behavior. A theatrical rhetoric informed the highly ceremonial performance of social roles in the main arenas of civic life: the court, the church, the court of law, and the marketplace. Hence the strongly political caste of rhetorical manuals by writers such as Christian Weise. Worldly knowledge was esteemed above bookish *praecepta*, and this pragmatism fed back into the academic and pedagogical spheres themselves. *Mundlichkeit*, vocality, became the watchword of the new teaching regimes (Barner 1970, 243). Budding authors were trained through grammatical exercises such as *locus comparatorum, locus similium*, and *locus contrarium*. Poets seeking to decorate their work could draw from *Schatzkammern*, or lexicons of metaphors, one of which ends the third part of Harsdörffer's *Poetischer Trichter*. Harsdörffer's *Schatzkammer* lists metaphors for every conceivable object. The entry under "sun" includes such circumlocutions as "she is Orpheus, whose harp is the sky, whose strings are the spheres" and "The Sun is the servant of nature, the ruler of the year and seasons, the source of all light, the treasure-keeper of the day, the protector of life, the measure of time and leads the hours in her hands" (1650, 3:428).

The musical equivalent of the metaphorical *Schatzkammer* is the list of music-rhetorical figures through which composition was taught. Wolfgang Caspar Printz's *Phrynis Mytilenaeus oder Satyrischer Componist* (1676) includes page after page of figured variations, designed to stretch the student's ingenuity. We will see, in the next section, that the institutional home of German *Figurenlehre* was the *Kantor* tradition of the church. But *Figurenlehre*'s consanguinity with secular poetics is generally overlooked. Printz's *Phrynis* is one of the most remarkable links between Harsdörffer's world and the world of Burmeister, Nucius, and Bernhard: it is a compositional manual couched in the form of an autobiographical novel. Recounted in the first person, with many conversations between Phrynis and his various teachers, the book also borrows from Weise's political rhetoric and the picaresque novels of Johann Beer (Printz himself wrote three straight novels about itinerant musicians). The figure of the musician is pitched into the theater of the world.

## 2. BAROQUE PEDAGOGY: TEACHING FIGURES

Johannes Nucius, in his *Musices Poetice*, explains musical figuration by analogy with the visual arts:

> Just as a painter will not merit great praise through an exact reflection of the bearing, state, or color of an image, but rather endows his images with their unique gestures, peculiar appearances, and distinct colors, thereby gratifying the eyes of the viewers, so too will a musical composition through uninterrupted similitude not only remain artless, but also bore the listeners. (In Bartel 1997, 101)

The uniquely German tradition of *Figurenlehre* arose from the application of the humanist rhetorical techniques of persuasion to the communication of the Gospel. Following Luther's recognition of musical oration as "a sermon in sound" (in Bartel 1997, 7–8), the disciplines of rhetoric and musical composition were integrated in the curriculum of the *Lateinschule*, so that the *Kantor* was often also the teacher of Latin and rhetoric. Bach himself was educated in this tradition, although it would be a mistake to see in his music the conscious and literal deployment of rhetorical techniques. The significance of *Figurenlehre* is not its claim to being a unified doctrine; critics have tried and failed to systematize it for over a century. Rather, its importance lies in the position it takes toward musical material. *Figurenlehre*'s typologies constitute a para-rhetoric that trains the gaze of the student toward the technical characteristics and possibilities of texture, just as the composer directs the listener's gaze toward the realized figures. At a time when imitative counterpoint was breaking up into a panoply of new styles and genres, *Figurenlehre* increasingly assumed the status of a compositional control. It renders the composer alive to the quality of his material, in the same way that its most characteristic figure, hypotyposis, makes things appear to come alive before the eyes. Baroque poetics and aesthetics—creating figures and "seeing" them—are thus reciprocally related, a

circularity basic to the rhetorical theory of creativity: precepts (*praecepta*) are exemplified by passages from the masters (*exempla*), which are then imitated (*imitatio*). Mimesis informs each of these stages—the exemplification of rhetorical categories in musical examples, the illustration of the vocal text within these examples, and their emulation in newly fashioned works.

If the musical figure is analogous to a picture, it is also comparable to a rhetorical figure. *Figurenlehre* is born from the wholesale mapping of an entire field of terminology from rhetoric to music. Musical metaphor here denotes not any individual figure, but the theoretically constructed analogy between the two whole domains, what Palisca calls *ut oratoria musica* (1994, 295). As we saw with Harsdörffer's projection of dramatic and literary genres onto pedagogical regimes, this principle was not unique to music. In fact, the act of conceptualizing music using categories borrowed from a different domain was standard metaphorical practice. Nevertheless, Harsdörffer's theory postdates the inception of *Figurenlehre* by Burmeister by some forty years. Burmeister's extraordinary insight was that equipping music with a verbal metalanguage, compounded of rhetorical terminology, emancipates music's materiality. A metalanguage breaks down the continuum of musical experience into discrete pertinent units. It creates typologies for emulation, repetition, and transformation. It identifies them with concrete and specific rhetorical procedures from the classical humanist tradition. And it provides well-defined and stable units of description (although the definitions themselves vary between theorists). All in all, the mapping from rhetoric to music objectifies music as a "dense" material, in Goodman's sense of the word. This is the first step away from counterpoint toward a theory of form; form not as a stereotypical and aurally transparent schema (that would only emerge in the eighteenth century), but as an infinitely variable play of contrasts, contours, and dynamics.

The history of *Figurenlehre* is a story of successive redescription. No two seventeenth-century theorists, and no two twentieth-century historians of these theorists, agree on either the identity or nomenclature of musical figures. In his finely nuanced comparative study, which identifies seventeen authors and twenty-seven treatises, Bartel avoids the pitfalls of previous approaches by resisting the temptation to generalize. To be sure, since the various typologies were made on the basis of noncommensurable criteria of figurality, how could a universal *Figurenlehre* even be possible? Yet without an overarching intellectual framework, *Figurenlehre* becomes an uninteresting taxonomy. For this reason, I consider the musico-rhetorical figure in the context of the baroque dialogue between harmony and painting, which I associate with two kinds of vision: an intellectual seeing of underlying harmonic coherence (harmony), and a quasi-visual perception of textural material (painting). Under the rubric of "metaphorical harmony," I reveal the baroque dialectic of line and space; under "metaphorical painting," I explore the interplay of material and representation. My binary scheme in fact comes close to the dual tradition noted by many critics before Bartel, one stemming, respectively, from Burmeister and Bernhard (see Dahlhaus 1986; Forchert 1989; Braun 1994). It also follows the distinction I set up in chapter 3 between the sense and reference of figures.

### *Metaphorical Harmony: Line and Space*

Composers, theorists, and listeners in the baroque acquired harmonic perspectives on counterpoint. Harmonic counterpoint entails a concept of musical line at a higher level of abstraction than literal counterpoint, one that is perceptible beneath the surface of elaborate figuration. This sense of line is nowadays called voice leading, and it goes hand in hand with the construction of a concept of tonal space. Line and space could interact in two ways. Stripping figuration down to an underlying contrapuntal skeleton prioritizes line; it is dependent on an imaginary notion of a linear voice. Conversely, these voices can be conceptualized as the intervals of a triad; voice leading threads in between the interstices of triadic space. The former view is identified with the primarily linear tradition of species counterpoint; the latter, with the essentially harmonic practice of thoroughbass (see Lester 1992, 26–89). The former is predicated on voice; the latter, on the keyboard. But what, exactly, is a line? What is it, precisely, that is linear in music?

The linear and harmonic perspectives on voice leading flow from the dual nature of line itself in Zarlino's theory, the model that generated the two traditions in Germany. Most obviously, line corresponds to the outline of the contrapuntal voice, its curvilinear rise and fall. But it also denotes the linear order of mathematical derivations, by which the consonant intervals are generated from the prime, as well as the unfolding of these intervals in time. Line here denotes the harmonic progression from one consonance to another. The linearities of voice leading and dissonance treatment are both tokens of musical logic and reason. Yet they split off in opposite directions. The history of harmonic counterpoint charts the ongoing attempts to bring them together in a common ground. I shall explore the function of three different grounds within this history. The first is the numbers and proportions that mediate Zarlino's synthesis of theory and practice. The second is much less speculative: with Bernhard, it becomes an actual compositional style—Zarlino's genus of simple counterpoint itself. Third, with Heinichen, the ground changes from line to thoroughbass harmony. Yet line gets back in through the back door with Heinichen's notion of *cantabile*, the quasi-vocal unfolding of the composition. We move, therefore, through three diverse metaphors of line: line as mathematical order, line as contrapuntal voice, and line as temporal unfolding.

## THE ITALIAN MODEL: ZARLINO

Lurking beneath the placid, classicizing surface of Gioseffo Zarlino's *Le istitutioni harmoniche* (1558) is the same torsion that would eventually break out in Kircher's anamorphic poetics. With Zarlino, this torsion is a pull between two types of musical perfection: the "full" and the "pleasing." The fuller intervals are those that are closer to their origin, yet "those whose proportions are smaller are said to be 'more pleasing'" (19). Previous writers, such as Franchino Gaffurio, had addressed the competing claims of reason and pleasure in separate treatises dedicated to *musica theorica* and *musica prattica*. Zarlino tries to mediate them in the standard Renaissance *tertium comparationis* of proportionality: the relationship between intervallic proportions and harmonic consonances. But faced with the violence of *musica pathetica*, Zarlino's model would ultimately fail, although it would be not rejected so much as transformed by his German students.

The stepwise simple-to-complex progression of Zarlino's chapter plan is crucial in convincing the reader that the ever more elaborate ("pleasing") styles at the end of the book are compatible with the "full" perfection of the beginning. This is a trick, of course, albeit a cunningly metaphoric one. The linearity of this sequence is reciprocally related both to the linearity of counterpoint (practice) and to the orderly derivations of the intervallic ratios (theory). Hence, on the level of the pedagogical regimen, we can see how Zarlino's chapter plan unfolds his systemic analogy between music's mathematical and compositional dimensions. Beginning with the octave (diapason), Zarlino arranges his chapters by analogy to the orderly divisions of a string. Chapters 12 to 25 treat the technical properties of the musical intervals, proceeding through each successive consonance of the *senario* (octave, fifth, fourth, major third, and minor third), and then through the dissonant intervals (seconds, sixths, sevenths, and augmented intervals). Zarlino uses the mathematical scheme of string division as a scaffolding to support an essentially compositional progression, and the latitude of this analogy becomes increasingly apparent as he moves from precisely quantifiable intervals to discussion of more general categories, such as contrapuntal species and vocal scoring. Clearly, the analogy between mathematical and compositional progression is an extremely broad one, for it needs to encompass relationships as diverse as melodic diminution (simple to diminished counterpoint), genre (simple to fugal textures), and vocal scoring (two-voice counterpoint to four voices or more). But Zarlino's metaphor says something important about the circular relationship in Renaissance polyphony between musical line and figurative texture. A typical vocal work of the time will start on a unison or octave and wax increasingly elaborate. The music's sense of line flows equally from the cumulative increase of figuration and the persistence of the underlying voice leading.

Remarkably, Zarlino's model of a synthesis between theory and practice spawned two diametrically opposite traditions. In Italy, the writings of first Giovanni Artusi, and then Agostino

Diruta and Adriano Banchieri, enshrined Zarlino's conservative principles as a theoretical bulwark against the freer modern style (see Palisca 1994, 81–85). If his conciliatory model ossified into a two-tier dichotomy in Italy, it was reconstituted in Germany as a three-tier synthesis. The ground, hitherto an abstract network of proportions, mutated into a middleground.

## BERNHARD'S METAPHORICAL COUNTERPOINT

Bernhard's *Tractatus* translates Kircher's three worlds into the three performance spaces of church, chamber, and theater, and these are collapsed into the levels of a musical structure. How does Bernhard do this?

Bernhard's metaphorical counterpoint syncretizes ideas from many earlier theorists, including Dressler, Nucius, Scacchi, Tinctoris, and of course Zarlino. First was Zarlino's theory-practice synthesis. Second was a ternary model indebted to Gallus Dressler's tripartite division of contrapuntal style into *contrapunctus simplex, floridus seu fractus et coloratus* (Zarlino's binary "simple"/"diminished" dichotomy had followed Johannes Tinctoris's distinction between *contrapunctus simplex* and *diminutus* [see Forchert 1989, 157]). Third was Dressler's analogy between pedagogical staging post and compositional genre. For Tinctoris and Zarlino, the simple species was a mere theoretical tool, a heuristic steppingstone to the diminished species, rather than a genre in itself. By contrast, Dressler's simple note-against-note style found a concrete analog in the contemporary Lutheran chorale. Fourth was Marco Scacchi's genre classifications of church, chamber, and sacred (see Palisca 1983). Just as Dressler associated genre (chorale) with pedagogical heuristic, Bernhard merges genre with structural level. Fifth was the three-tier cosmology of Fludd and Kircher. As we have seen, Kircher adapts Fludd's Hermetic cosmology to represent the universe of musical style, bounded at either extreme by the abstraction of canon and the physicality of practical music, with *musica* in the middle. With Bernhard, and later with Heinichen, *musica* becomes a conceptual middleground, mediating between the spaces of divine counterpoint (church) and the secular theatrical styles (opera). Finally, the ground that mediates these worlds itself becomes material. Crucially, it is the concrete, diminished *stylus gravis* (Zarlino's diminished style) that Bernhard selects as his ground, rather than the abstract note-against-note consonances of the simple style (*contrapunctus aequalis*). Bernhard divides *stylus gravis* into fundamental and superficial figures (after Nucius); if the former are suitable for sacred music, then the latter are in turn split, following Scacchi's remaining two performance spaces, into *luxurians communis* (chamber) and *theatralis* (theater). All the while, the *senario* is maintained as the mathematical undercarriage of his model, guaranteeing its scientific validity, although it plays no part in the working of his analytical system, which is grounded rather in the solid earth of compositional practice.

Step by step, the *Tractatus*'s pedagogical regime takes the student from the compositional reality of counterpoint—*stylus gravis*—to the imaginary realm of voice leading—metaphorical counterpoint. This progression follows the sequence established by Zarlino. The first thirteen chapters correspond more or less to the order of *Le istitutioni harmoniche* (chapters 1–25)—that is, a survey of the compositional properties of the musical intervals. However, at the point where Zarlino introduces principles of simple counterpoint, Bernhard interpolates the entirety of his *Figurenlehre* (chapters 14–42). Given Bernhard's definition of figure as "a certain way of employing dissonances" (Hilse 1973, 77), his *Figurenlehre* functions as an extended qualification of Zarlino's rules of treating the basic consonances.

Whereas Zarlino's chapters outlined a progressive diminution of style, Bernhard's narrative presents a gradual increase in abstraction. In other words, each successive figure demands a more abstract level of analytical interpretation on the part of the student. The figures of *stylus luxurians communis*, Bernhard's middle style, concern mostly the reduction of melodic diminutions. *Superjectio, anticipatio notae*, and *subsumtio* all describe the differentiation of diminutions into structural and decorative notes. *Superjectio* "occurs when a note is placed next to a consonance or dissonance a step above" (Hilse 1973, 92) (see ex. 4.2).

A more advanced case of this principle is the figure called *prolongation* (Hilse 1973, 102), since here the diminution is proportionately longer than the structural note (ex. 4.3):

Example 4.3. *Prolongation*

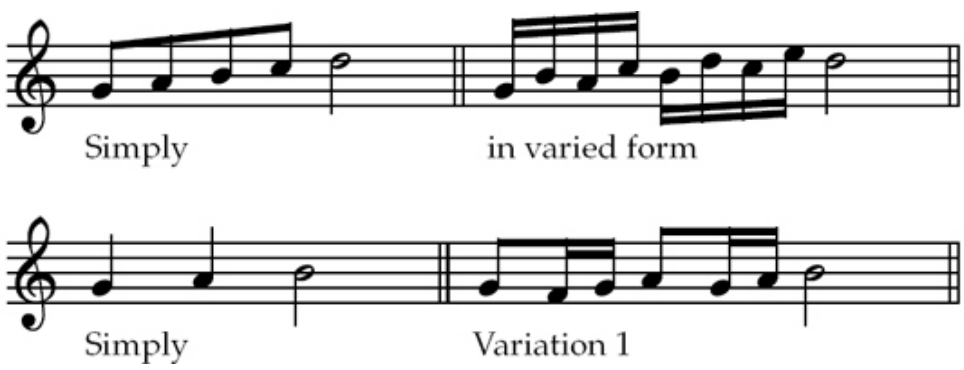


It would naturally be thus:



A higher degree of abstraction is required in the figure called *variation* (96), whose starting point is not a structural step on the surface of the score but a filled-in musical interval (ex. 4.4):

Example 4.4. *Variation*




Bernhard shows how intervals from the third to the octave can be filled in diverse ways. He can thus redefine passing notes as a filler of intervallic space, rather than as a link between steps. Hence the figure of *variation* teaches the student the abstract concept of musical "space" as the ground for diminution. The most advanced figure in *communis* requires the student to infer a note that is not actually there, as in *quaesitio notae*, which "occurs when part of a note is cut off" (108). In the example below (ex. 4.5), the eighth-note F is inferred at the start of the second measure:

Example 4.5. *Quaesitio notae*




Naturally it stands thus:





The figures in *stylus luxurians theatralis* are more advanced still. *Ellipsis*, "the suppression of a normally required consonance" (112) asks the student to imagine the music against a cadential or contrapuntal model not present in the score. Thus in example 4.6, the cadential resolution of the D to a C♯, against the bass A, is missing.

Example 4.6. *Ellipsis*



It should stand thus:

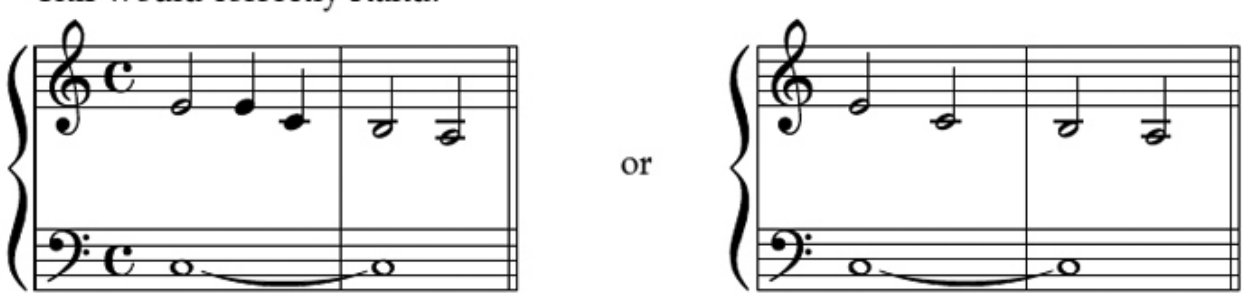


*Transitus inversus* takes Bernhard to the thorny subject of rhythm and the freedom of the recitative style. We reach here the crux of Bernhard's reductive method as it pertains to the experience of theatrical music. To what extent is it justified to hear recitative style, the style of language and the passions, as a transformation of strict counterpoint? To what extent are reason and passion commensurable at all? *Transitus inversus* is similar to the fundamental figure *quasi-transitus* of the *gravis* style, an accented passing note "when a false note stands on an odd beat" (81). Despite this, Bernhard states that "it is allowed only in recitative style, since no beat is observed there" (116) (ex. 4.7):

Example 4.7. *Transitus inversus*




This would correctly stand:




There is surely a contradiction here. The fundamental figures of *gravis* are defined metrically. Hence a *transitus* occurs "between notes on odd-numbered beats," since "all odd parts of the measure should consist of consonances" (78). Bernhard reduces the foreground in example 4.8 (below) into a hypermetrical passing-note progression. Yet his procedure is illogical; if, as Bernhard maintains, "the measure is not kept" in recitative style (116)—that is, if it is not heard metrically—then its rhythmic freedom can hardly be experienced as a displacement of a regular pattern. Rhythm, then, defines the two extremes of Bernhard's musical cosmology: the strict rhythm of counterpoint versus the free rhythm of vocal declamation. Bernhard describes this duality in terms of whether music or language has the upper hand. The *stylus theatralis* is "devised to represent speech in music" (110). "Language is the absolute master of music in this genre, just as music is the master of language in *stylus gravis*" (110). Language and music are in equilibrium in *stylus luxurians communis*.

Bernhard's *luxurians communis* thus occupies the same central position in his cosmology as Fludd's sun (representing the equilibrium of form and matter) and Kircher's suspended terrestrial sphere (the reconciliation of theory and practice). The medium or ether that connects the three domains of this ternary scheme is Bernhard's vision of triadic tonal space, whose practical vehicle is thoroughbass. This notion is epitomized in Bernhard's last and most characteristic figure, *heterolepsis*. *Heterolepsis* is defined as "the seizure of a second voice" (118). Leaps onto a dissonance can be understood by inferring the full complement of voices intrinsic to the harmony. These voices would in any case be realized by the continuo. Thus, in example 4.8, the leap from E to B can be rationalized as the conflation of two voice-leading progressions: E falling to D, and C falling to B:

Example 4.8. *Heterolepsis*



The other voices would stand thus:



*Heterolepsis*, like previous figures such as *inchoatio imperfecta*, is permitted "as a result of the thoroughbass, in as much as the organist is supposed to play a genuine four-part structure atop the given bass line whenever possible" (106). The keyboard is the ground for tonal space, and we see now why Kircher imagined the universe as a divine organ, rather than a monochord. God's instrument is a *General-Bass*.

## HEINICHEN'S REVERSAL

Heinichen's *Der General-Bass in der Composition* (1728) reversed the priority of figure and ground. The figured keyboard idiom of thoroughbass, the essence of the new theatrical style, became foundational for composition. "What does playing thoroughbass entail," Heinichen asks in his introduction, "other than to imagine or compose *ex tempore* a perfect harmony upon a given bass part?" (1–2). His question tallies with contemporary reports of how J. S. Bach based his composition teaching on thoroughbass, and also with the ordering of contemporary compositional manuals (see Butt 1994, 164). In Bernhard's time, thoroughbass was typically covered at the end of the treatise, after counterpoint. In the early eighteenth century, this ordering was reversed, in a reflection of a general switch in the baroque perspective on counterpoint. Space, with its various entailments of triadic harmony, thoroughbass technique, and theatrical style, usurped line as the ground for metaphoric harmony. Line, with its entailments of linear progression, species counterpoint, and strict voice leading, was commuted to a figure against this ground. Bernhard's *Tractatus* and Heinichen's *Der General-Bass in der Composition* thus constitute opposite viewpoints on the line/space dynamic. Bernhard reduces unorthodox harmonies to linear progressions; Heinichen supports linear progressions by an underlying grid of triadic voices. Otherwise, their reductive method is the same. Like Bernhard, Heinichen gives a catalog of analytical devices, all of which explain the more flexible dissonance treatment of the theatrical style (see Buelow 1962; 1986).

Another side of this reversal is a privileging of the ear over reason, reflected in the abandonment of Latin or Greek jargon for pragmatic musical names. Heinichen's pragmatism is in line with the empirical mood of the times:

> It is just as absurd if one should say along with pedants: this is outstanding music because it looks so fine (I mean pedantic) on paper, even though it does not please the ear, for which music is surely made. . . . As we must now admit unanimously that our *Finis musices* is to stir the affects and to delight the ear, the true *Objectum musices*, it follows that we must adapt all our musical rules to the Ear. (In Buelow 1962, 265–66)

Following the ear led to a frank realism in contemporary compositional practice. But it could also lead to an anti-intellectual dead end, as witness Heinichen's circular (non-)definition of taste: "In short, taste [*Goût*] is everything, and is the source of everything, which contributes to the real promotion [*Beförderung*] of the true *Finis Musices*" (1728, 23). Even worse: "what taste means in

Music cannot be explained, and lends itself just as little to description as the true nature of the soul" (22). Nevertheless, although Heinichen says little more on the subject, his *Figurenlehre* accords with the cognitive theory of taste advocated by contemporary French philosophers such as Charles Batteux, where "taste" denotes the mind's formal faculty. Heinichen's theory promotes a technique of tonal competence by which the listener can "hear through" apparent ruptures in harmonic logic to an underlying unity. For instance, the device called "How to leap to and from dissonances" shows the student how unprepared dissonances can originate in elisions. Heinichen's surface breaches correspond to Batteux's notion of *écart* (gap): "a gap is when one moves abruptly from one object to another that seems completely separated from it. These two objects find themselves connected in spirit by ideas which one could term *mediating* [*idées médiantes*]." Batteux means "gaps" in a Pindaresque ode or a sculptural torso (like the *Venus de Milo*), which the mind fills in by imagining the missing words or limbs. Batteux's paradigm for this syncretic vision is painterly: "a painter who has chosen the color and position of a head, if he is a Raphael or a Rubens, sees at the same moment the colors and folds of the garments with which he must dress the rest of the body." The musical analog for this vision, according to Batteux, is the perception of a "secret thread" (*un fil secret):*

> In music the primary tone sets the pattern, and although the line may sometimes appear to be broken by large gaps, those who have good ears will easily perceive that it is held together by a secret thread. These are the Pindaresque gaps [*écarts pindariques*] which can become incomprehensible if one loses sight of one's point of departure or the goal where one must arrive. (Batteux 1756, 86)

Batteux's secret thread is a common trope of the times. It is a cousin of the more famous thread (*filo*) mentioned by Leopold Mozart, which holds together the mosaic of seemingly unconnected ideas in his son's *galant* music. In his letter to Wolfgang, Leopold exhorts his son to follow the ideals of "good composition, sound construction, *il filo*," since "these distinguish the master from the bungler—even in trifles" (in Allanbrook 1992, 125). But Batteux's remarks are quoted literally (although, as we shall see, selectively) in one of the most important theoretical texts of the eighteenth century: Heinrich Koch's *Versuch einer Einleitung zur Composition* (1782–93). As I shall show in chapter 5, "linear" for Koch means something very different from voice leading: a formal process embracing rhythm and melody as well as harmony. Something of this kind is anticipated by Heinichen's beguiling notion of "all-pervading Cantabile" [*überall dominirendes Cantabile*], by which he means the general *flow* of the music (1728, 23). In short, the formal faculty of taste denotes for Heinichen *both* voice leading *and* formal process, the linking of apparent contrapuntal ruptures *and* the connection of one moment in time with another. One side of his theory looks forward to the future mutation of linearity into formal process in the *Formenlehre* of the late eighteenth and nineteenth centuries, and even the *Leitfaden* metaphors of Wagner reception. The other side looks back, and brings to its culmination, the metaphor of universal harmony.

## *Metaphorical Painting: Figure and Trope*

The baroque analogy between music and painting is mediated by rhetoric. *Ut pictura poesis* governed music indirectly, via *ut oratoria musica*. Music aspired not to painting *tout court*, but to the effect of pictorial expression poetry achieves via the quintessential rhetorical figure of hypotyposis. But hypotyposis, as we have already seen, is double-edged. It can render visible a concept (of a person, place, feeling, or activity). But it also exposes the materiality of the sign. Does the musical picture represent its referent, or does it actually reference *itself*, not as a representation but as an objectification, an embodiment?

This ambiguity reflects the baroque distinction between figure proper, and trope. A figure objectifies the passions of the soul by concretizing musical material. A trope, by contrast, is an ornamental picture of a concept. The figure/trope distinction is formulated most clearly in the Cartesian rhetoric of Bernard Lamy's *L'art de parler*. It is applied to *Figurenlehre* by Johann Scheibe in various articles from his *Der critische Musikus*. But it also supervenes upon an older Aristotelian discourse concerning the relationship between concepts (*res*) and expression (*verba*), going back at least to Julius Scaliger's *Poetik* of 1561 (see Braun 1994, 328–32). Viewing the history of

*Figurenlehre* through the figure/trope distinction clarifies the difference between musical material and musical representation. For Burmeister, music's concept resides in its text, whereas the music constitutes an objectification of *Affekt*. Burmeister maps categories from rhetoric onto music in order to individuate its material. Theorists after Burmeister sought to analyze music in terms of intrinsically musical categories. Scheibe created his typology of figures also, like Burmeister, by mapping from the familiar to the unknown. But whereas the familiar source domain for Burmeister's projection was rhetorical terminology, for Scheibe it was basic-level musical figures themselves. Scheibe now maps from the local to the architectonic level of form; form assumes the role of the target "unknown" domain.

A similar shift from the local to the large-scale is unfolded by the history of the musical trope. With Nucius's differentiation between structural and rhetorical figures, the *res*/*verba* opposition, previously aligned with text/music, is internalized as structural layers within music alone. For Bernhard, a concept (*res*) is a structural note, expressed (*verba*) by diminutions. This piecemeal approach to musical representation reflects the patchwork, highly sectionalized quality of mid-seventeenth-century music. As baroque music coalesced around single *Affekts*, enshrined within a homogeneous texture, the *res* became identified with the piece as a whole, and the *verba* achieved the stability of a fixed image. According to Scheibe, true metaphor is a trope, not a figure. His reading is comparable to Niedt and Heinichen's account of the expressive character of textural variation. Figure evolves ultimately into figuration.

## METAPHORICAL FIGURES: BURMEISTER

*Hypallage* and *metalepsis* are two types of classical metaphor. To compare these figures with musical devices is to create another order of metaphor. Such is the double-bind inherent to Burmeister's *Figurenlehre*. Joachim Burmeister (1564–1629) was a teacher of music and Latin grammar in the northern German town of Rostock and a student of the famous Luneburg rhetorician Lucas Lossius. He was thus eminently qualified to introduce the concept of the musico-rhetorical figure by analogy to figures in classical rhetoric in his three treatises, *Hypomnematum Musicae Poeticae* (1599), *Musica Autoschediastike* (1601), and *Musica Poetica* (1606).

Burmeister's chief insight, one Harsdörffer would discover independently for literary poetics, is that music's various aspects could be better perceived through an imaginative act of comparison: metaphor as a "hearing as" effect. His basic act of comparison was to label the musical ornaments (classified as either harmonic, melodic, or mixed) with names that are either borrowed from rhetorical manuals or freshly coined to emulate rhetorical terms. Nothing could be more wrongheaded than to seek an identity between the musical figure and its rhetorical label; on the contrary, *Figurenlehre* gains its leverage as an imaginative practice precisely from the gap between the two terms. A corollary of this gap is that the terminology of *Figurenlehre* is frequently arbitrary and varies from theorist to theorist. Far from being a limitation, this relativity is *Figurenlehre*'s very foundation. The task of its historians, therefore, is not to harmonize the many diverging typologies; nor to critique apparent misapplications of rhetorical terms (Vickers's critique of *Figurenlehre*'s basic assumption [1984b] is entirely wrongheaded). Rather, it is to explore the very procedure of its mappings, so as to understand how it can shape the perception of musical material. To this end, I shall focus on just two of Burmeister's many figures, *hypallage* and *metalepsis*, in the light of two of Burmeister's critics, Rivera and Bartel. In actual fact, the lack of consensus in *Figurenlehre*'s historians is no worse than that found in the classical rhetors themselves: Cicero, Quintilian, and their followers.

Burmeister's *hypallage*, which he uses to denote the inversion of a fugal subject, is an example of a clear-cut transference. In rhetoric, *hypallage* means an exchange or substitution. Thus Quintilian defines it as "the substitution of one name for another," as in metonymy (*metonymia*) (in Bartel 1997, 300). More pertinently, Lossius, Burmeister's rhetoric teacher, explains this figure as "whenever a sentence inverts the order of things, as in Virgil: 'Give the winds to the fleet,' which is to say, 'Give

the fleet to the winds'" (in Burmeister 1993, xxxiii). Closer still is Susenbrotus's "when the oration is advanced through a reversed order of things" (Bartel 1997, 300). Susenbrotus's *converso rerum ordine* becomes Burmeister's *converso intervallorum ordine:* the fugal subject's intervallic inversion.

Definitions of *metalepsis*, by contrast, are much more divergent. There is disagreement among the classical sources, between Burmeister's three treatises, and between Burmeister's critics. In *Musica Poetica*, he defines *metalepsis* as "that manner of fugue in which two melodies are interchanged here and there in the polyphony and treated fugally" (Burmeister 1993, xxix). He illustrates this definition with a passage from Lassus's *De ore prudentis* (ex. 4.9):

Example 4.9. Lassus, *De ore prudentis*




The music evinces a crossover between thematic material and vocal group. Soprano, alto, and second tenor enter with words "De ore prudentis," while first tenor and bass follow with "procedit mel" on a countersubject. After these entries, first tenor and bass take their turn on "De ore prudentis," while the three voices that had opened pick up "procedit mel." Now, according to Rivera, Burmeister derives his figure from the Latin *transsumptio* (crossover), "the substitution of one word, with its separate connotations, for another" (Burmeister 1993, xxx), which squares with Lossius's definition in his *Erotemata* of 1552: "what is *metalepsis?* It occurs when a word is exchanged not for something similar, as in *metaphor*, but for a cause or effect, as in 'pale death,' since death makes bodies pale, or 'warm wine,' because it makes bodies warm" (Burmeister 1993, xxxi). Nevertheless, Bartel, drawing on different sources, interprets *metalepsis* not as substitution or reversal but as retrospective completion of meaning. Whereas Rivera had referred to Lossius's *Erotemata*, Bartel uses his *Commentatorium Rhetoricu*. Here, Lossius understands *metalepsis* as "when the subsequent is understood from the antecedent, or the antecedent from the subsequent" (Bartel 1993, 322). Bartel

finds that Lossius agrees with the definition in Susenbrotus's *Epitome:* "when something is revealed in stepwise fashion." In Bartel's words, "a thought can be clarified with either a preceding or a subsequent thought" (321). Using this definition as a filter, Bartel hears the Lassus entirely differently from Rivera. He focuses not on the points of entry, but on the overall content of the phrases. Hence Bartel observes that the soprano and alto begin with the entire subject, while the tenor and bass are incomplete, since they enter only with the second half of the sentence ("Procedit mel"). The second tenor soon enters with the entire subject. Thus "the 'missing' first part of the subject in the tenor and bass entries is supplied by the preceding and subsequent entries of the subject in the context of the composition, thereby completing both the musical and textual thought" (Bartel 1997, 321). According to Bartel, "the meaning of the musical (and textual) expression is clarified 'through' (*meta*/*trans*) the 'addition' (*lepsis*/*sumptio*, adoption, assumption) of a further reference" (321).

The difference between Rivera and Bartel's hearings is one of aspect perception, or "hearing as." Rivera draws attention to the transfer of motives and words between the vocal groups. Bartel concentrates on the integrity of particular melodic lines and textual phrases. Rivera sees a process of crossover; Bartel one of completion or clarification. All of these aspects, of course, are present in this music, and the divergent readings are a matter not of verification but of selection or foregrounding.

## MUSICAL FIGURES: SCHEIBE

The metaphor of "music *as* metaphor" would gradually evolve into "metaphor *in* music." After Burmeister, the fate of *Figurenlehre* was to shake off the scaffolding of rhetoric and devise typologies intrinsic to compositional practice. For example, the *transitus*, or passing note, is a figure denoting a purely musical device. This internalization of rhetoric is accompanied simultaneously by a retreat from vocal to instrumental music, and a shift from a decorative (*ornatus*) to an affective (*movere*) model of expression. These tendencies reach their logical conclusion at the very end of the *Figurenlehre* tradition, in the brief but perspicuous essays on figures Johann Scheibe contributed to his own journal, *Der critische Musicus*.

With Scheibe, *Figurenlehre* takes a dramatic turn back toward rhetoric, but on the level of musical discourse, thereby endowing the tradition with a circular aspect. The move after Burmeister from rhetoric to music is reversed, with Scheibe, via a double metaphoric projection: from the technical to the rhetorical, and from the local to the formal. The cross-domain mappings that had been a feature of *Ut oratoria musica* now turn inward, becoming intramusical mappings between structural levels. Scheibe's most striking innovation was to apply figures originally denoting local or contrapuntal progressions to the broader levels of the piece, to the *dispositio*. The signal instance of this is Scheibe's adaptation of Bernhard's figure of *heterolepsis* into *hyperbaton*. *Heterolepsis* denotes the transfer of a harmonic resolution between contrapuntal voices. Scheibe extends this meaning to describe the transfer not just of notes but also of phrases, ideas, or words. *Hyperbaton* even pertains to the transfer of the ritornelli of an aria, and "the words of the aria themselves" (Scheibe 1737–40, 688). Many of Scheibe's remaining figures also illustrate this projection from the technical to the rhetorical and the formal domains. The implications of Scheibe's transfer from the technical to the rhetorical domain are most pronounced in figures of repetition and antithesis. Repetition and contrast, foundational categories of musical logic, operate quite differently on the level of form.

*Anaphora (repetitio; Wiederholung):* This figure includes "repetition of certain musical notes, passages, or thoughts" (689), even the da capo of an aria.

*Antithesis (Gegensatz):* Scheibe extends the expression of opposing ideas to the relationship between contrasting themes (such as subject and countersubject in fugues) and contrasting affections (693).

*Ellipsis (Verbeissen):* A technical figure originally meaning the omission of an expected consonance is extended to mean a dramatic interruption: a passage is broken off, and after a silence the music can resume with an unexpected harmony (688).

*Gradatio (Aufsteigen):* A figure conventionally defined as a rising stepwise progression (Kircher) is turned into a conceptual crescendo: "The ascension occurs when one progresses by step from a weak passage to stronger ones, thereby gradually increasing the importance and emphasis of the expression or music" (697).

*Interrogatio (Frage):* This figure, like *gradatio*, originally denoted melodic contour. Bernhard writes that "questions are commonly expressed by ending the phrase a second higher than the foregoing note and syllable" (in Bartel 1997, 314). Scheibe applies this concept to the antecedent-consequent logic within a phrase, as well as to the relationship between successive phrases in an entire movement: "a lengthy piece which is constructed out of numerous connected melodies retains a pleasant cohesion through a frequent application of the *interrogatio*. The subsequent passages must also provide clear answers in response, as it were" (695).

*Suspensio (Aufhalten):* This term refers not to the harmonic suspension, but to the technique of narrative tension used to structure an entire movement; the play of expectations. "A passage begins from a remote point and progresses for a considerable time through numerous digressions in such a manner that the listener cannot immediately discern the intention of the composer but must await the end where the resolution becomes self-evident" (694).

Scheibe's use of local figures as an index for formal procedures has nothing to do with the generative, periodic theories of form that would emerge in the mid-eighteenth century. As we shall see, the transfers between small-scale and expanded formal schemata in the theories of Kirnberger and Koch predicated an entirely different concept of metaphoricity. Scheibe's local-global isomorphisms depend, instead, on shared contour. They point, rather, toward the thematic *Formenlehre* of the nineteenth century, where the shape of a piece was often construed in its thematic detail.

## TROPES

Scheibe thinks that metaphors are tropes. His articles from *Der critische Musicus* offer the most articulate formulation of musical metaphor of the entire baroque era. Scheibe's account of metaphor in music is noteworthy for the additional reason that it is associated with his notorious critique of one of the era's major composers. J. S. Bach is criticized, in short, because his style is too "metaphorical." Scheibe takes exception to the superabundance in Bach's textures of artificial devices and ornaments since they lead to a lack of clarity. With Bach in mind, Scheibe contends that "this obscurity and turgidity increase when [composers] set many metaphors on top of one another, in that they namely write metaphorically in all parts of a many-voiced piece" (1737–40, 647). He attributes Bach's "confusing" style to metaphorical excess:

> There are even people among those literate in music who admire and raise up a composer who distinguishes himself from others through his obscurity and through his dazzling style and who has so strongly enclosed himself in, as it were, *an unending mass of metaphors and figures* that one can only with the greatest effort divine what his meaning is. This composer and his admirers can be compared to parrots who speak a language without knowing its meaning. (1737–40, 648)

Scheibe's complaint brings together the musical and rhetorical strands of a time-honored suspicion of unchecked ornamentation. On the musical front, the underlying issue is the integration of diminution technique with the functional hierarchy of voices in a contrapuntal texture. A "turgid" or "confusing" style results "when one gives all the parts too much to do at once," so that the composer writes "metaphorically in all parts of a many-voiced piece" (in Dreyfus 1996, 136). Most particularly, the bass, which is the pillar of the harmony, should be shielded from excessive figuration. According to Friderici's *Musica Figuralis* of 1618, "In the bass no coloratura should be made other than those specified by the composer. (For otherwise the fundament of the song will be mutilated, and the other parts left groundless, then will there be heard nothing other than an annoying dissonance)" (in Butt 1994, 130).[10]

On the rhetorical front, Scheibe typifies the traditional view that metaphor, as a decorative trope, should keep to its place. Tropes belong to the *elocutio* part of language, rather than the *inventio;* to expression, rather than content, to *verba*, not *res*. Over-elaborate ornamentation obscures thought and is to be condemned. Of course, Scheibe is hardly the first theorist to make the link between compositional and linguistic prudence.[11] What is special about Scheibe's approach to this question is that it taps into an extremely rich vein of philosophical thought about the nature of reason and language—namely, the post-Cartesian philosophers of late-seventeenth-century France. Descartes had been comparatively uninterested in rhetoric, because his method aspired to the clarity and self-evidence of a geometrical chain of proof, from which eloquence could only be a distraction. Later philosophers, such as Bernard Lamy and Nicolas Malebranche, grasped that Descartes's insistence on the primacy of attention, the process by which the mind's eye focuses upon and distinguishes

between ideas, was kindred with the rhetorical ethos of lively and vivid presentation. Rather than being an impediment, eloquence could be an instrument of *évidence*, so long as the correct balance was struck between reason and the emotions. To this end, the language of eloquence must be clearly ordered. At the heart of Lamy's rhetoric, then, is a strict distinction between tropes and figures: "the tropes allow the most abstract thoughts to be conceived in a way that appeals to the senses; they produce a pleasing picture of what one wishes to make known. The figures awaken attention; they inflame; they animate readers, which is pleasing" (in Carr 1990, 155).

A trope uses a sensory image to express an abstract notion. Lamy calls it "a picture appealing to the senses," as when "the prophets speak of God, they continually use metaphors drawn from things subject to our senses; they give God arms, hands, eyes" (in Carr 1990, 158). Although tropes appeal to the senses, their role is ultimately to foster attention to a concomitant concept. This is the crucial difference between tropes and figures: tropes ultimately engage reason, not emotion. With figures, the priority is reversed. Whereas tropes widen the scope of language to express subtle distinctions of thought, figures enhance discourse's ability to represent the passions. Figures reflect the agitations of the soul's emotional life, a dynamic registered in discourse through deflections in the normal flow of speech. Hence tropes and figures involve two opposite types of rhetorical deviation. With tropes, an ornate term deviates from a plainer model. A figure, by contrast, deviates syntactically from the standard word order:

> The tropes depart from ordinary usage by relying on one term to suggest a referent to which it is not normally applied; the figures involve syntactic changes that depart from normal word order. They give presence to the speaker's emotional life, to the movement of esteem, scorn, hate, and love that mark our relation to various ideas. (In Carr 1990, 159)

Figures such as exclamation, repetition, antithesis, and interrogation describe the irruption of the passions into discourse.

Scheibe absorbed Lamy's ideas indirectly, through the Francophile critic Johann Christoph Gottsched's *Versuch einer Critischen Dichtkunst* of 1730. Otherwise, his musical interpretation of the figure/trope distinction keeps close to Lamy. Metaphor, Scheibe's chief trope, denotes digression from normal meaning. Metaphor in music is expressed by melodic embellishments (*verblühmten Auszierungen*). In the same way that a trope deviates from standard usage, a metaphorical embellishment of a melody's structural notes (*Grundnote*) deviates from a plain setting. Scheibe likens an unadorned structural step or melody to an unadorned thought. The decorations "are compared to" the concept they elaborate. Embellishment is an actual prerequisite for beauty: "one sees that no melody is beautiful which does not contain certain variations of its structural notes, certain additions, diminutions, extensions" (1739, 644). Nevertheless, decoration serves a deeper purpose: that of enhancing the attention (*Aufmerksamkeit* = Descartes's *attention*) of the listener to the logic of the underlying discourse. An oration must maintain a balance between clarity (Descartes's *clarté*) and persuasion. The tropes should serve the argument and must never cloud it, just as in music embellishments ought never to interfere with the clarity of the underlying harmonic structure. Scheibe divides *musikalische Metaphora* into those that embrace entire phrases and those that only decorate single notes. Although he gives no musical examples, the former procedure, whereby "one gives the regular notes of a phrase an entirely new shape and order" (1737–40, 646) corresponds to the variation technique illustrated in his contemporary Niedt's *Die musicalische Handleitung*. For Niedt, elaborations impart "life, strength, gracefulness, and embellishment," yet in such a way that "the passage maintains its basic character" (Niedt 1989, 74).

Whereas tropes transform only structural notes, figures "alter the musical passage and therefore also particularly affect the harmony and the entire context of composition" (Scheibe 1737–40, 642). Hence they "belong to invention as well as to style." "I believe," Scheibe continues, "that one must distinguish the decoration of a subject from its nature; thus, when one describes figures, one must look more at their inner nature than at decorative expression" (684). In Lamy's terms, while tropes enhance reason with imagery, figures give presence to the emotional life. Scheibe's insistence that metaphor—that is, decoration—belongs solely to the realm of *elocutio*, with no bearing on the syntax

or substance of the material (*inventio*), is inconsistent with his complaint that Bach's style is "obscure" and "turgid" because it is overly metaphorical (Bach sets "many metaphors on top of one another"). What Scheibe's critique registers, albeit negatively, is the precise opposite of its basic premise: in Bach, tropes and figures, *elocutio* and *inventio*, interpenetrate. Gottsched's and Scheibe's opposition to Bach's "obscurity" reflects an Enlightenment taste for rhetorical clarity, as Lawrence Dreyfus has noted (1996, 236). Bach's distance from Enlightenment aesthetics does not mark him out, however, as an ahistorical figure, a view summarized in Eggebrecht's reception history.[12] On the contrary, Bach is the last great figure of baroque *Bildlichkeit*. His metaphorical "obscurity" attains to the condition of the pictorial. In Ricoeur's and Goodman's terms, obscurity is really a symptom of metaphorical density and tension. Specifically, Bach's density emerges through tensions in the contrapuntal fabric. It is to these tensions that I now turn, starting with Bach's precursor, Schütz.

## 3. PAINTERLY DISCOURSE

Circling back now to chapter 3, it now becomes possible to introduce my theory of musical discourse into the specific context of baroque poetics. In the baroque era, music's trajectory toward quasi-human density takes on the particular coloring of its pictorial aesthetic, the metaphor of *Bildlichkeit*, a living hypotyposis. (In chapters 5 and 6, density will assume the forms, respectively, of linguistic immediacy and biological embodiment). Moreover, baroque narrative often compounds *Bildlichkeit* with the "rhetoric of incarnation," to borrow a term from Nicolas Malebranche, Lamy's colleague in the post-Cartesian tradition. The rhetoric of incarnation is the process by which the divine becomes increasingly immanent within the material. Paradoxically, the numerous Passion settings by Schütz and Bach, and by the contemporaries of each, indicate that material becomes alive to the extent that it begins to die. Discourses such as Schütz's *Seven Last Words of Jesus Christ* and Bach's *St. John Passion* project a trajectory toward death. They follow, therefore, the same course of much seventeenth-century German tragic drama, as described by Walter Benjamin's famous study, *Ursprung des deutsches Trauerspiels* (1998).

This rhetoric of incarnation as death is not rhetorical in the conventionally received sense of "rhetoric." A common modern misconception is that rhetoric pertains to form—the disposition (*dispositio*) of ideas in time—whereas it mostly concerns material: in musical terms, texture. The most influential rhetorician of the baroque was Gerhard Johannes Vossius (1577–1649), and the shortest of the five books that make up his *Die Rhetorices Contractae, sive Partitionum Oratoriarum Libri Quinque* (1606) is book 3, on *dispositio* (see Barner 1970, 269).[13] The section on *dispositio* is also the least prescriptive, since the form of the oration was left to the imagination of the rhetor or composer. Hence it is inadvisable to take Mattheson's much-discussed section on *dispositio* in *Der vollkommene Capellmeister* (1739, 235ff.) too seriously (see Bonds 1991, 86–90).[14] In this regard, Lawrence Dreyfus's charge that most formalist analysis of baroque music is anachronistic is extremely welcome.[15] We cannot escape the fact, however, that a baroque work unfolds as a process through time, and that its course is hardly arbitrary. To understand this trajectory, we must look elsewhere. I propose two ideas: first, that the form of baroque music typically unfolds a process of cumulative elaboration, producing ever-increasing density; second, that increasing density creates a rhetoric of incarnation.

### *The Rhetoric of Incarnation: Schütz's* The Seven Last Words of Jesus Christ

Schütz's short oratorio provides an object lesson in cumulative hypotyposis. The figure of Christ becomes alive in the course of dying. The process of individuation is set into sharp relief through Schütz's device of framing the dramatic *stile rappresentativo* of Christ's (and the Evangelist's) utterances with impersonal contrapuntal panels—an Introitus and Conclusio—so that Christ steps out

of the crowd (the motet texture) like a sculpture from a frieze or bas-relief. It is also enacted from within, since the seven utterances are increasingly dissonant and broken—that is, figured.

After a choral Introitus, in which the audience is invited to contemplate Christ's Seven Last Words "in your hearts" ("die sieben Wort, die Jesus sprach, betracht in deinem Herzen"), narrative (Evangelist and Tenor I) and personification (Jesus and Tenor II), recitative and arioso, alternate like epigram and emblem in a picture-book or play. The setting of the first Words is relatively straightforward, but becomes much more elaborate toward the end, Words Six and Seven.

The penultimate Word, "Es ist vollbracht" (It is finished), with its dislocation of the tenor melody, is a classic example of the figure of *abruptio* (Bernhard writes that "the vocal line is either ruptured or broken off altogether"; in Hilse 1976, 115). But the wonder of Schütz's setting is that it suggests completion as much as breaching (ex. 4.10):

Example 4.10. Schütz, *The Seven Last Words of Jesus Christ*, Sixth Word




The tenor's opening eighth-note figure (E–G–A–B) encapsulates the bass line of the following measures, while the melody's ascending half-notes (B–C♯–D♯–E) proceed to complete the rising fifth to a full octave (E–E).

The last Word contains the strongest dissonances of the piece, mostly involving the pitch G♯ (ex. 4.11):

Example 4.11. Schütz, *The Seven Last Words of Jesus Christ*, Seventh Word

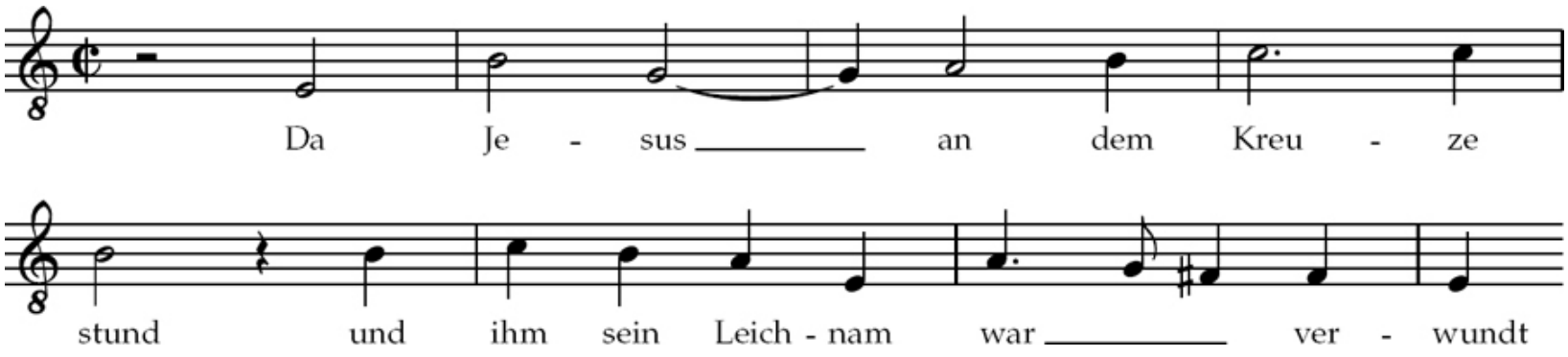



In measure 1, it is the instrumental descant's G♯ against the tenor C, creating a diminished fourth. In measure 2, the tenor leaps down to an unprepared G♯, and in measure 3 the bass sounds a false-relation G♮. Another diminished fourth occurs in the penultimate measure, between the descant's G♮ and the tenor's D♯, part of the augmented triad B–D♯–G (note the further false-relation D♯–D♮ across measures 8–9). Most extreme is the bass's chromatic scale in measures 6–8, a *passus duriusculus*, the

conventional figure for death or lamentation. The air of *kairos* is exacerbated by the soloist's parlando rhythms and dying fall of its final measures.

Arresting as these effects are, something much richer is going on in the drama, as is revealed when we consider the Words in relation to the chant on which they are modeled. The Seven Words quarry material presented in the Introitus, in particular an archlike cantus, "When Jesus stood on the Cross, and his body was wounded" (ex. 4.12):

Example 4.12. Tenor chant




Words Six and Seven are based, respectively, on the rising and falling halves of this cantus. The rising half ("Da Jesus an dem Kreuze stund") is simplified into the bass's I–III–IV–V progression in Word Six (E–G–A–B). The falling half ("und ihm sein Leichman war verwundt"), a descent from C to E, is elaborated in the melody of Word Seven (the A is the particular focus for expansion: tonicized by the G♯ and only really quitted at measure 8 for the G natural). The problem is that the division between the two Words is not as clear-cut as it first seems: the bass line of Word Seven elaborates the bass of Word Six, hence the *rising* half of the chant (see ex. 4.11). The two halves of the chant interfere with each other at the expense of the final Word's tonal coherence. The harmonic difficulties center around the pitch A, and, moreover, around the *passus duriusculus* of measures 6–8. The voice leading of this passage shows that the *passus duriusculus* elaborates an arpeggiation of the triad A–C–E, thus expanding the subdominant (IV) region of Word Six's harmonic model, I–III–IV–V–I. But the A♮s of measures 7–8 also represent the A that had been originally displaced at measure 3, when the bass's I–III progression had diverted the falling half of the chant toward the relative major, G (it is interesting to note that the melody in measures 4–7 circles the fifth around A, E–D–C–B–A, just like the bass line in measures 6–8). The tenor's G♯ at measure 3 should properly have been resolved by an A. What we are hearing when the bass shifts to G♮ is not just a harmonic false relation, but the frustration of one half of the chant by another.

Schütz's oratorio beautifully refutes the dogma that the poetics of the word, *pace* Ricoeur, is incompatible with a context-theory of metaphor. To be sure, the locus for Schütz's metaphor of *Bildlichkeit*, for his textual and tonal hypotyposis, is the individual Word. But the Words are context-bound both synchronically and discursively. Synchronically, they emerge from a web of contrapuntal relations presented in the Introitus. Discursively, the Words are targets for a process of harmonic decay, as musical impertinences accrue progressively along with Christ's decline—a process of focalization around both the "figure of Christ" and the "figures of music." The climactic figure of death certainly has a name—*passus duriusculus*—but Schütz helps us to hear and see figures as an expression of living discourse, not merely as labels in a dead science of *Figurenlehre*. We can put our finger on the *passus duriusculus* as the precise moment when things fall apart, and stare into its blank chromaticism as the figure of what Beckett called the "unnameable."

Technically, the ultimate ground for Schütz's tricks is the ambiguous status of the chant in early baroque tonality: conflicting perspectives on a contrapuntal tenor as, on the one hand, a thematic idea in its own right, subject to polyphonic elaboration, and, on the other, an authentic bass line generating a triadic harmony. One could say, then, that Schütz uses tonality against the grain so as to awaken qualities within the chant. Schütz's contrapuntal *epochē* projects the materiality of tonality. As functional tonality begins to die, it attains a tensive aliveness adequate to the life-in-death

paradoxes of the rhetoric of incarnation. According to Malebranche, the Incarnation is the defining rhetorical act of human history. Spirit became flesh so that God could make known the intelligible through the senses. In his *La recherche de la vérité* (1674), Malebranche writes: "the Order that must reform us is too abstract to serve as a model for base minds. . . . Let it therefore be given a body; make it accessible to the senses; dress it in various manners to make it lovable to the eyes of carnal men; let it be incarnated so to speak" (in Carr 1990, 114–15). But just as Christ must be crucified for the Gospel to be rhetorically effective, the Incarnation is most complete on the very point of death. Flesh is most alive when it begins to decay—the scandal at the core of baroque German *Trauerspiel*, and of Benjamin's theory of allegory:

> And if it is in death that the spirit becomes free, in the manner of spirits, it is not until then that the body too comes properly into its own. For this much is self-evident: the allegorization of the physis can only be carried through in all its vigor in respect of the corpse. And the characters of the *Trauerspiel* die, because it is only thus, as corpses, that they can enter the homeland of allegory. (Benjamin 1998, 217)

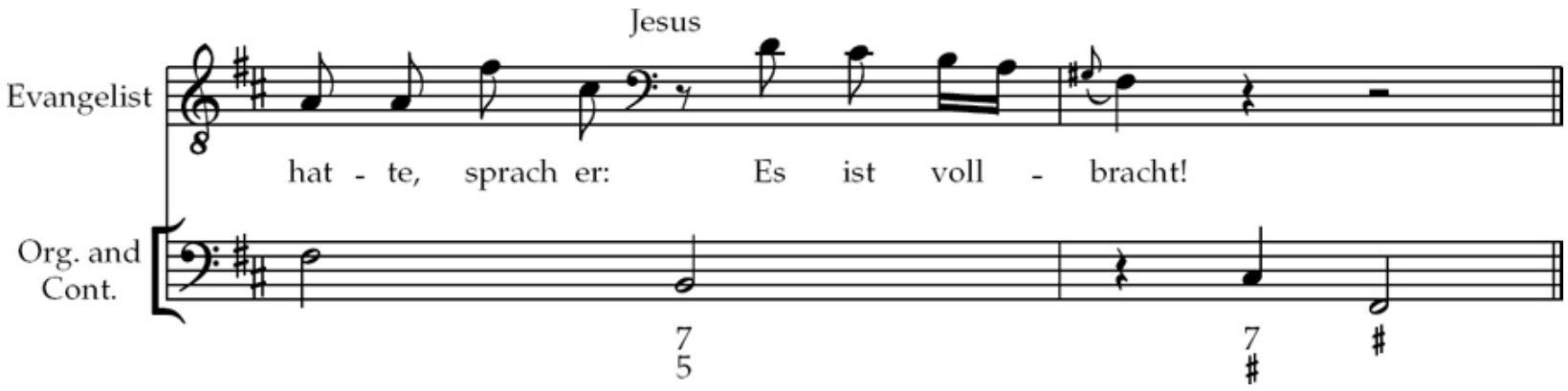
## *Seeing Salvation: Bach's "Es ist vollbracht"*

Cumulative hypotyposis is unfolded across the entire work in Schütz's oratorio. With the evolution of the da capo aria—a genre not available to Schütz—it becomes possible to *internalize* this process within a single musical structure. Schütz's five-measure Word becomes a forty-four-measure aria in Bach's *St. John Passion*. The trajectory toward the dense is unfolded now not between movements—as in Schütz's *Seven Last Words*—but within the aria, in the course of a set of variations on the opening ritornello. Formally, the instrumental textures and dancelike well-formedness of a ritornello assumes the function of a verbal utterance. Likewise, the variations on the ritornello are reflections upon this utterance.

The aria's internalization of hypotyposis reflects a wide range of cultural and compositional developments in the late seventeenth century. Theologically, the broad shift from Lutheran Orthodoxy to Pietism emphasized the private and psychological nature of devotion, at the expense of public show; the interiority of feeling over the externality of image.[16] Musically, *Figurenlehre* moves from *pingere* (painting) to *exprimere* (expression), and from particular *verba* to general *res*.[17] Strangely, in seeming to retreat from painting toward abstract form, music gets closer than ever to the material conditions of painting as a spatial object. A da capo aria, projecting a unified affection through time, is effectively a musical canvas on which the composer paints. Similarly, music approaches the emblem/epigram dualism of baroque visual culture only when the distinction between aria and recitative is clarified and polarized.[18] And yet, as I showed earlier, the polarity is not static but dialectical. On the one hand, an aria is a picturelike figuration of a text; it is an emblem. On the other, Neumeister, Feind, and Hunold all think of the aria as epigram or *subscriptio*, elaborating a *sententiam generalem*. In this regard, the recitative is a picture of the action. This complex dialectic is played out also within the aria, between the outer (A) sections and the intervening (B) section, between the words and the instrumental figures, between the instrumental ritornello and the vocal episodes, even between primary and subordinate phrases or motifs. It is the dialectical spiral itself that engenders the cumulative density of Bach's discourse.

Bach's opening gambit is extraordinary. Jesus' utterance is tucked into the very end of the Evangelist's recitative, whereas Schütz had let it stand alone as a miniature arioso (ex. 4.13):

Example 4.13. Bach, *St. John Passion*, Sixth Word (recitative)




Bach then follows the recitative with a substantial da capo aria for an unnamed alto, accompanied by obbligato viola da gamba, who sings a reflective poem elaborating the sense of the Word: “It is finished. O rest for all afflicted spirits. This night of woe makes me upon my last hour ponder” (ex. 4.14):

Example 4.14. Bach, *St. John Passion*, "Es ist vollbracht"



5

Vla. d. g.

A.

Es ist voll - bracht, es ist voll - bracht, o Trost für

Org. and Cont.

*p*

7

Vla. d. g.

A.

die ge-kränk-ten See-len, o Trost, o Trost! es ist voll -

Org. and Cont.

9

Vla. d. g.

A.

- bracht, o Trost für die ge-kränk-ten See - len,

Org. and Cont.

11

Vla. d. g.

A.

die Trau-er - nacht,

Org. and Cont.




This pondering (*zählen*) is enacted at many levels. The poetry of the aria expatiates on Jesus' factual statement in the recitative (declaring "it is finished" is, of course, an illocutionary speech act—not reporting an action but willing it to happen). Contemplation takes the further form of the aria's text-repetition, a redundancy that shifts the focus from *verba* to *res*. This redundancy is also musical: the gamba picks up on the descending scale of Jesus' utterance, but commutes the appoggiaturas from cadential scale steps to figurative decorations. The appoggiaturas switch from syntax to expression and are scattered across the canvas, as indexes of a prevailing affect. Finally, the hidden sense of "Es ist vollbracht" is that closure is provisional, or at least suspended (how can the penultimate Word be final?). Note that Jesus' cadence on F♯ sits on the continuo's subdominant 7/5 chord, that is, *before* the cadence. The aria explores the closure-that-is-not-closure in endless permutations. Paradoxically, the illocutionary force of the Sixth Word can, by definition, only be directed toward a future event, not a present condition: it *will be* finished.

The gamba's four-measure ritornello, while relegating Jesus' Word to decoration, also translates it into the terms of formal and harmonic closure, especially the antecedent-consequent logic of measures 1–2 (I–V answered by V–I). Yet it is a logic undermined by meter: the strongly anacrusic descent at measure 1 climaxes at the half-measure and is put right in the second ritornello (measure 5), where the figure is shunted to an upbeat. Nevertheless, the voice enters with a variant of the scale at the beginning of measure 5, like the gamba at measure 1. It is quickly put right by the proper start of ritornello 2 half a measure later. However, this half-measure "hole" is large enough for the voice to escape the constraints of the instrumental ritornello and, by the end of the section, to establish its subjective authority over the music. In other words, the three ritornellos of the opening section unfold a process of growing subjectivity. In ritornello 1 (measures 1–4), the voice is absent. In

ritornello 2 (measures 5–10), the voice moves within the formal and tonal space of the gamba's ritornello, coloring in its outline with thirds and sixths. In ritornello 3 (measures 13–17), the voice is emancipated, its luxurious passagework cutting across the gamba's phrase rhythm.

Why is the gamba entry at measure 13 so weakened? For the first time, it lacks a tonic chord (now F♯ minor), since Bach has elided it into the dominant harmony of the vocal entry half a measure earlier. The alto sits on an extended C♯ (on "Nacht"), a pitch that is variously prolonged throughout the following four measures: transferred to the continuo at measure 15 and back to the alto across two octaves at measure 16. Ritornello 3 is consequently hedged in by the alto's prolongation of the dominant C♯. Bach transforms the ritornello's syntax from balanced and closed to through-composed and tonally open. By dwelling on C♯, the fifth scale step, Bach abolishes the closure of the descending scale. To be sure, keeping a linear descent open by prolonging the $\hat{5}$ is a normative expedient in Schenkerian terms. But here it dramatizes the underlying burden of the Sixth Word: "es ist *nicht* vollbracht!" It is *not* finished, of course, because the spirit ultimately transcends the flesh, a process of sublimation that the aria enacts by gradually dissolving the formal constraints staked out in the opening ritornello. Figuration becomes not only more elaborate, but also harder to subsume within structure. In painterly terms, the image is no longer subordinate to the concept, nor emblem to epigram, or ornament to outline. Vocal expression can no longer be contained within the rule of the text. In terms of the visual dialectic, aria/music as emblem becomes aria/music as epigram: musical image attains to the conceptual status normally ascribed to text. Ironically, since baroque discourse is so often assumed to be static, we discover that the aria's contradictory status (as both emblem and epigram) is really the trace of a dynamic process: aria *becomes* epigram; music *achieves* conceptual status. The spiral has shuttled between text and music twice: the gamba figures are abstracted from Jesus' Word; the alto recuperates these figures back for language; voice *qua* music slips its formal moorings.

And all this in the opening seventeen measures! What happens next is nothing less than a portent of resurrection, as the C♯ rises to a radiant D, putting all descents in the shade. Between the lachrymose main part of the aria and its da capo, Bach inserts an allegro of astonishing contrast: a martial, D major alla breve, hailing Christ's triumph with trumpetlike fanfares: "see Judah's hero triumphs now and ends the fight" (ex. 4.15):

Example 4.15. Bach, *St. John Passion*, "Es ist vollbracht," mm. 20–22




Such radical contrast between A and B sections was unusual (curiously, the best-known parallel also comes from 1723, "Piangerò la sorte mia" from George Frideric Handel's opera *Giulio Cesare*) and begs the question of what the two affections have in common. But Bach does the work for us and, with deft sleight-of-hand, converts the fanfares step by step into the lachrymose appoggiaturas in the retransition (ex. 4.16):

Example 4.16. Bach, *St. John Passion*, "Es ist vollbracht," mm. 35–40




First, the arpeggios are figured with sixteenth notes (measure 36); second, the sixteenth notes are flattened into a descending scale (measure 38); third (measure 40), the scale metamorphoses into Jesus' utterance—the cadential progression that had been displaced into the recitative, and that had been conspicuously absent in its "correct" form from the aria. That Christ's cadence had originally been in the dominant of B minor, F♯, makes his withdrawal from the aria all the more poignant, and his incarnation within the alto at measure 40 in the home key all the more miraculous.

Measure 40 engenders the instantaneous flash of recognition that baroque poetics sought in metaphorical comparisons. Through metaphor, as we saw with Harsdörffer, "the mind gains pleasure from holding together two analogous objects and contemplating their similarity and difference" (1650, 3:57). Metaphor had of course been a handmaiden of biblical exegesis since the time of the Latin church fathers—Auerbach (1973) traces the *Ur*-metaphor of "Christ as lamb" to Tertullian. Yet the element distinctive of Christian metaphor was time: historical eschatology. The terms of

comparison are disposed in time as *figura* and *veritas*, "figure and fulfillment" (34), whereby Moses is a metaphoric pre*figura*tion of Christ, and the crucifixion a *figura* of the resurrection. As a rule, "carnal things come first as a figure of spiritual things" (33). The St. John's Gospel turns this temporal axis in on itself, in that John's concept of "realized eschatology" holds that the believer is redeemed already in this life (see Chafe 1989, 82). Having faith means being able to see beyond the physical present into a deeper spiritual level, so as to recognize the Messiah within the man Jesus.

Seeing, then, means recognition, as in the dramatic *anagnoresis* that irrupts into measure 40. Bach's retransition lets us see the fanfares immanent within the appoggiaturas, so that we recognize the cross as the instrument of glorification through abasement. The Johannine viewpoint, according to Chafe, is that the crucifixion is "a triumphant event, the 'lifting up' of Jesus" so that he becomes a visual sign (77). The Sixth Word, the turning point of the Passion, answers the appeal of the congregation in the opening chorus for a sign: *zeig' uns durch deine Passion*. The cross, in its allegorical abstraction, is the baroque sign par excellence, and Bach's setting enshrines the cross's traditional semiotic roles as, simultaneously, a symbol for the inversion of the outward meaning of things, the agent of lifting up, and an icon of chiastic symmetries around a central axis. The tragedy of Christian metaphor is that man must become Cross in order that dead wood can bloom into new life, a circularity at the root of the verdant cross.

## *Metaphor in Painting:* The St. Matthew Passion

The miraculous transformation of dead into living wood provides one of the most pervasive images of Christian iconography, which Simon Schama (1995, 214–26) identifies as the motif of the "verdant cross." Pliny reported the myth that the date palm, a fruit-bearing tree worshipped for its life-giving properties, perpetually revived itself even when it appeared to be dead, and it is notable that the words for "palm" and "phoenix" were interchangeable in both Greek and Egyptian Coptic. Onto such preexisting pagan tree cults, grounded in the vegetable cycle of the seasons, Christian theology grafted the obvious analogy with sacrifice and immortality. The cross became the Tree of Life, which, by an apocryphal tradition, both neighbors and eventually redeems the fatal Tree of Knowledge in the Garden of Eden. The image of the verdant cross expressed the rhyme between these two trees with poetic conciseness. Verdant crosses sprang up throughout the chapels and churches of Northern Europe; they also pervade its iconography. Often, as in a manuscript painting in the 1460 Arenberg Hours from Bruges (see Warner 1989, 17), or in a much later oil painting by Hendrick Goltzius (1610), *Christ on the Tree of Life* (see Schama 1995, 225–26), Fall and Redemption are folded into each other, so that Christ is shown already hanging in the apple tree at the moment of Eve's temptation. Even more arresting, however, are patently didactic works such as Hans Holbein's *The Old and the New Testament* of 1535 (see plate 4), in which the two stories confront each other on a single stage, corresponding like antiphonal responses across the choir. In Holbein's painting, the Trees of Life and Knowledge are grafted together as a single tree, blasted on the one side, verdant on the other, at the base of which sits *Homo*, Everyman. Drawing on his large experience as a designer of Protestant wood-cuts, Holbein constructs the picture as a system of chiastic oppositions, all pivoting around the trunk: Law and Grace, Fall and Redemption, Death and Resurrection. Background images of strife and warfare are complemented by an idyllic pastoral scene, while the prophets Isaiah and St. John the Baptist, representing the two Testaments, point out Mary and the Agnus Dei. Holbein gives each element a gilt legend, so that the picture is at once a composite emblem and a blueprint for a Lutheran sermon (see Bätschmann and Griener 1997, 117–19).

The picture could also be seen as a blueprint for a Lutheran sermon in tones, since the opening double chorus of the *St. Matthew Passion*, articulated by the double choir of the Leipzig *Thomaskirche*, clearly follows the same painterly genre. Indeed, the visual perspective is built into Bach's text, enforcing metaphorical "hearing as" *as* "seeing as": one choir entreats the other to look upon the Christ "as a lamb" (*seht ihn als wie ein Lamm*). Bach directs our gaze toward the lamb just

as Holbein's prophets point the eyes of Everyman toward the Agnus Dei. Bach's chorus portrays the verdant cross as a sonic metaphor between a contrapuntal crux and the pastoral style. A soprano solo enters with a Lutheran chorale, "O Lamm Gottes unschuldig," and then the concerto structure settles into a ritornello in G major (measure 52). The style here has all the ingredients of the baroque pastoral that so often symbolized the Christmas nativity (as in the finale of Corelli's *Christmas Concerto*): a lilting siciliano in 12/8 meter, a bass tonic pedal, a subdominant bias, and a melody studded with expressive appoggiaturas and suspensions. The bass aria from Bach's pastoral cantata *Du Hirt Israel* (BWV 104), another work that identifies Christ as lamb or shepherd, exemplifies this style too. Given how stereotypical these pastoral traits are, it is remarkable that, with a simple switch of modality to the minor, the same style can denote an opposite affect. The ritornello, as it is originally presented in E minor at the very opening of the chorus, depicts the mourning of the observers of Christ's Calvary procession (ex. 4.17):

Example 4.17. Bach, *St. Matthew Passion*, first movement, mm. 1–3




The lilting ostinato now creates a mood of lamentation rather than calm, the pedal point jars against the chromatic progressions above, and dissonances that are sweet in a pastoral context are now felt as painful. The referent of this scene is not the Lamb but the cross. At the center of the contrapuntal complex is a cruciform wedge formation that moves in contrary motion from the tonic to the dominant. Bach had used it in an early organ fugue in E minor, but it forms the basis also for the "Crucifixus" of the B Minor Mass. The lower voice of this structure, the descending chromatic tetrachord, is the most venerable topic of mourning in Western art music. Bach's fugal treatment of the wedge formation in the *St. Matthew* chorus exacerbates its tensions with an asymmetrical interval of entry. The answer comes in half a measure too early, in the middle of measure 2 (compared with the regular organ fugue), because Bach builds an acceleration into the subject: the first two steps of the rising scale, E and F♯, occupy half a measure each; the G♯ and the A are squeezed into a space half as long. Moreover, one expects the G♯ at measure 2 to occupy a dotted quarter note, tied to an eighth-note group, as in the preceding pattern. But instead the pattern is reversed so as to impart a kick to the A on the weak part of the measure. The placement of the A here allows Bach to suspend it against the B, a note that provides double service as both the completion of the wedge and the beginning of the fugal answer. Thus the A, as the culmination of the stretto and the point of

intersection between subject and answer, constitutes a crux. Its dissonance is compounded by the tonic pedal, against which it sounds the contrapuntally proscribed interval of the perfect fourth.

Bach's metaphorical identification of the cross with the Lamb pivots, then, on a reinterpretation of this crux. The virtue of invertible counterpoint is that it can be rotated so that the bass becomes the melody. In the G major ritornello, the descending tetrachord, previously the bass, is lifted up so as to cover the rising scale (ex. 4.18):

Example 4.18. Bach, *St. Matthew Passion*, first movement, mm. 52–54




The perfect fourth of the crux (here a C♮) is now a contrapuntally acceptable inner voice. Conversely, as a high soprano melody, the falling tetrachord sheds its tragic ground-bass connotations, and the linear descent now creates a feeling of elegiac closure (Bach is careful to make the answer enter at the bottom of this descent). Another corollary of this contrapuntal inversion is that the second measure now receives a stress on its first beat, rather than its second. The F♮ of measure 52 (corresponding to the D of measure 2) is a full dotted quarter note, and this promotes continuity into the entry of the answer, as well as foregrounding a pastoral subdominant coloring.

There are two ways of understanding Bach's metaphor here. The simpler one is that he has associated two types of material, denoting respectively crucifixion and pastoral, by writing a contrapuntal wedge fugue as a siciliano. But this conventional explanation is surely not adequate, because it is the same material that is heard differently in major and minor. Even without the wedge subject, the pastoral style sounds tragic in the minor, as Bach shows in *Du Hirt Israel*. In the cantata, the major and minor variants of the style are disposed according to the ABA scheme of the da capo aria. When, in the *St. Matthew Passion*, the chorus tells us to behold Christ "as if a lamb," they are directing our perception to the qualities of material presented in the opening ritornello. The G major pastorale, rather than comprising a domain to be compared (Lamb with cross), is instead a reinterpretation that helps us "see" elements implicit within the original complex. Creation for the baroque composer entails reciprocal acts of perception: on the one side, the *Erfindung* ("invention") of ideas rich enough to afford varied aspects from different points of view that requires, on the other, a keen eye, a metaphorical *perspicacia*, for the properties of the material. Bach's ability to look deeply into the latent possibilities of musical material is described by his son, Emanuel:

> When [J. S. Bach] listened to a rich and many-voiced fugue, he could soon say, after the first entries of the subjects, what contrapuntal devices it would be possible to apply, and which of them the composer by rights ought to apply, and on such occasions,

> when I was standing next to him, and he had voiced his surmises to me, he would joyfully nudge me when his expectations were fulfilled. (In Dreyfus 1996, 13)

It is in this regard that the contemplation of musical material is analogous to gazing at a fixed visual object. On the level of the finished artwork, just as Bach's discourses offer up to the listener different views of the material, many baroque allegorical pictures scatter around their canvas diverse aspects of a central image. The textures of the *St. Matthew Passion* are probably the densest and most visual that Bach ever wrote. Scheibe was certainly correct to characterize such textures as "obscure," since Bach's replete, opaque pictures have no place in an Enlightenment world governed by the empty and transparent signs of *language*.

# 5

# *Rhythm and Language*

## *The Kantian Pastoral*

Mozart's first opera, the singspiel *Bastien und Bastienne*, derived its libretto from Jean-Jacques Rousseau's dramatic interlude *Le devin du village*. The twelve-year-old composer evidently knew enough about musical nature to introduce Colas, the *devin* of the title, dressed in a suitably pastoral topic. Colas, sung by a boy alto, makes his entry to the sound of a musette, complete with bagpipe drone and tritone skirl (ex. 5.1):

Example 5.1. Mozart, *Bastien und Bastienne*, entrance of Colas



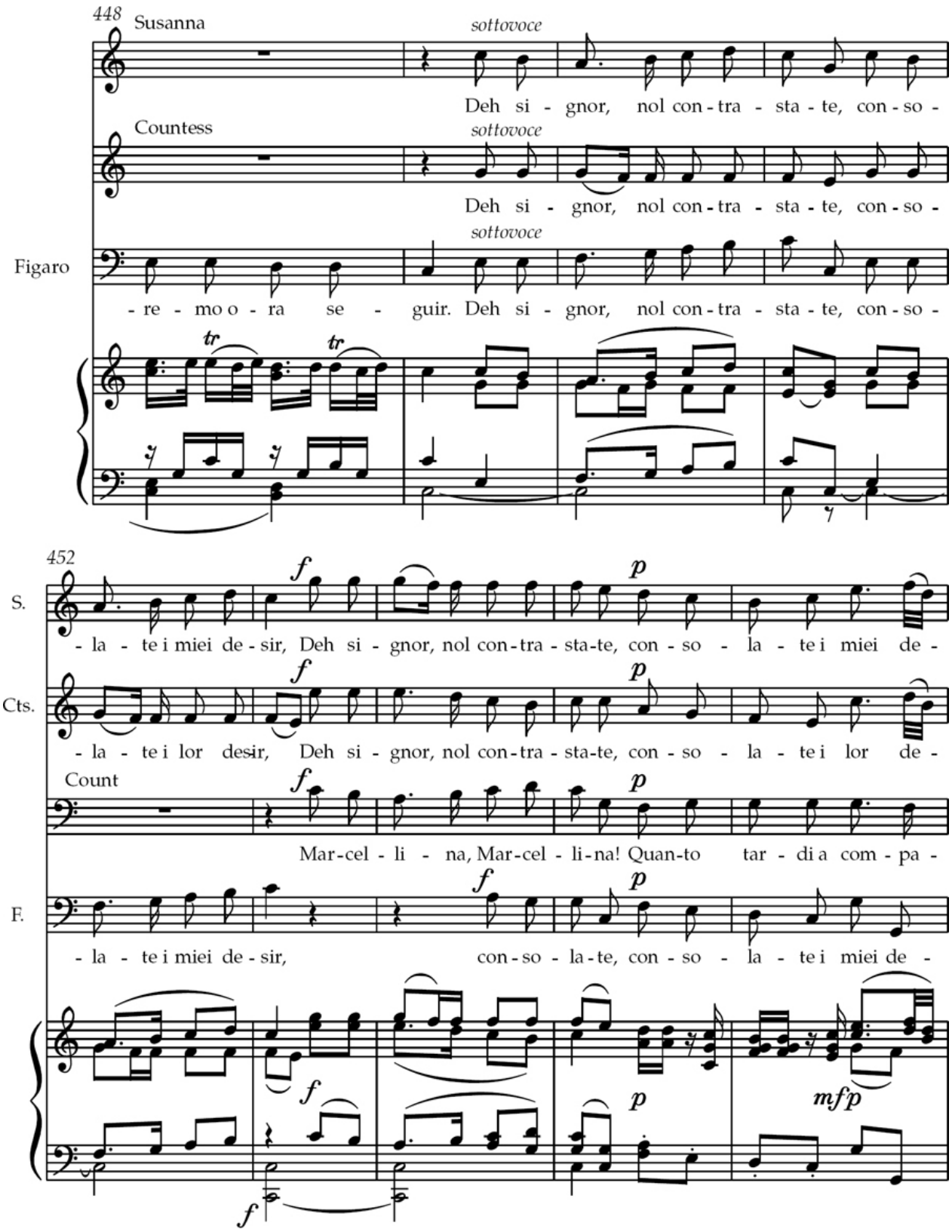
Nothing could be less "natural," of course, than a child singing an adult role of a magician impersonating a peasant, set to music of exquisite refinement. But that is not the point. The point is that Colas's musette shows that artificiality and nature were interwoven within Mozart's pastorals from the very outset of his operatic career. Colas is in fact not a magician but a benevolent philosopher—the precursor to Don Alfonso in *Così fan tutte*. Mozart seems to have intuitively understood that the pastoral, since Virgil's *Eclogues*, was the favored idiom by which European intellectuals defined their critical exile from the "town" (see Patterson 1987). The pastoral style is really a metaphor for the artist's detached role in society. It is odd, then, that *galant* nature is habitually sniped at for its fakeness, as if an "authentic" pastoral could, by very definition, ever exist. Yet this is a howler committed even by the very best critics, as in the philosopher David Hume's objection that Fontenelle's famous "Dissertation on Pastorals," the basic text of mid-century rococo aesthetics, projects a world that is hopelessly refined. "The sentiments of his shepherds," Hume complains, "are better suited to the toilettes of Paris than to the forests of Arcadia" (Hume 1911, 154).

Mozart's fake pastoral par excellence comes exactly midway in the act 2 finale of *Le nozze di Figaro*, in the C major quartet. As Figaro parries the Count's awkward questions about the contents

of the mysterious letter (much to the exasperation of his accomplices, Susanna and the Countess), Mozart transfixes the texture with a monumental pedal point on C, played by double basses and horns (ex. 5.2). It is difficult to say quite why this effect sounds so electric. Perhaps it is because the gap between nature and artifice, intrinsic to pastoral, has been stretched by Mozart to a chasm. The musette is floated on a gridlocked dramatic intrigue, expressed by the interlocking entries of the invertible counterpoint. The musette is animated by the metrical pattern of a gavotte, a dance that is socially coded as middle class (see Allanbrook 1983, 67).[1] Certainly, gavottes and musettes were conventionally paired off in baroque dance suites (as in Bach's Third English Suite), and, moreover, they often shared the same meter (Bach even calls his musette "Gavotte II"). Mozart's quartet is unusual because it begins as a gavotte and *becomes* a musette: that is, a rustic topic is laid over a bourgeois frame. In addition to the contrapuntal and metrical artifice, the musette is encased in an elaborate tonal cara-pace. The act's finale is a giant sonata form with a symmetrical tonal scheme: E♭–♭–G–C–F–B♭–E♭. The quartet falls dead center within this scheme; its resonant C♮ fundamentals, so redolent of the acoustic "nature" of Rameau's *corps sonore*, are nonetheless heard as deviant relative to the overarching E♭ tonic. The pedal is texturally and tonally distanced, and we can speak, following Carolyn Abbate (1991),[2] of a dramatic "deafness" here: Mozart's characters are deaf to the ground beneath their feet.

The use of pedals to denote nature, especially in association with compound-time siciliano meters, was prevalent in the baroque (see the *St. Matthew Passion*) and goes back at least as far as the medieval Christmas hymns (see Jung 1980). In some ways, nature does not change; only culture changes (or, at least, it changes faster). Musical style in Mozart's time became more artificial and conventionalized than ever before with the ascendancy of a new metaphoric pair: rhythm and language. Articulation superseded ornamentation as the basic technical device. It is evinced as much in the metrical pulses that interrupt the time line as in the cadential phrase endings that punctuate the stream of musical discourse. In comparison with the continuity of contrapuntal texture, a rhythmic style predicates a discontinuity between form and content: the very notion of form presupposes that form can be abstracted from a particular context. Similarly, cadences inflect phrases with the arbitrariness of the linguistic sign. Just as the gap between signifier and signified gives language its freedom to manipulate ideas, the classical style's "language character" is responsible for late-eighteenth-century music's unprecedented dexterity and suppleness. And yet this very distance from nature enabled nature to be conceptualized as an ideal—hence the contemporary preoccupation with genealogy. No longer available as a premise, nature's immediacy—epitomized in the motivation of the iconic "natural sign"—was relegated to an expressive goal. Nature became "second nature," emergent through the grid of a cultural syntax.

Example 5.2. Mozart, *Le nozze di Figaro*, act 2, scene 15, mm. 448–56




In the context of the classical style, pedals thus assume a new role. They are no longer heard, as Kant would say, "in themselves" (*an sich*), but negatively, according to their representations. The pedals in *Le nozze di Figaro* are doubly negative, formally and texturally. They interrupt the form and grate against the texture, short-circuiting its harmonic syntax. Most remarkably, the gridlock projects the (natural) materiality of the texture, so that the appoggiaturas are enjoyed as affective objects in their own right, rather than as abstract syntactic markers. Surprisingly, "nature" is not in the pedal after all; it is in the human subjects who observe them. The "natural" is thrown back from the object (the pedal) to the subject (the singers).

According to Kant, "nature is cognized by us only as a phenomenon" (1989, 38). We can have no prior (*a priori*) knowledge of things "in themselves"; we can know them only as they appear to us: "Our intuition is nothing but the representation of appearance. . . . What objects may be in themselves, and apart from all this receptivity of our sensibility, remains completely unknown to us" (1986, 82). Kant's insight that the task of philosophy is not to investigate the nature of perception (or

the perception of nature) but the cognitive limits and conditions of such an activity sounds, as it were, the deepest keynote of the age. What I term the "Kantian pastoral"—the critical viewpoint on the sense-impressions of nature—articulates the antinomy of musical "nature" in the classical style. It might seem surprising, then, that I ignore Kant in this chapter in favor of a much inferior philosopher called Johann Sulzer. I do this for several practical reasons. As is well known, Kant disparaged music as "more a matter of enjoyment than of culture" (1989, 194), since "it speaks by means of mere sensations without concepts" (193). Music is thus a kind of sonic kaleidoscope, a play of sensations leaving no "lasting impression" (195). Sulzer explores many of the philosophical issues that would acquire their definitive formulation in Kant's great critiques. But he does so, crucially, with a vastly superior technical grounding in the theory of music. For example, while Kant states that music is an art "without concepts," Sulzer argues that the "concepts" of music are its metrical and formal patterns. Moreover, Sulzer's argument is actually a Kantian one, comparable to the famous analytic of time consciousness in the first critique: as with time, Sulzer shows that our perception of rhythm is a regulative activity. In other words, rhythm is all in the mind.

A further reason for focusing on Sulzer is that he is much more interested than Kant in questions of language—in particular, the great "origin of language" debate that was imported into Germany from France. Music was considered a variety of language; likewise, metaphor shifted from the province of painting (*Bildlichkeit*) to that of poetry. Lastly, many of Sulzer's ideas were translated directly into musical terms by the theorist Heinrich Koch. Koch's *Versuch* offers the most cogent and systematic theory of form in the eighteenth century. It demonstrates the interdependence of music's rhythmic and linguistic metaphors. Reading Mozart through Sulzer and Koch, then, gives music theory access to Kant via the back door.

## 1. THE DIALOGUE OF RHYTHM AND LANGUAGE

The metaphors of rhythm and language are two sides of the same coin, the interface being periodic articulation at rising levels. Mattheson (1739, 224), a transitional figure between classical and baroque, illustrates the interdependence of rhythm and language by punctuating a sixteen-measure minuet at metrical intervals (ex. 5.3):

Example 5.3. Mattheson's punctuated minuet




The punctuation marks indicate increasing degrees of closure, from the comma, semicolon, and colon to the full stop. Hence the end of measure 2 affords a weak point of closure analogous to a comma; the cadence at measure 4 is stronger, like a colon; and the cadence at measure 8 stronger still, a full stop. This hierarchy of closure is based on a geometrical grid of binary, symmetrical proportions. It is this grid that gives musical punctuation its metrical quality. But the analogy between meter and punctuation is a forced one, because the two principles pull in opposite directions. Metrical grouping is orientated toward the *head* of the group, the arsis; punctuation interrupts the flow of the rhetorical stream toward the *end* of the period, when the full sense of the utterance is

fulfilled. "The period," according to Sulzer, "is a speech that is made up of several interlinked phrases, whose full meaning is not understood until the last word" (1777, 2:405, "Periode"). Kirnberger compares this ending with a perfect cadence: "A principal section of a composition always ends with such a perfect cadence. Therefore it may be likened to [the end] of a paragraph in speech which concludes a succession of sentences that are individual yet related by a central topic, after which the speech pauses for a moment" (Beach 1982, 114). The dialogue between rhythm and language, then, engenders a conflict of orientation: head orientation versus end orientation. It develops, ultimately, into a dialectic between dance and lyric, concept and expression, reason and poetry. Does (musical) language transcend nature or aspire to it?

### *Rhythm*

At every period in which people have considered music's position in the world, the metaphor of rhythm has provided an interface between the patterns of stress peculiar to music and the cycles of life and the universe. Musical rhythm has been compared to the beating of the heart; the intake and exhalation of breath; the body in motion, gesturing, walking, and dancing; metrical patterns of poetry and speech; the alternation of night and day; and the cycle of the seasons. By virtue of its intrinsic order, rhythmic pattern is linked not only to physical motion, but also to the geometry of the world in general, and to the rationality of the mind itself. These comparisons were common currency in the seventeenth century and before. The question is why the metaphor of rhythm became so central to musical thought in the classical period. In the mid-eighteenth century, rhythm displaced harmony as the paradigm of metaphorical projection. The target for this projection was the understanding of musical form. The metaphor of "form as rhythm" regulated compositional treatises by theorists such as Joseph Riepel and Heinrich Koch. At the heart of this metaphor was the notion of periodicity—namely, that the alternation of strong and weak beats in a metrical pattern could be grouped at ever increasing levels. Measures could be grouped by analogy to beats, phrases could be grouped like measures, sections like phrases, and so on. The question still remains, however, why periodicity should become so pertinent now, given that the hierarchical concept of meter was hardly new.

The sudden awakening of the rhythmic metaphor was due as much to the crystallization of a new empiricist epistemology as to changes in compositional style. In the first respect, philosophers thought of knowledge no longer as the divination by the mind of absolute, fixed truths, but now in the more dynamic and mediated terms of the working of the mental faculties. As we will see, particularly with Sulzer, this psychological approach accorded with rhythm's dynamic nature, as a pattern unfolding, and comprehended, through time. It was this temporal, evolutionary aspect that was so alien to universal harmony, and that ultimately secured its demise. In a powerful sense, then, the concept of periodic rhythm was always out there and simply awaited the birth of a "rhythmic" music philosophy to make full use of it. In the second respect, that of compositional practice, it could also be said that musical style converged with a preexistent concept of periodicity. For Descartes, periodicity was a purely mathematical, theoretical model, kindred with the harmonic consonances and with only a limited connection to practical music (see Seidel 1970). This is the same speculative tradition in which Rameau discovers meter and harmony's common grounding in proportion: "We may derive meter from the source of harmony, for meter consists only of the numbers 2, 3, and 4, numbers which also give us the octave divided arithmetically and harmonically" (1971, 164). Although Rameau recognizes that "a multiple of the number four is always the most perfect" (175), he does not actually construct his own large-scale works as transformations of quadratic units. Similarly, in the sphere of composition itself, although four-measure phrases and symmetrical dances were perfectly familiar to the baroque composer, periodicity was not representative of expanded forms. A Bach prelude may easily begin with a periodic phrase, but this feeling of symmetry is not sustained at the level of the paragraph, or of the discourse as a whole. By contrast, a Mozart sonata-allegro movement audibly projects a sense of formal equilibrium and large-scale tonal rhythm conformant with the dynamics of the individual phrase. Classical form, with its aurally transparent

functional differentiation between beginnings, middles, and endings, can be as predictable as a rhythmic pattern. We know where we are in a sonata, in a way that is not possible in the less conventionalized forms of the baroque. But the link between form and rhythm is not literal: the listener's perception of strict symmetry fades above the level of the phrase; a beat is a durationless instant, whereas a formal juncture, be it a cadence or a coda, occupies real time. Rather, the association of rhythm and form emerges only through an imaginative, metaphorical act. Through this act, measures and sections are "heard as" metrical beats, and the experience of symmetry or periodicity is mediated through the concept of musical content. As with seventeenth-century contrapuntal manuals, it was the task of the compositional treatise to inculcate such metaphors. In Riepel's and Koch's treatises, the modest minuet is just as much a pedagogical model as *contrapunctus simplex* had been for Bernhard. In fact, the metrical dance fulfills a role precisely analogous to the baroque contrapuntal species: as a basic-level model of musical grammaticality and a source for projection onto more complex, expanded structures. With its readily comprehensible periodicity, the dance mediates between the concepts of rhythm and form. The metaphor of "form as rhythm" would prove to be the most powerful of all musical metaphors, given the abiding preeminence of the classical style in our musical culture.

Sulzer's essay "Rhythmus," from his *Allgemeine Theorie*, is the first attempt to psychologize rhythm as a process inhering in the mind rather than in the objects of perception. A cognitive theory of rhythm was vital if the leap from meter to form was to be productively made. I will explore Sulzer's writings in due course. But it is useful to begin with a precursor to Sulzer's theory, one that provides an important stepping-stone from universal harmony to universal rhythm: Charles Batteux's concept of rhythm as "mental interruption" (*repos de l'esprit*, resting point of the soul). For Batteux, music reflects the world because music is "entirely governed my measure," and measure is present in all things: "Everything works according to measure, everything moves in regular time." This espousal of mensuration reflects the endurance of universal harmony in Batteux's thought. But the medium of measure, and the true object of Batteux's interest, is motion or rhythm, and he finds all of nature to be governed by this principle: "It is Nature in which everything is but movement and rest." And human beings participate in nature through rhythm: "all our limbs have an understanding which is rhythmic or proportional; our steps are equal; we breathe at regular intervals; the pulsations in our arteries are even" (1756, 103). The dynamic metaphor allows Batteux to find continuities between domains. The common term is interruption, or resting point (*repos*), of which he lists four types: "of the breath, of the spirit, of objects, of hearing" (98). Repose can be physical, as in the motion of objects or the process of respiration. But it is also a principle of cognition, through which the visual or aural field is demarcated. Batteux's resting point of the spirit denotes articulation, what we would nowadays call grouping procedure. In the sphere of the fine arts, this principle is most evident in the punctuation of a discourse. Batteux views discourse in terms of interruptions to the rhetorical flow: "All discourse is a river which flows: this is the emblem under which the ancients have portrayed it: *flumen orationis*" (95).

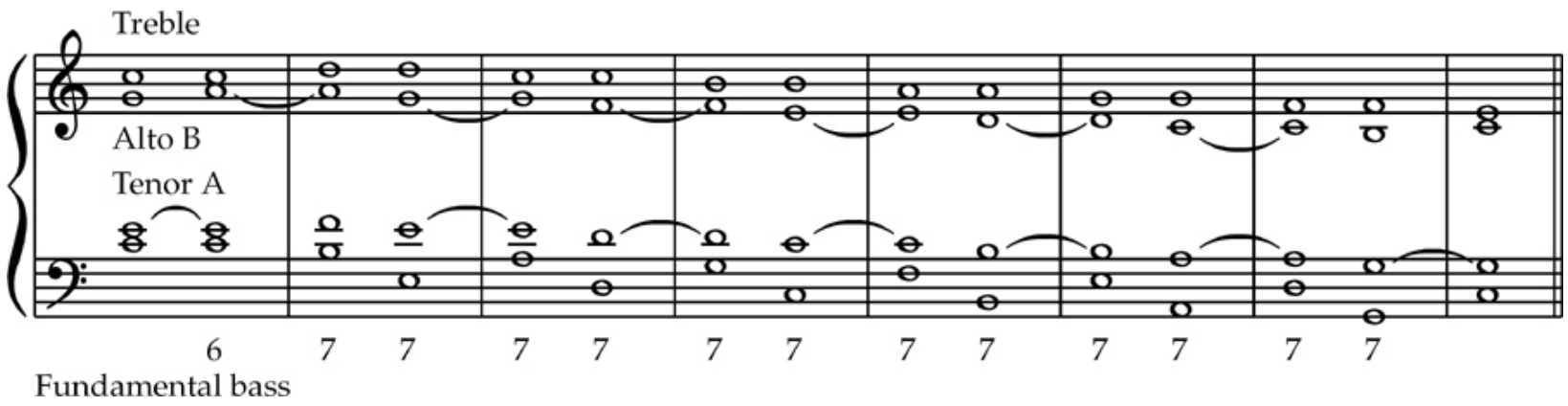
This identification of rhythm with articulation is perhaps the most important move made by eighteenth-century music aesthetics. At one stroke, it opens up pathways between rhythm and form (the intramusical metaphor) and between rhythm and language (the cross-domain metaphor). In particular, Batteux's *repos de l'esprit* was directly taken up by Koch as *Ruhestellen des Geistes*, via the German translation of Batteux's works made by the poet Karl Wilhelm Ramler. Ramler helps us understand the linguistic as well as the rhythmic metaphor, as we shall see in the second part of this section. We must begin, however, by exploring the implications of articulation in the context of harmonic theory, since a musical work's *flumen orationis* is really its tonal process. In the transition from baroque to classical harmony, I see articulation functioning in three basic ways: as deflection of the stream of rhetoric, as normative cadential marker, and as subversion of metrical pattern. The last mimics the rhetorical effect of type 1, but filtered through the conventionalized classical syntax of type 2. This technique of mediating physical interruption through normative structure, recuperating

nature through the grid of culture, will take us toward a deeper concept of metaphor in line with what philosophers such as Moses Mendelssohn and Gotthold Lessing believed poetic metaphor to be.

## INTERRUPTION TYPE 1: THE CIRCLE OF FIFTHS

Interruption is foundational to Rameau's harmonic theory. It takes the form of cadential evasion, without which harmonic continuity is not possible. Rameau grounds musical progressions in the circle of fifths, which represents an interlocking cycle of perfect cadences: "The entire harmonic progression of dissonances consists solely of a chain of dominants" (1971, 224). The circle of fifths (in Rameau 1971, 255) constitutes a closed tonal universe for Rameau, a post facto rationalization of the tonal space we saw operating in Schütz's psalm setting (ex. 5.4):

Example 5.4. Rameau's circle of fifths




Rameau states that "this progression of chords [circle of fifths], which is the essence of the most natural harmony, is so much a unit that we often become habituated to it before we understand it" (1971, 410). In keeping with the spatial metaphor, these fifth progressions have the natural momentum of Newtonian mechanics. As with a moving object, a cadence can be deflected through "collision" with another chord. Rameau quotes Father Pardies: "A moving body meeting another body which is at rest gives the body at rest all its motion and remains immobile itself." Hence Rameau understands interruption or "syncopation" in a mechanistic sense, as a collision of sounds, after the original Greek meaning of syncopation as "collide together" (78). If "the natural progression of the lowest part in perfect cadences is to descend a fifth" (68), then a harmonic "license" is an interrupted, or "deceptive," cadence (*cadence rompue*), by which the seventh chord ascends a tone or semitone instead of falling a fifth. As a composer, Rameau was personally aware of the rhetorical potential of abrupt leaps between distant chords or keys: "Despair and all passions which lead to fury or strike violently demand all types of unprepared dissonances, with the major dissonances particularly occurring in the treble" (155).

Clearly, since all music is born from the deflection of the fifths cycle, there is in principle no substantive difference between interruption as rhetorical license and interruption as grammatical axiom—only a difference of expressive intensity. Rameau's circle of fifths, punctuated by cadential evasions yet pushing ever forward toward its final tonic, is analogous to Batteux's stream of rhetoric, with its resting places on the way to a terminal full stop. This quintessentially baroque model of musical articulation is founded on a linear logic of contiguous chordal blocks. Classical articulation turns this model inside out: it is based on a radical discontinuity between chord and cadence and a quasi-rhythmic alternation of structural and passing harmony.

## INTERRUPTION TYPE 2: PHRASE

Classical tonality takes as its starting point not the circle of fifths (conceived, as Rameau says, as a "unit") but the self-contained phrase, inflected by cadential markers. Crucial to this development is a reversal in the status of articulation vis-à-vis the discourse that it punctuates. Hitherto, the musical syntax resided in the flow from one chord to another, with articulation defined negatively as a

deflection of the rhetorical stream. Now the syntax is taken away from the body of the music and encapsulated within the phrase endings themselves, which are arranged in stereotypical patterns. One could say that the content of the phrase now "interrupts" the articulation. To demonstrate this principle theoretically necessitated a reinterpretation of musical punctuation (as in Mattheson's minuet above) in terms of degrees of tonal closure—that is, "final" and "nonfinal" endings. In Koch's hands, Batteux's *repos de l'esprit* as rhetorical interruption becomes *Ruhestellen des Geistes* as tonal sign. However, the theorist who appears to have invented this model of articulation was not Koch but Joseph Riepel, in his *Anfangsgründe zur musikalischen Setzkunst* of 1752. Riepel characterizes phrases according to their endings, which he annotates with void or filled squares. The closure of a phrase depends on whether it ends on a tonic or dominant, and on its melodic scale step (1̂ is weakest, 3̂ is the strongest, 5̂ is weakest). A phrase that ends with either a 1̂ or 3̂ is called an *Absatz;* a *Grund-Absatz* ends on a tonic; the *Aenderung-Absatz* ends off-tonic, typically with a 2̂; a final, full cadence is an *endliche Grund-Absatz* (1755, 37). Koch's symbology is slightly different. Triangles indicate the end of an "incise" (*Einschnitt*), squares the end of a phrase (*Satz*) (ex. 5.5):

Example 5.5. A 4-bar phrase by Koch (from 1983, 14)




Cadential formulas at the end of phrases, since they are so clearly understood, are not marked. But, to all intents and purposes, Riepel and Koch shared the same insight that phrase endings are understood by the listener as comprehending the entire phrase, as a kind of musical "sign." In other words, the meaning of the phrase is defined by the tonal orientation of its final note. Koch is explicit on this point: he labels a phrase either a "I phrase" or a "V phrase," depending on its ending. Riepel and Koch's mode of articulation presupposes a break between form and content. It also requires, on the part of the listener, a degree of abstraction with respect to musical material not seen before. The nature of this abstraction is most clearly revealed at the very beginning of the *Anfangsgründe*.

Riepel's Praeceptor tries to teach the student (the Discantista) how to construct a musical period (1752, 7). He starts by showing that a well-formed period is composed from a rising antecedent and a falling consequent phrase (ex. 5.6):

Example 5.6. Riepel's arch




Discepulus. Gut; ich will meinen Men. gleich steigen und fallen lassen, z. Ex.

In setting so much store by contour, the Praeceptor seems to be invoking the archetypal arch-shaped intonation of baroque oratory. For example, Bernard Lamy, in his *L'art de parler*, speaks of the rising and falling contour of a breath as both an index of expression and a determinant of unit length. The parts of a sentence should be separated by equal intervals, so that "the more this equality is exact, the more pleasure is felt in it" (Lamy 1672, 199).[3] Lamy's breathing cycle suggests an iconic correlation between contour and expression. His theory of expression is predicated on a Cartesian aesthetic that ascribes to the soul an unmediated access to sensory impressions. By contrast, the Enlightenment theory of language grounds the possibility of articulation and signification on a notion of the arbitrary sign. This notion takes the form, in music, of a new disjunction between the note-to-note content of the phrase and the cadential marker (or sign) at its end. We see the shift from the iconic to the symbolic in Riepel's next example (ex. 5.7):

Example 5.7. Riepel's encapsulated arch




Having dismissed the contour model, the Praeceptor shows the student that the same rising-and-falling pattern can be encapsulated in the cadential endings of the phrases, enabling the period as a whole to oscillate freely. Hence the top A of measure 6 (marked by Riepel with a cross) "can express Rising" (1752, 8), and the final two measures of the consequent falls to the cadential C. Riepel's insight is important because it reveals a new attitude to musical perception. The act of listening is discontinuous, insofar as we connect cadential markers that are separated in time. The act of listening is founded on an arbitrary process of signification, since the cadential marker stands in for the phrase as a whole.

"Discontinuous listening," the reading of tonal "cues" separated in time, comes with a vast intellectual and cultural baggage, which I will begin to unpack in later parts of this chapter. But "discontinuous listening" also has its feet solidly on the ground of the new harmonic practice: the *galant* style. Why should *galant* harmony be more "rhythmic" than baroque counterpoint? In the first instance, this claim seems to go against the evidence, since the preparation and resolution of dissonance in the older style is strictly determined by metrical placement. A *galant* dissonance, by contrast, may occur on any beat of the measure. But the issue is not rhythm *tout court*, but a metaphorical "tonal rhythm." The essence of *galant* harmony is the differentiation between structural and passing chords, by analogy to strong and weak metrical beats. The alternation of structural and passing harmonies is defined primarily by tonal criteria and so cuts across the tactus of the music.[4] The essential continuity between tonal progression and punctuation, intrinsic to harmonic theory from Zarlino to Rameau, was first ruptured by Kirnberger, especially in his treatment of suspensions.[5] Although Kirnberger does not specifically employ the terminology of tonal prolongation, a broader conception of tonal space is implicit in his suggestive distinction between essential (*wesentlich*) and incidental (*zufällig*) harmony, as well as his use of the melodic phrase as premise. A phrase is an outline of a key area. Both these concepts were extended by Koch (Lester 1992, 276–84). In Koch's tonal space, passing chords intervene between the three basic harmonies of tonic, dominant, and subdominant, and these essential chords, articulated by cadences, outline the key. Conceiving of the phrase as a tonal entity leads to a theory of form.

## INTERRUPTION TYPE 3: PATTERN

The third type of articulation is the interruption of pattern. It supervenes upon type 2 and also returns to elements of the baroque. From the baroque idea of the stream of rhetoric, it recuperates the force of an expressive interruption. However, the interrupted object is now not a chord but a stereotypical *galant* phrase ending. Rather than deflecting a linear process, the disruption is measured against a normative periodic structure. Expression is now understood as deviation from regularity. At this level, the purely syntactic articulation of Koch's *Ruhestellen des Geistes* yields to the original sense

of Batteux's *repos de l'esprit* as oratorical punctuation. This sense of return to an older, baroque style of articulation informs Koch's general view of elaboration. A phrase may be extended by embedding or attaching motivic repetitions, or by adjusting, eliding, or repeating its phrase ending. Either way, extension entails switching the focus from a metrical, periodic, "top-down" discourse to one that is linear, generative, and "bottom-up." German critics such as Wilhelm Seidel (1975) and Hermann Forschner (1984) have designated these two discourses "rhythmic" and "logical," respectively. Ordinarily, logic is subordinate to rhythm: one extracts the melodic substance of a phrase by reducing it from four to one measures, that is, by eliminating redundancy. *Einschnitte* (Koch's term for motivic segments) are a product of dividing a phrase in two; one does not construct a phrase by multiplying *Einschnitte*. By contrast, in Koch's theory of extension (*Erweiterung), Einschnitte* have an opposite, now logical or generative, function: motives can now be repeated or sequenced. Koch's logical idiom is most in evidence in second-subject groups of sonata forms, as we shall see. The second group is logical for a range of reasons. To a much greater extent than the first group, it is typically dedicated to the repetition and elaboration of a characteristic motive. The group is expanded by repeated deferral of phrase endings. Whereas the first group prolongs its opening tonic, the second group has to wait until its end to receive the punctuation mark that completes its sense. With its successive postponement of tonal closure, the logical idiom mimics the rhetorical flow of baroque tonality, as represented by Rameau, albeit from a completely new perspective.

This retrospective slant is not historical so much as ontological, insofar as it restores a materiality provisionally bracketed by articulation. The phrase structures identified by Riepel and Koch work precisely because they are invariant across different melodies. In a formulaic phrase, the material has literally no signification. The content of such melodies can be scooped out and replaced with no loss to their intelligibility, so that the material is completely assimilated by syntax. The lyricism typical of second groups recaptures much of this materiality. But is not the term "logical" a misnomer, since lyricism surely implies emotion rather than abstraction? The point is that type 3 articulation is dialectical, not schematic, representing an advance as much as a return. Both sides of the opposition, rhythm and logic, are "antinomic" (as Kant would say): split, again, into rational and affective poles. A rhythmic pattern, as well as encoding a mathematical order, enshrines an emotional affect. Dance, after all, elicits a direct and visceral physiological response. So too with song. "Logic" carries a sense that a shift to a more lyrical mode entails a growth in civilization. Such an advance reflects the utopian strand of Enlightenment semiotics. But song's affective quality denotes the opposite, archaic strand of the Enlightenment debate about origins—the notion of "back to nature." "Nature" for the classical style comprises the very substance of its technique, a materiality that was suspended by the abstract conventionality of its syntax. The object of classical discourse is the recuperation of this materiality, filtered through the grid of syntax—hence not nature unmediated, but a "second nature." German philosophers such as Moses Mendelssohn, Lessing, and Johann Gottfried Herder identified this process of recuperation with the workings of metaphor in language. We are led, inexorably, to what Adorno called "music's language character" (see Adorno 1992; Paddison 1998), its semblance to speech. A rhythmic pulse, as well as marking time, can also be an expressive gesture.

## *Language*

Musical style in the eighteenth century is commonly represented as a retreat from language toward an instrumental music that was formally autonomous and expressively abstract (Neubauer 1986). And yet, as Adorno was among the first to observe, this very autonomy and abstraction served actually to enhance music's "language character" (Adorno 1992). In Paddison's words, "in becoming separated from direct social function, [music] has developed its own internal dynamic, one of increasing logicality, rationalisation and technical control of all aspects of its material" (1998, 74). My task in this chapter is to identify music's language-like aspects not on the broad—hence figurative—level of rationality, but in terms of the actual nuts and bolts of grammar. In other words, the question is: how, for a short time, did music behave like language? The starting point for the

*galant* style was the miniature phrase as a self-contained entity. Composition became an *ars combinatoria*, by which stereotypical phrases were arranged and transformed by analogy to words. Periodic phrasing patterns, as well as graded cadential phrase endings, organized these lexical units according to a describable (and predictable) syntax. Music even attained a referential realm, by virtue of a variegated topical universe of social registers, theatrical idioms, and dance patterns.

This convergence between music and language was also motivated by changes in literary taste. The reaction from the elaborate periodic constructions of the baroque toward a new simplicity is epitomized in the writings of Gottsched (1730), whose polemic against the dramatic poetry of Lohenstein is precisely mirrored in Scheibe's attack on Bach.[6] Long and florid Ciceronian periods give way to a curt and loose *stile coupé* modeled on Tacitus, which Kirnberger defines as "a literary style characterized by a succession of short periods." According to Kirnberger, *stile coupé* was reflected in the music of those "composers who seek beauty in making a cadence every other measure or even every measure." Excessive articulation was to be avoided, however ("this style soon becomes dull and boring"), and the desire was to reformulate the principles of periodic construction on the basis of Enlightenment ideals of clarity and regularity (Beach 1982, 118).[7]

The convergence between music and language, manifest in stylistic changes in the materials of both domains, was reinforced by new critical and philosophical orientations. *Ut pictura poesis* yielded to a paradigm based on the primacy of poetry, a move that received its classic formulation in Lessing's *Laocoön* (1984). Lessing analyzed the arts on the basis of the particularity of their signifying practices and their relationship to cognition. His cognitivist stance enabled him to reverse the traditional ranking of "natural" and "arbitrary" signs in the arts. Dubos had epitomized the baroque view that natural sign-systems, such as painting, were superior because they bore an iconic or isomorphic relationship to their referents. But poetry, for Lessing, is superior to painting precisely *because* it utilizes arbitrary signs and so engages the reader's imagination.[8] The devaluation of the natural sign reflects a growing conception of cognition as a developmental process, rather than a fixed picture of reality. It also accords with a conception of time as the proper medium of thought. With painting, the viewer is overwhelmed by a simultaneous aggregate of features, because the order in which these impressions are absorbed is left completely free.

The shift from a spatial to a temporal paradigm for the arts seems to align music firmly with poetry. But the semiotic affinity between the two media—that is, with respect to their sign types—is far from straightforward. Lessing favors the linguistic sign because of its arbitrariness. Yet music features in the genealogical narratives of Condillac and Rousseau as an originary or transitional stage between emotion and language, as a natural sign of the passions. Even if music and language originate in the same root, they ramify from divergent branches and are discovered in the modern age confronting each other oppositionally. To be sure, in the second half of the eighteenth century, it is the "emptiness" or indeterminacy of musical expression that begins to interest philosophers as a symbol of the imaginative nature of the aesthetic in general. In Kevin Barry's words, music's significance becomes located "in its absence of meaning, and therefore in the act of listening, in the energy of mind which its emptiness provokes" (1987, 65). Nevertheless, these judgments are made on the level of expression, of feeling, rather than the grammatical level Lessing assumes. A properly cognitive approach to the musical imagination must proceed from a definition of the arbitrary musical sign, on the level of musical grammar.

We now begin to see the broader significance of the discontinuous listening modality I explored above, with its arbitrary relationship of phrase to phrase ending (tonal signs). We also see that the transition from universal harmony to universal rhythm constitutes the musical analog for the paradigm shift of painting to poetry, spatial to temporal. A rhythmic pattern unfolds through time. Equally, the cognition of rhythm develops in time. The mind attends to one beat after another, seeks regularities at increasing levels, projects into the future in search of a broader pattern, and retrospectively adjusts patterns in the light of experience. A rhythmic pattern allows the mind to hold distant points of time together, to survey a temporal event as if it were an object or a concept. It was

Sulzer's achievement to elaborate a cognitive theory of rhythm in a way that reflected the concerns not only of philosophers of language, but also of composers. In other words, I shall show later how Sulzer's essay "Rhythmus" parallels both his essay on the origin of language and Koch's compositional treatise. The present section, by way of stage-setting, outlines some of the other areas in which issues of rhythm, language, and cognition converged.

Sulzer's essay "Über den gegenseitigen Einfluss der Vernunft in die Sprache, und der Sprache in die Vernunft" (Observations on the Reciprocal Influence of Reason on Language and of Language on Reason) must be considered in the context of German reception of Condillac. The problem of the origin of language was introduced to Berlin by the expatriate Frenchman Pierre-Louis de Maupertius in his *Réflexions philosophiques sur l'origine des langues et la signification des mots* of 1748 (Scaglione 1981, 58). Maupertius instigated a long-running debate on this question, which Sulzer's essay, submitted to the Berlin Academy in 1768 (and published in 1773), attempted to solve. The prize was finally awarded to Herder in 1772, for his *Über den Ursprung der Sprache*. Sulzer and Herder, in common with a constellation of other figures such as Moses Mendelssohn, Georg Friedrich Meier, Johann Peter Süssmilch, and Lessing, gave the French problem two peculiarly German turns, one cognitive and the other poetic. I will deal with them both.

The Germans' cognitive turn entailed linking the genealogy of language with an epistemological tradition stemming from Leibniz, though popularized by his student Christian Wolff. Wolff's philosophy describes the processes by which the mind, or "soul," turns percepts into concepts—the path that leads from an initial chaos of impressions to the clear cognition of the world. Wolff's 1713 handbook of logic, *Rational Thoughts on the Powers of Human Understanding and their Correct use in the Cognition of the Truth* (Wellbery 1984, 12), defines the progress of knowledge from crude sensations to refined conceptualizations in terms of a set of formal distinctions, such as "obscure" (*dunkel*) and "clear" (*klar*), "confused" (*undeutlich*) and "distinct" (*deutlich*).[9] The shift from "clear" to "distinct" cognition involves an opposition both between whole and part, and between simultaneous and linear. Clear representation attends to the object as a whole; distinct representation attends to it in terms of its constituent parts. Clear cognition presents the object's features simultaneously; with distinct cognition, its features are distributed along a succession, in time. A third opposition divides "lower" and "higher" borders of language. Clear cognition involves simple designation, by which an object is merely named. Distinct cognition involves complex discourse, "enumerating for someone else" (Wellbery 1984, 14) what the object's features are.

So far, there is little to divide Wolff's account of the origin of knowledge from the standard plot of the French Enlightenment, a passage from "nature" to "culture." The German and French approaches part company, however, over the notion of the arbitrary signs of language. Wolff sees the institution of the sign as yet another aspect of the subject's emancipation from its dependence on the contingency of sensations. Signs are merely names we give to features we discriminate through acts of attention (*Aufmerksamkeit*) and reflection (*Überdenken*). Hence the emergence of language signals the dawning of reflection, the mind's attainment of a degree of critical distance and freedom from the thrall of sensation. It is here that Wolff's theory stands diametrically opposed to the account given in Condillac's *Essai sur l'origine des connoissances humaines* (see Thomas 1995). Condillac's famous "just-so story" of the emergence of language posits a primal scene of two children alone in the desert, who communicate at first in a gestural "language of action."[10] For Wolff, signs presuppose reflection; for Condillac they are the prerequisites of reflection.

The problem with Condillac's account, a problem German critics such as Herder would seize upon, is that it hypothesizes a stage anterior to reflection. How could language exist prior to thought? The children who supposedly discover language are already rational beings, insofar as they are human beings distinct from animals. Herder (1986) makes reason a foundational attribute of human nature, rather than a faculty that is learned or imposed from without. His move requires broadening the definition of reason to include the general state of being in the world, a power of reflecting over one's environment that is absent in animals yet present in an infant: "For if reason is not a separate

and singly acting power but an orientation of all powers and as such a thing peculiar to his species, then man must have it in the first state in which he is man. In the first thought of the child this reflection must be apparent" (Herder 1986, 112). Herder's name for this reflective power is *Besonnenheit*. Hence Herder follows Wolff, rather than Condillac, in seeing reflection as primary to language. But Herder is much clearer than Wolff on the matter of language and reason's codependence. He is less interested in questions of primacy than in demonstrating language and reason's simultaneous emergence as two aspects of the same process. The distinguishing marks that characterize language arise in the natural course of parsing the objects of perception.[11] The extraction of these distinguishing marks results in a "clear concept" (Wolff's "clarity"). It is with this "work of the soul," Herder concludes triumphantly, that "human language is invented!" (116).

Herder's notion of simultaneous emergence succeeded in reconciling Wolff and Condillac where many other arguments, such as Sulzer's, had failed. Sulzer, for example (1773), though he advocated the primacy of reflection, thought that names were simply tacked onto preformed concepts. Herder's synthesis was due to his essentially dynamic and sonic view of reality, where both concepts and words are traces of the sounds objects make in action. Sounds are "images of action, passion, and living impact" (Herder 1986, 135), and they are originally registered as verbs. "The child names the sheep, not as a sheep but as a bleating creature" (132). Hence "sounding verbs are the first elements of power" (132) and precede nouns in the formation of language. Names and concepts are coextensive for Herder because they are both traces of the dynamic thrust of impressions upon the mind. The physicality of Condillac's "language of action" is relegated by Herder from the sphere of communication (gesturing) to the sphere of cognition. Herder regards hearing as a privileged sense in this respect, "the gateway to [the] soul, and the connecting link among the remaining senses" (142). Hearing is the "middle" sense, mediating not only between nature and the mind, between reason and language, but also between the directness of touch and the detachment of vision. Hearing is thus emblematic of the spirit of mediation so typical of German aesthetics.

This same spirit of mediation is manifest also in the second of the two German takes on the language problem, the poetic. In eighteenth-century Germany, the origin-of-language problem was not simply a matter of philosophical debate; it concerned also how language ought to be spoken and written in the present day: genealogy was linked to poetics. The issue of linguistic origin was a live one for German critics, because the state of their literary language was judged to be inferior to that of other European languages such as French and English. Gottsched's classicizing project, which was designed to emulate the logic and clarity he admired in French grammar, was countered by the Swiss critics Johann Jakob Bodmer and Johann Jakob Breitinger, who affirmed the emotional, gestural, and concrete qualities believed to be especially characteristic of the German language. Hence linguistic renovation entailed, in Blackall's phrase (1959), a very literal "return to origins." Herder praised the Swiss for salvaging much valuable obsolescent vocabulary, and he urged the restoration of the sensuous and rhythmic aspects of "primitive" language: *sinnlich* onomatopoeia and a freer word order directed toward expressive *Machtwörter*. Herder saw language developing historically in three successive stages, from poetry, through prose, to philosophy. He discovered present-day German to be in the middle stage, the age of prose, but looking with one face backward toward poetry and forward to philosophy with the other. German ideally should combine "the advantages of the poetic stage with those of the philosophical, a high degree of order as well as freedom" (Scaglione 1981, 75). To this end, the language must be improved in both directions: rendered both more *sinnlich* and more logical. Condillac had discussed the role of syntactic inversions of "regular" word order in creating a poetic, emotional effect. Putting the object at the head of a sentence, as occurs through poetic inversion, resembles the practice of ancient languages, where head-position represents a gesture toward a signified object. The "language of actions," of gesturing toward objects, is thus taken up by poetic language. Although Condillac recognized the prevalence of inversion (or head-position) in primitive language, he did not advocate its revival. Herder, by contrast, defended

inversion as the very soul of language. Through inversion, German grammar would become more *rhythmic*.

The text that makes the most forceful connections between rhythm, the genealogy of language, and the origin of music is in fact not by Sulzer but by Johann Forkel. Forkel's account of the roots of music in his *Allgemeine Geschichte der Musik* (1788) is interesting as much for its treatment of Herder's idea of the stages of language as for its conceptual cul-de-sacs. So why is Forkel's approach ultimately less fruitful than Sulzer's? Forkel outlines an evolutionary narrative of musical language, beginning with a primitive phase of disconnected gestures, progressing to repeated rhythmic patterns based on single pitches, and ending with a style capable of melodic progressions. At every stage, Forkel draws an analogy between music and language. He begins by observing that what he calls primitive races are drawn toward percussive or noisy instruments. In Forkel's view, "primitive nations are only capable of rhythmic music"; and "one can compare this with sentences that are formed merely from nouns" (1788, 5). Just as individual musical tones are unmediated cries of passion, so primitive man communicated by means of "interjections and simple words, with which he described external objects in his immediate surroundings" (6).

The Herder-inspired progression from this "language of feeling" (*Empfindungsprache*) to a "language of ideas" (*Ideensprache*) pivots on the notion of repetition, that is, meter. "Man, in his earliest state, quickly realized that all simple things can be maintained through a certain kind of regular repetition. This regular repetition of simple things, which in itself is capable of hardly any variety, we call in music 'meter,' or, to give it its original term, 'rhythm'" (4). If a single tone is a mere gesture, then Forkel compares a series of undifferentiated beats to a phrase "that describes not only an object, but also its quality, and binds the two together, as when I say not just 'tree' but 'tall tree,' or 'the tree is tall,' etc." (5). Just as "primitive races" are slow to achieve this level of linguistic sophistication, it takes them a long time to "arrange a series of tones in such a way . . . that a melody, akin to a spoken sentence, can arise" (5). A style capable of connecting notes into a melody is thus, for Forkel, analogous to a "language of ideas." With the three-note scale C–D–E, the C is the "primary tone," the E is the "adjectival tone," and the D is the "copula tone"; the scale thereby forms a miniature sentence (7). The functional differentiation between structural and auxiliary notes in melody corresponds to language's hierarchical distinction between main and subsidiary feelings.

Whereas the *querelles* in France over music's origins centered on the relative priority of harmony and melody, this opposition played no part in Forkel's narrative. Forkel predicated his model upon an opposition between meter and harmonized melody. The pragmatic, pedagogical bent of German musical thought made it difficult for theorists to conceive of melody apart from harmony (e.g., Forkel's notion of melodic passing note only makes sense within an implicit harmonic context). The interdependence of melody and harmony was also fundamental to Friedrich Marpurg's concept of a musical *Urstoff*—a kind of musical "plasma"—which would later inspire Koch's formal theories (see Baker 1988). Hence the musical tokens of nature and culture are aligned differently in Germany than in France. Melody, for Forkel, represents the attainment of a civilized musical language, whereas for Rousseau it constitutes an origin. German theorists posited rhythm as a token of the primitive.

Why, then, is Forkel's account ultimately flawed? His vision of a progression from (primitive) rhythm to (civilized) melody is out of step with the prevailing intellectual ethos of simultaneous emergence and subsequent coexistence. Whereas Forkel's "civilized" music supersedes the rhythmic stage, the Sulzer school sees music as rhythmic at every stage. The spirit of mediation that informs Forkel's harmonized melody is taken one degree further by Sulzer and Koch into a harmonized and *rhythmicized* melody. Forkel is also out of step with the typically German preoccupation with a "return to origins." Modern (that is, eighteenth-century) music aimed to recapture the affective impact of rhythm, just as language aspired to the gestural, *sinnlich* qualities of primitive language. The phenomenon of rhythm is singularly well suited to perform this dual role of the primitive and modern, since it can be simultaneously passionate and rational. Rhythm can serve both as a natural

origin (metrical affect) and as a source for recursive patterning (metrical order). A generative theory of musical form could only be rhythmic.

The mediating role rhythm performs in theories of musical form parallels the structural position the aesthetic itself occupies in Enlightenment thought. According to Wellbery, "The aesthetic mediates between the flux of sensations and images, the sheer contingency of our natural being on the one hand, and the ordered unfolding of our knowledge in civilized discourse on the other." The aesthetic also marks the return of the primitive, mediated through the modern language of arbitrary signs: "In terms of Enlightenment semiotics, this means that aesthetic representations are characterized by the fact that they reactualize an archaic stratum of pre-conventional signifying procedures" (1984, 22). The return of the primitive is most pronounced in poetic metaphor. Metaphor recuperates a state of sensuous plenitude lost when natural signs yield to arbitrary signs, when intuitive cognition is replaced by symbolic cognition. Metaphor, as a mode of perception, aims at the immediacy of a pictorial image. Metaphor is always a compound sign, filtering its representation of the natural through an artificial language. Its nature, therefore, is always a second nature. Metaphor, like the aesthetic in general and the German language as a whole, combines archaic and utopian tendencies in one effect.

And what of metaphor in music? In the passage from primitive to civilized and then to metaphor we recognize the same sequence of derivations as in the three types of rhythmic articulation we explored above. An initial type, interruption, is disciplined by a metrical grid of syntactic phrase endings, which is then subverted by rhetorical interruption of a higher order. Like metaphor, Koch's "logical" mode unlocks the sensuous plenitude temporarily suspended by "rhythmic" syntax. A second-subject group is metaphorical because it recaptures a sense of concrete immediacy. Thus the development of grammar, both in language and music, unfolds in two essential moves. In the first stage, natural (painterly) representation yields to the symbolic (linguistic), with the construction of the sign. The second stage restores natural expression, yet mediated now through the sign: the sign is naturalized into metaphor. Both these stages can be explicated not just philosophically, but according to technical linguistic theories of the time. In stage 1, Enlightenment theories of periodicity assimilate punctuation into conceptualization. In stage 2, theories of syntactic (word order) inversion address how expression is liberated from concepts.

## STAGE 1: PERIODICITY

Generativity comprises the most familiar interface between music and language. The musical "metaphor of the oration," as Mark Bonds (1991) calls it, is based primarily on periodicity. A musical discourse, like a verbal oration, is articulated hierarchically into segments of increasing size, analogous to words, sentences, paragraphs, and sections. Kirnberger presents a version of this metaphor:

> A principal section of a composition always ends with such a perfect cadence. Therefore it may be likened to [the end] of a paragraph in speech which concludes a succession of sentences that are individual yet related by a central topic, after which the speech pauses for a moment. Just as a paragraph in speech consists of segments, phrases, and sentences that are marked by various punctuation symbols such as the comma (,), semicolon (;), colon (:), and period (.), the harmonic [equivalent of the] paragraph can also consist of several segments, phrases, and periods. (Beach 1982, 114)

Kirnberger alludes to the two most characteristic features of a period: its orientation toward its ending and the interdependence of its constituent clauses. Sulzer's definition neatly combines them: "The period is a speech that is made up of several interlinked phrases, whose full meaning is not understood until the last word" (1777, 2:405, "Periode"). Sulzer also clarifies an ambiguity in Kirnberger's description concerning the orientation of the generative process. In one respect, the process is analytical, flowing from a ruling concept ("a central topic"), which is then elaborated by subordinate clauses. In an opposite respect, however, it is combinatorial, proceeding from a chain of originally distinct propositions, which are then connected. The period is naturally a product both of thought and of language. But it is significant that the course of the generative process—whether it is analytical or combinatorial—is determined by whether thought or language has the upper hand.

Furthermore, each of these terms is laden with extensive methodological baggage. Thought is implicated in Sulzer's Wolffian epistemology, which is directed toward conceptual coherence. Language mixes positivist research into the rules of grammar with more speculative genealogical themes. In particular, hypotaxis, the technique whereby the period embeds subordinate clauses, was conventionally viewed as having evolved from parataxis, the juxtaposition of independent clauses (Scaglione 1981, 7). A period was seen, therefore, from the dual perspective of epistemology and grammar, to elaborate both an underlying concept and a paratactic structure. Sulzer's article on the period in the *Allgemeine Theorie* can be understood as an attempt to negotiate this contradiction.

Sulzer states that there are three ways of binding clauses together (1777, 2:406, "Periode"). The first is to simply arrange them in sequence: "He loves her, he admires her, he worships her" (*Er liebt sie, er verehrt sie, er betet sie an*). The second method is to connect clauses through copulas: "I have warned him, and will not cease to warn him" (*Ich habe ihn vermahnt, und werde nicht aufhören ihn zu vermahren*). Sulzer criticizes this idiom, since the individual clauses remain independent, and one is not truly impelled from one clause to another: the construction is still paratactic. The third, most powerful, method is to hypotactically bind clauses by means of a common noun or verb: "They were encouraged, obliged, and were often even through threats compelled to do it" (*Sie sind dazu verführt, sie sind genöthiget, und gar oft durch Drohungen dazu gezwungen worden*). The deferral of the link word to the end of the sentence performs a double service, endowing the chain of clauses with a conceptual unity and heightening the sentence's teleological flow. This combination of unity and direction marks the essence of periodic construction. From an epistemological standpoint, Sulzer states that a good period results from the interaction of synchronic representation and a linearly unfolding logical process (*Vernunftschluss*). It is striking how far his notion of representation preserves the vestiges of the old painterly aesthetic, although with the picture (*Gemälde*) now commuted from its previous status of plastic image to that of an abstract concept. In other words, a concept is for Sulzer a mental picture.[12]

The painterly metaphor is preserved when Sulzer moves to examples of periodic construction. His chief example is a convoluted Latin period by Livius that compresses into a single sentence an entire story about King Antiochus's courtship of the daughter of King Kleoptolemus. Sulzer provides two German versions, representing, in turn, a paratactic and a hypotactic arrangement of statements. The paratactic version is laid out as a chain of self-contained propositions: "From Demetrias, King Antioch came to Chalcis; there he fell in love with an unmarried maiden; she was the daughter of Kleoptolemus," and so on. Sulzer compares this to a painting with no grouping, in which the characters are arranged in a line. It is far more effective, says Sulzer, to convert all these sentences into subclauses of a single period:

> After the King had arrived from Demetrias to Chalcis, and had fallen in love with a maiden who was the daughter of Kleoptolemus, he then, after repeated requests, first through second parties, finally in person, exhausted the father, who had no desire to get into difficulties with a stronger power, and received consent, as if one were in the midst of peace, for the marriage to be consummated. (1777, 2:407–8, "Periode")

The linear sequence of statements (*Vernunftschluss*) is thus assimilated into a single image (*Gemälde*), namely, "a portrait, whose task is to represent Antiochus' foolishness in allowing himself to be governed by pleasure in the middle of an extremely dangerous war" (1777, 2:408, "Periode"). Pursuing this military theme, Sulzer explains the cognitive advantage of periodization. Somebody surveying a regiment of soldiers finds it much easier to grasp its size when it is organized into chief and subordinate divisions. A period is both cognitively more challenging, since it makes greater demands on the reader's attention (the Wolffian concept of *Aufmerksamkeit*), and consequently more satisfying aesthetically, since the emotional discharge produced by syntactic closure is all the greater for being deferred.

It is unclear whether Sulzer's picture denotes a conceptual unity that emerges through language, or, on the contrary, it refers to a prelinguistic meaning created only through discourse. If the latter, then Sulzer's theory corresponds to the contemporary doctrine of the "linearity of speech," by which language was believed not to reflect thought but to actually reconstruct it. The temporal, linear

dimension of discourse was opposed to the simultaneity of thought, which was compared to a picture. Man thus decomposes into sequential order the picturelike experience of reality.[13] The "linearity of speech" doctrine makes the eighteenth-century theory of generativity different in one crucial respect from its modern versions, such as Noam Chomsky's transformational grammar. Chomsky holds that the linguistic nuclei within his "deep structure" are linearly ordered, whereas the crux of the eighteenth century's version of this position was that linear order belongs solely to the surface. Such a position is actually closer to the linguistics of Ferdinand de Saussure, whose premise was the noncoincidence between structure and surface.[14]

But Sulzer departs from the mainstream doctrine in his general championship of the synchronic over the linear. Because of the formalist bent of his aesthetics, he stresses the conceptual unity of his periods above their temporal unfolding. The synchronic holds sway both at a prediscursive level *and* at the level of language (a direct reversal of Chomsky's top-to-bottom linearity). This extension of synchronicity from thought to discourse is most clearly manifest in Sulzer's theory of the creative process in the arts. Like his article on the period, the articles in the *Allgemeine Theorie* that deal with artistic creativity express generativity in painterly metaphors. Sulzer's creative stages are titled "plan" (*Plan*), "sketch" (*Entwurf*), "layout" (*Anlage*), "disposition" (*Anordnung*), and "elaboration" (*Ausarbeitung*) (see Baker and Christensen 1995, 55–80). There is considerable overlap between these terms. Hence, the preliminary stages (plan, sketch, and layout) comprise not only the essential substance of the work, but also its disposition. A sketch for a speech "consists of the disposition of sections through which the purpose of the speech is realized"; a painter's sketch "drafts and fills out its main parts in the order or relation he imagines them to have" (in Baker and Christensen, 64). These stages unfold successive levels of refinement of a work whose form is established from the outset. When Koch adapted Sulzer's *Anlage* to musical composition, he took it to mean a mental construct rather than a fully worked out plan. Yet Sulzer's *Anlage* already assumes the outline of the main formal sections. The concept of form, expressed in painterly terms, collapses the distinction between space and time, between content and expression, and is continuous from the top to the bottom of the creative and generative process.

Sulzer's position represents one extreme of the eighteenth-century theory of grammar. I will turn now to an opposite viewpoint, one that attends to the ordering of words and the claims of temporality. The issue of word order, in the particular context of inversion, is ideologically marked as a critical, even subversive, move against the rule of the concept.

## STAGE 2: WORD ORDER

When Koch compares a four-measure musical phrase to a sentence, he terms the antecedent segment a "subject" and the consequent a "predicate" (Baker 1983, 4). Koch's subject-predicate sequence follows the "natural" word order advocated by Herder in his "Essay on the Origin of Language": "It would appear natural that the subjects should have preceded the predicates, that the simplest subjects should have preceded the composed ones" (1986, 131). Moreover, placing the most important unit first, the subject, seems to run diametrically counter to the baroque stream of rhetoric, which is orientated toward its end. It also reverses the end orientation of periodic construction, whereby the meaning and conceptual integrity of an utterance is determined by the last word or cadence. Rameau called his end-orientated discourse a "natural order" (1971, 288), the "essence of the most natural harmony" being the forward impulse of the circle of fifths (1971, 410). But Koch's and Herder's "nature" inverts Rameau's and corresponds to the "natural" word order of eighteenth-century grammar. This natural order was thought to recuperate the head orientation of primitive language and was achieved by inverting "regular" word order. Such inversions produce poetic effects, in particular metaphor. From where would Koch have drawn his knowledge of natural word order and inversion?

The question of a "natural" word order goes back at least as far as Dionysius of Halicarnassus, who typified the classical view that "what is necessary (the noun) must precede what is unnecessary or dispensable (the adjective)" (Scaglione 1981, 31). Similarly, the subject must precede the

predicate, since a noun can stand by itself. The Enlightenment interest in the genealogy of language reinforced the link between natural word order and cognition, climaxing in Condillac's notion of a language of gesture.[15] According to Condillac's "primal scene," nouns appeared before verbs, since, in the language of gesture, man first pointed to the objects of his desires and then named them. It is thus natural to put the object at the head of the sentence, and then the verb, as in *fruit vouloir*. "From the point of view of mental conception," Condillac argues, "what is bound together without mediation must be expressed together without mediation" (in Scaglione 1981, 42). A natural word order thus entails inversions. In highly inflected languages, such as Latin, inversion was the norm. But inverted order was much more rhetorically marked against the rigid syntax of languages that had lost their flectional endings, such as French. It was in this respect that poetry, the "language of inversions," could be deemed to be a return to nature.

Batteux (1756) contrasts two versions of a period by Fléchier: in a poetic idiom full of inversions, and in a "metaphysical" idiom of direct word order:

> La lumière de mes yeux s'éteint: un nuage sans fin s'éleve entre le monde et moi. Je meurs, et je m'échappe insensiblement a moi-même. Triste moment! terme fatal de ma languissante jeunesse! (57)
>
> La mort éteint la lumière de mes yeux: elle éleve entre le monde et moi un nuage sans fin; j'ai rempli ma carrière. Une force inconnue me ravit a moi même. Que ce moment est trifle! voilà donc quel est le terme d'une juenesse passée dans la languer! (59)

Batteux explains the difference between these two versions in terms of the placement of the physical object of attention:

> The natural order is that the important object should be at the head: "La lumière de mes yeux . . . un nuage sans fin." It is on these objects that the dying princess fixes her attention, and on which, therefore, she wishes those to whom she is talking to fix theirs. It is for these objects that the two phrases are formed. The verbs which follow them are merely modifiers which complete the sense, the thought; . . . but they are no longer the object that strikes the imagination of the person who is speaking. (58)

Koch refers to Batteux's treatise in the 1769 German version prepared by the poet Ramler. The German edition contains an *Anhang* (1769, 4:329–412) on the issues of word order in relation to the problems of translation.[16] It is here that Koch would have read discussions on the relationship between "natural" and "regular" order in the construction of his own language.

Ramler compares the various ways that objects, thought, and expression can be related to one another. One may have inversion of thought with respect to the order of objects, and inversion of expression with respect to the order of thought (1769, 4:337). The central question for Ramler is how objects are ordered in nature (4:338). Ramler narrates a "just-so story" in the style of Condillac about the origin of communication. When a primitive man sees a snake, his immediate reaction is to point at it, so as to warn others about possible danger. Hence the "natural order" follows the recognition of objects:

> I am sitting at the table, and want to get some bread. When I have caught the attention of someone who can give it to me, I point to the bread and then lead the gesture back upon myself, in order to show him the action I would like him to perform. In the language of gestures, I will say *panem praebe mihi*, and not *gieb mir Brodt*. (1769, 4:339)

Ramler shows how oratory can be harnessed to return German to this "language of gestures" through indexical pointing. An oratorical discourse designed to move the audience must be based on objects, and a sentence can be grammatically arranged with the most important fact at the head. Ramler supplies various transformations of the sentence *Alexander überwand den Darius* (Alexander defeated Darius), each directed toward a particular key concept (4:342–43):

> *Alexander überwand den Darius bey Arbela* (toward the victor).
> *Darius ward vom Alexander bey Arbela überwunden* (toward the vanquished).
> *Bey Arbela überwand Alexander den Darius* (toward the place of battle).
> *Der entscheidende Sieg war bey Arbela* (toward the fact of victory).

Ramler is actually somewhat ambivalent about the status of inversions in German, a confusion that largely stems from an unclear distinction between poetry and prose. For example, at one point he contrasts the freedom of Latin word order with the inflexible German sequence of "subject-verb-object" (4:333). Elsewhere, however, Ramler identifies the *Ruhestellen des Geistes* (Batteux's *repos de l'esprit*) with the verb that normally completes the German sentence: "The spirit has no other goal

than to pursue its thought and bring it to an end, which mostly happens with the verb. When phrase and thought are concluded, the spirit comes to a rest" (4:360). The problem was that inverted construction was intrinsic to German prose—not to the same extent as Latin, but certainly in comparison to French. While most critics freely acknowledged the importance of inversions for expressing strong emotions in poetry, it was another matter to admit them into prose, the language of philosophy and reason. In sections one and two of his *Fragmente über die neuere deutsche Literatur*, Herder advocates the normality of inversions for German prose (see Scaglione 1981, 73). In the spirit of Condillac, this insight is formulated in terms of an historical progression:

> When language evolved from the primitive wild stage to a state befitting the newly found orderliness of social and political organization, it became a poetic and sensual medium, rich in the features that distinguish poetry from prose, these features including fresh inversions and simplicity in the use of connecting particles. (74)

Although inverted word order is a feature of a primitive stage of language, "the speech of a people that is still in the sensual stage of its development as essentially irregular and dislocated," German can "still combine the advantages of the poetic stage with those of the philosophical, a high degree of order as well as freedom" (75). German is a language of both the head and the heart, of civilization as well as nature.

Herder's most detailed analysis of what he took to be the nature of poetic language is found in the essay "Ossian und die Lieder alter Völker," included in his first *Kritisches Wäldschen* of 1769 (see Blackall 1959, 474–81). Herder makes explicit the link between free word order and the notion of rhythm as a structural and expressive force. The vitality of primitive poetry, Herder argues, is due to a *sinnlicher Rhythmus* and *Tanzmässige des Gesanges* (Blackall 1959, 474). A rhythm is *sinnlicher* the more varied and unpredictable its patterns, or the more it disrupts the regularity of the meter (*Losungen zum Schlag des Takts*). It is expressed in repetition of words and syllables, refrains, assonances, and alliteration, devices that foreground sound rather than sense, irregularity instead of logical order. When Herder praises the *Symmetrie des Rhythmus* in the following example, it is to admire how the sonic symmetry subverts the lines' grammatical construction, resulting in inversion and ecstatic stammering:

> Denn so hat dir
> Er der Weltgeist!
> Er der Weltgott!
> Virakocha!
> Macht gegeben
> Amt gegeben! (475)

In another example, an old Norse lay, the unaccented first syllable of each line creates an upbeat effect (*Auftakt*), throwing the emphasis on the important word. The lines' brevity, with their absence of end rhymes, further heightens the head orientation of the poetry.

> Es erhub sich Odin
> Der Menschen höchster!
> Und nahm sein Ross
> Und schwang sich aufs Ross
> Und ritt hinunter
> Zu der Höllen Thor.
> Da kam ihm entgegen
> Der Höllenhund! (477)

This rhythmical pattern is itself broken occasionally by a stressed first syllable:

> Blutbespritzt
> War seine Brust! (477)

Herder drew the connection between the poetic vitality of primitive language and the expressivity of metaphor. He acclaimed "those powerful bold metaphors in the roots of words" and believed that "this spirit of metaphors" (*Metapherngeist*) was "alive in all unpolished languages" (1986, 149). Herder was not alone in arguing that this spirit of metaphors, though archaic, should yet be an aspiration of modern poetry too. Enlightenment semiotics, heavily tinged with Wolffian psychology,

identified metaphor with poetic representation in general, which it saw as the summit of human cognition. According to Lessing, "[Poetry] has a means of elevating its arbitrary signs to the status of natural signs, namely metaphor" (in Wellbery 1984, 195). Moses Mendelssohn held that metaphoric use of language helped transform symbolic cognition into intuitive cognition, making us feel that that "objects are presented to our senses as if without mediation." Unmediated perception, of course, is impossible, as Kant proved. Yet, *contra* Kant, Mendelssohn suggests that, with metaphoric intuition, "the lower faculties of the soul experience an illusion in that they often forget the signs and believe that they are viewing *the object itself*" (Wellbery 1984, 79).

The trajectory of poetry is thus to overcome the arbitrariness of the sign, which it achieves by rediscovering the metaphoric practices intrinsic to the origin of language and culture. The goal of music, likewise, is to overcome the artificiality of formal articulation, and it is predisposed to succeed because musical form originates in rhythm. From rhythm to form and back again: music's metaphorical cycle is also a metaphor for the circle of language, for metaphor itself.

## *Classical Poetics*

Sulzer's theories of rhythm and language are supported by an identical conceptual structure. According to Sulzer, language and musical form share a common origin in the perceptual parsing of sense impressions. Furthermore, they develop along analogous paths of derivation. The rhythmic pathway runs as follows (fig. 5.1):

sense impressions → meter → form → expression

Figure 5.1 Rhythm

We organize a stream of undifferentiated pulses into metrical patterns. A metrical group, for Sulzer, has the coherence of a concept. We move from meter to form by grouping the measures of a phrase by analogy to the beats of a measure, creating *zusammengesetze Rhythmen* (compound rhythm, i.e., hypermetrical patterns). Musical expression results through deviation from regularity and symmetry. Deviation produces the effect of musical "speech," endowing the notes with "poetic" content.

The language pathway also originates in sense impressions and ends with expression (fig. 5.2):

sense impressions → concepts → language → expression

Figure 5.2 Language

We organize our jumbled sense impressions of the world into well-formed concepts. Language is achieved once these concepts are named, and it becomes expressive by deviating from literal meaning.

The essay on language contains an extensive discussion of metaphor. Metaphor operates in two capacities for Sulzer, as both a tool for projection and an expressive trope. In the first respect, metaphor functions as a hinge between the middle steps of his pathway, enabling mappings from concept to name. Metaphor is the means by which the mind arrives at the arbitrary correlation between meaning and words. Since words do not generally sounds like their referents, the connection between them is argued to be a metaphorical one. In the second respect, metaphor, in the form of poetic expression, is also the goal of Sulzer's pathway. Sulzer's coordination of metaphor's cognitive and figurative dimensions in the essay on language illuminates its function in his rhythmic theory. Metaphor is thus also a hinge between the middle steps of the rhythmic pathway, mediating the leap from literal meter to the metaphorical meter of phrase structure and form. Musical metaphor is found at the goal of the process, in the expressive articulation that interrupts formal regularities. Indeed, we see that the two cycles meet at their extremities: sense impressions at one end, and rhythmic expression at the other (fig. 5.3).

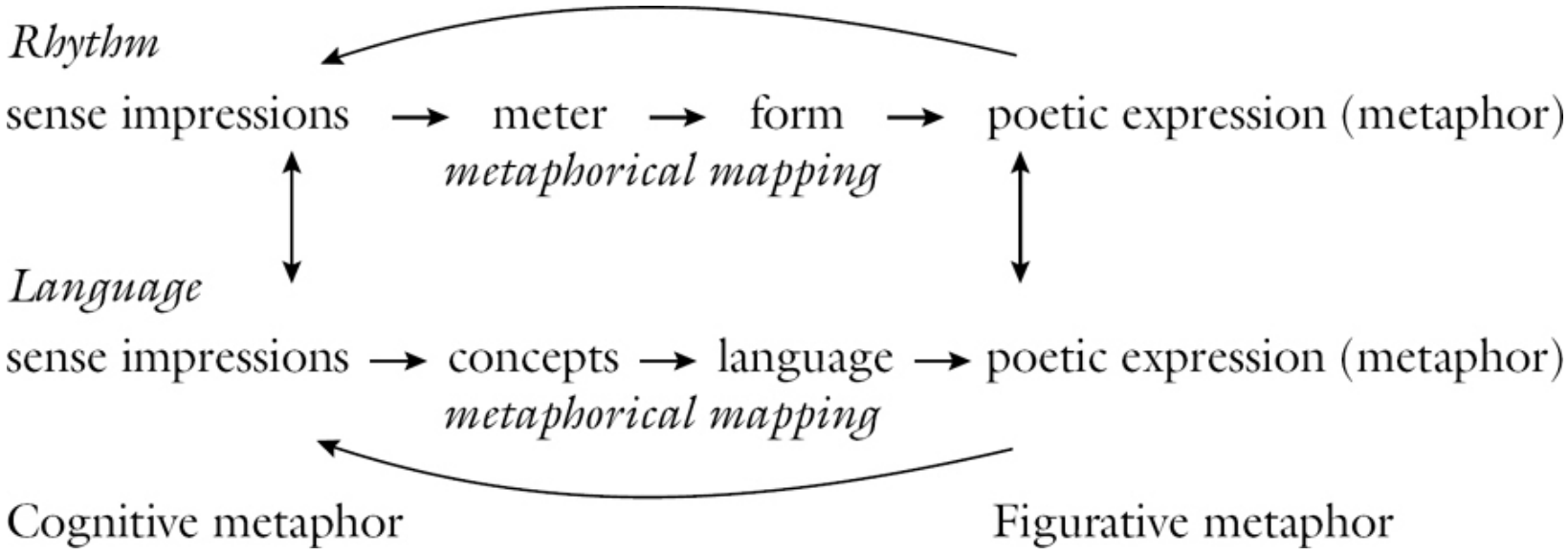


Figure 5.3 The circle of metaphor

## *The Article on Rhythm*

Sulzer's aesthetic program is based on the connection between knowledge and feeling. If knowledge concerns external objects, feelings pertain to subjective feelings. Just as knowledge, in Wolff's terminology, can be clear or obscure, feelings can be pleasing or displeasing, lively or weak. The clarity of any such feeling was determined by the symmetry of the musical materials' formal relationships. The aesthetic appeal of symmetry, especially in the realm of rhythmic pattern and formal proportion, was a truism of Enlightenment music theory. Geometrical proportions were deemed to be not only rational, but also aesthetically pleasing and psychologically grounded. Riepel claims that phrase lengths of four, eight, sixteen, and thirty-two measures are "rooted in our nature, and it seems hard to imagine listening to any other pattern with pleasure" (1752, 23). For Koch also, four-measure phrases are the "most common," as well as "most pleasing for our feelings" (Baker 1983, 11).

The aestheticization of musical proportion represents an adaptation of a conventional topos of universal harmony—the concept of "unity in variety"—for an empirical age. It is appropriate, therefore, that the essay in which Sulzer considers the relationship between reason and feeling in most detail employs another staple of universal harmony: the vibrating string. Sulzer's "A Consideration of the Origin of Pleasant and Unpleasant Feelings" (Untersuchung über den Ursprung der angenehmen und unangenehmen Empfindungen) is a philosophical essay that touches on music only briefly, and as a metaphor for broader aesthetic issues (Sulzer 1773b, 1–98). The essay adduces a model of "harmony" (in its universal sense) based on the acoustician Leonhard Euler's coincidence theory of vibration. It is a sign, perhaps, of the inherent yet productive conservatism of German thought that Sulzer could still discuss harmony in its general sense of rational order in the late eighteenth century. But the order Sulzer discovers in harmony is now of a rhythmic nature. The four horizontal lines of Sulzer's diagram represent the notes of a perfect harmony: the fundamental, third, fifth, and octave, a *Klang* that awakens a pleasant sensation. This perfect harmony arises from the simultaneous vibration of four strings. Since notes are acoustically made up of repeated beats that follow at regular intervals, Sulzer can indicate the relationships between the different frequencies as points on a line. Hence the diagram illustrates the orderly relationships between the cycles, "a very regular but, at the same time, very varied progression" (1773b, 69). It is thus a paradigm of variety within unity, which lies at the heart of "intellectual beauty." From this musical example, Sulzer draws a conclusion that extends to aesthetics in general: "what gives pleasure to the mind in the unclear representations of the senses [*was der Seele in der undeutlichen Vorstellung durch die Sinne gefällt*] also gives it pleasure when one represents it clearly [*deutlich*] to the spirit" (70). Since the same pattern gives pleasure both to the senses and the mind, it affords proof of an "analogy between the pleasure of the senses and that of the spirit."

The difference between Sulzer's use of the vibrating-string metaphor and earlier treatments by Mersenne and Kircher is chiefly due to the growth of a more dynamic epistemology. The soul no longer vibrates in sympathy with sound; it now actively organizes it. Following Wolff, Sulzer believes that all faculties spring from the natural power of the soul, and he investigates which patterns are in tune with the soul's natural laws of motion. According to Sulzer, the soul is naturally entrained by orderly, periodic patterns or processes—typically four-measure phrases—thus entailing a correlation between metrical complexity and seriousness of expression. Anything broader than a four-measure grouping is harder to comprehend and hence evokes more serious expression. Longer phrases, from six to eight measures, are "obscure."

From this philosophical position, it is thus a natural step for Sulzer to argue that all beauty comes from rhythm. The premise for his article "Rhythmus" in the *Allgemeine Theorie* is that "everything we call beautiful in song and dance originates in rhythm" (1777, 2:526, "Rhythmus"). A composition is rhythm rendered in melody, harmony, and instrumentation. All these parameters are transformations of rhythm; they all serve to give rhythmic uniformity greater variety, thanks to rhythm's limitless versatility. Sulzer can detect rhythm in all spheres of art and life because he defines the phenomenon on an epistemological basis as a cognitive faculty of human perception. Rhythm is thus not a quality of things in themselves but a *Taktgefühl*.

At first sight, rhythm's cognitive turn seems to reverse the important achievement of baroque theorists such as Caspar Printz, who helped emancipate a concept of rhythm from prosody. Printz recognized that the beats of a measure had an intrinsic weighting irrespective of the textual accents of word-setting. Thus, whether or not they tallied with a text, the first and third beats in a 4/4 measure were intrinsically strong, the second and fourth intrinsically weak. By contrast, Sulzer follows the ancient Greek theorist Aristoxenos in differentiating between the material or medium of rhythm (*Rhythmizomenon*) and the rhythmic principles that regulate it (*Rhythmizon*). Musical tone is in itself arrhythmic. Regularity is a mental construct, a deviation from a ground of irregularity. Sulzer cites a famous example from Cicero's *De oratore*, a reference also quoted at the start of Isaac Voss's influential rhetorical manual of 1673, *De Poematum Cantu et Viribus Rhythmi* (see Seidel 1975, 89). Cicero compares rhetorical rhythm, the *numeros oratorius*, to the fall of raindrops, which is regular yet ever-changing. The impression of regularity is all in the mind. Only the imagination hears regular intervals between the raindrops. This regularity, although illusory, is nevertheless necessary for grasping the infinite succession and thus making the abstract palpable. Two conclusions are drawn from this thought experiment. First, regularity is not a natural phenomenon, since it is marked against the irregularity of nature. Second, it follows that order is pleasurable precisely because it is unnatural.

Building on Cicero's example, Sulzer proceeds onto his own heuristic model, based on an undifferentiated succession of drumbeats (*Schlagfolge*), "a model of the simplest order of succession of things" (fig. 5.4):



Figure 5.4

Sulzer's model contrasts with traditional analogies of the human pulse or a beating clock in that it is entirely hypothetical. Sulzer asks himself, "How can such a series of beats become pleasant, or receive an ethical or affective character?" (1777, 2:527, "Rhythmus"). By way of an answer, Sulzer takes us through the various stages that lead from sense impression through form to poetic expression. In the first stage, the undifferentiated series of beats yields to "simple" (*einfache*) rhythm. Here, the beats are differentiated according to strong and weak, thereby introducing into uniformity a moment of variety. Yet differentiation also establishes regularity on a higher level: meter. After metrical regularity, the next stage is grouping (into measures, phrases, etc.). With grouping, beats lose their independence so as to participate in a more overarching unity. In his article "Uniformity" (1777, 1:398–401, "Einformigkeit"), Sulzer writes that meter turns time into spatial concepts. A

series of beats (or indeed, a series of *any* objects) can, through a uniform pattern, be "united with a concept" (*mit einem Begriff zusammen gefasst*). Through uniformity, an infinite succession of events can be surveyed at a glance and held in the mind. Similarly, one need only grasp the rhythm of the first measure of a piece in order to fix onto the rhythm of the piece as a whole. The notion of *Einformigkeit* marks a crucial link between Sulzer's theory of rhythm and his theory of language. A metrical group is "heard as"—held to be analogous to—a linguistic concept.

The goal of Sulzer's rhythmic path of derivation is the construction of periods, of musical form. Sulzer conceives of periods, the units of phrase structure, as "compound rhythms" (*zusammengesetze Rhythmen*). He thinks that measures group themselves in the same way as beats in a measure. Sulzer's example applies as much to musical as to poetic form: "two or more measures form an *Einschnitt* or verse; two or more *Einschnitte* a period, or a main section; two main sections form the entire strophe, or the whole melody, which is repeated as many times in the course of the piece as is required to finish the dance. This is the most perfect kind of rhythmic organization" (1777, 2:531, "Rhythmus"). Turning to the poem *Doris* by Albrecht von Haller, Sulzer compares measures with poetic feet. Each iambic foot corresponds to a measure, and there are four measures in each line, which thus constitutes an *Einschnitt*. Three *Einschnitte* form the first period:

> Komm Doris, komm zu jenen Buchen,
> Lass uns den stillen Grund besuchen,
> Wo nichts sich regt als ich und du.

The following period registers a change of mood. After a portrayal of calm, the second verse describes the leaves of the tree stirring in a westerly breeze. Rhythmically, therefore, the two verses portray calm followed by motion. Sulzer states that this second verse must be set in a different key, preferably the dominant, "exactly as one generally does with dance melodies" (1777, 2:531, "Rhythmus").

> Nur noch der Hauch verliebter Weste
> Belebt das schwanke Laub der Aeste
> Und winket dir liebkosend zu.

The construction of periods marks the first phase of Sulzer's trajectory: the metaphorical mapping from rhythm to form. The second phase entails the expressive deviation from regularity. Now, the mind is preoccupied not with imagining regularities at ever increasing levels, but with comprehending pattern subversion. Aesthetic pleasure is gained by making sense of immediate disruption through the imagining of higher-order patterns. This switch in orientation, from order to disruption, is defined by Sulzer in Wolffian terms. Absolute uniformity works only upon the attention (*Aufmerksamkeit*) and affords only a limited kind of pleasure. Meter binds obscure sensory perception, allowing the clear spirit to freely unfold. The mind unconsciously counts the units of the primitive *Schlagfolge*, but is awakened only when something unexpected happens, such as a sudden change of tempo or interruption. Whereas the obscure faculties react to disturbance as a shock, the clearer faculties seek to understand deviations from the norm as speechlike aesthetic statements. The clearer faculties involve themselves with the musical thought process, weighing up foreground transformations. They follow the formal significance of segments; try to understand extensions, expansions, contractions, and parentheses; and register the harmony or disharmony of corresponding units. This, for Sulzer, is the truly spiritual part of music, the home of expression.

## *The Essay on Language*

The title of Sulzer's essay, "Observations on the Reciprocal Influence of Reason on Language and of Language on Reason" (1773a), highlights the symmetrical relationship between language and thought, a reciprocity that seems to question the very notions of origin, priority, or genealogy. Sulzer's task is to reconcile Condillac's narrative of origin and development with the Wolffian systematic tradition, a balance that would not be struck until Herder's prize essay. The curiosity of Sulzer's essay is that, its title notwithstanding, the actual focus of the argument is really the

reciprocity between reason and sense impression. Sulzer's Wolffian side argues for the simultaneous emergence of perception and conceptualization. But sequential narrative creeps back in when Sulzer maintains that words are attached to preexistent concepts. To be sure, once language is attained, then reason and language really do influence each other. But the symmetry of their relationship turns out to be bogus, since reason has been shown to develop *before* language. Nevertheless, the essay has the great merit of situating the topic of metaphor in a philosophical context, something that neither Condillac nor Herder attempts to do. Metaphor for Sulzer is both a deviation from literal meaning and a return to the original, "natural," designation buried within words. Sulzer's is a cognitive theory of metaphor, revealing how poetic expression aids the comprehension of concepts and the discovery of new ideas. It is on this level that the influence of language on reason is most radical.

As with his rhythmic pathway, Sulzer starts with the cognition of sense impressions: Man "manages to bring the chaos of his impressions into order," an operation "which necessarily precedes the invention of words, since Man cannot be in a position to give a name to something of which he has no clear concept" (1773a, 172). Sulzer begins by asking himself two questions: "By what process does the understanding enable man to search for suitable signs to represent his ideas, and by what means has he discovered these signs?" (167). He takes the point of view of a baby's first perceptions, and his narrative of emerging consciousness is quintessentially Wolffian: "It is now clear that, before we are in a position to give an object a name, we must distinguish it from the mass of representations, and regard it in isolation from the other separated and differentiated objects." Sulzer stresses that perception can only work if it is guided by personal familiarity with the objects being distinguished, that is, by conceptual understanding:

> But this first step can only take place when a person has made himself familiar with these objects; for as long as something is completely new, it is difficult for us to distinguish anything about it. This process of understanding can be observed everywhere. Whoever hears an unfamiliar language spoken for the first time cannot distinguish either a word or syllable within it. An entire speech will seem to him like an unbroken din, with no separable components. (169)

Sulzer suggests that we parse the visual field in the same way that we articulate the stream of language. This primary step of segmentation depends upon an act of attention (*Aufmerksamkeit*), and it is interesting that Sulzer blends this Wolffian concept with Condillac's notion of personal interest or need (such as hunger or desire). With a tacit reference to Condillac, he argues that "it is the force of necessity which sharpens man's wits, since it forces him to direct his attention at the object of his desire" (171). Hence a man who is thirsty learns to distinguish water from all neighboring substances.

To get from concepts to words, Man must associate them with sounds. And Sulzer looks to the sounds and cries of the natural world: "In all probability, the first words in every language were nothing other than imitations of certain noises" (1773a, 174). Sulzer finds evidence of this in onomatopoeia. For example, the sound of thunder can be heard in the first syllable of the German *Donner*, and Sulzer also traces the word to the Latin *tonitru*, the French *tonnerre*, and even the Greek *brontae*. Sulzer's discussion is preoccupied with the natural motivation of correlations between concept and sound, and he argues strongly against the possibility that connections between words and natural sounds can be arbitrary. He immediately encounters the problem that most words do not have an obvious similarity to the sounds in the natural world. It is here that Sulzer appeals to the function of metaphor. Sulzer calls metaphors the "natural signs of ideas" (188).

Sulzer believes that metaphor is not only innate, but is a cognitive faculty that is anterior to the acquisition of language: "man's property even before the development of his speech" (1773a, 176). The gift of metaphor allows man to extend speech even "to objects which are distant not only from his sense of hearing, but from the material domain." The metaphorical imagination (*Einbildungskraft*) allows us "to discover similarities between things which, in our primal speech, have names, and others which appear not to have any original connection with sounds" (176). Hence the similarity of human rage to a provoked dog: its growls are transformed into the Latin *ira*, or the French *irrité* (177). We thus see that Sulzer understands metaphor as a faculty man possesses of projecting from a physical ground to an abstract or conventional lexical unit.

Sulzer's argument here reaches its midpoint: "So far, I have shown how reason and intellect helped primitive man to develop the elements of language; I must now explore the advantages that the understanding can draw from language for the cultivation of reason" (1773a, 178–79). Having examined metaphor as a faculty of projection, he puts metaphor temporarily to one side so as to turn to language's regulative function. He considers language's influence on reason from the respective standpoints of the arbitrary and the natural sign. Sulzer will pick up the metaphoric thread again when he discusses the natural sign at the end of his essay.

At the most basic level, labeling concepts with arbitrary signs (*willkührliche Zeichen*) facilitates reason. Signs, or names, help make ideas more secure, and they enable us to have memories. "It is much easier to remember concrete things than abstract" (1773a, 179). By representing concepts, signs permit them to be manipulated just like algebraic or mathematical symbols. Symbols can abbreviate logical pathways; indeed, Sulzer holds that "speech is to reason what analysis is to mathematics" (187). Much of Sulzer's argument recalls Condillac's associationism, as in the Frenchman's claim: "should not words stand in the same relation to ideas in all the sciences as do Arabic numerals to ideas in arithmetic?" (in Aarsleff 1982, 166). But Sulzer extends this principle of rationalization even to aesthetics: words provide the critic with a metalanguage with which to classify and describe artistic experience. Sulzer's symmetrical argument here reaches its first stage of closure: if we need to organize sense impressions in order to arrive at words, language in turn helps us organize our thoughts and classify sense impressions.

Sulzer now turns to the natural signs (*natürliche Zeichen*) of metaphor. "By natural signs, I mean words which express actual or metaphysical similarity between two objects, of which one corresponds to the proper sense of a word, the other to its figurative sense. . . . To this class belong all metaphorical expressions whatsoever" (1773a, 188). Sulzer's primary example is the word *verblenden*, whose literal meaning is "to blind," but which also has the metaphorical sense of obscuring thought, "blinding" a concept (*Vorstellung*). Sulzer's example is of course eminently appropriate, in view of the representational paradigm of Wolffian philosophy, and its metaphorical identification of light with reason. The passage from obscurity to clarity of representation unfolds the course of metaphor itself. Conversely, with another turn of the circle, Sulzer sees metaphor as the very instrument of thought: "the course of reason is heavily dependent upon the perfection of the metaphorical side of language" (191). By rendering elusive mental representations concrete and stable, metaphor enables us to build on them and push back the frontiers of knowledge. Sulzer illustrates this claim by reinterpreting a famous poetic metaphor of Virgil's in a cognitive light:

> Such a metaphor [Virgil's description of bodies *fusi per herbum* (poured on the grass)] produces an effect similar to the effect of figures in geometry. Without figures, which help the intellect precisely and accurately to define ideas that otherwise would remain altogether confused and unusable, this science would still be in its infancy. Likewise, metaphor helps us to distinguish and fix ideas, which without such aid would remain agglomerated with the mass of our representations, and in this way metaphor renders visible and sensible that which seems ungraspable to the intellect. In order to conceive of the full importance of this use of metaphor one must consider that the most acute minds sense in every moment an infinite number of things which they do not distinguish from one another and that there are as a result a great many obscure representations in the intellect of man which set limits to the growth of his knowledge. Every felicitous metaphor pushes these limits further out because it draws forth one of these previously useless ideas from its obscurity. (189)

The progress of reason thus keeps pace with the march of metaphor—marching backward toward the origin. Metaphor recuperates the *Stammwörter* (root words) at the origin of language. Sulzer's system has turned in on itself. At first, metaphor had motivated the leap from primal speech to abstract speech, from the growl of a dog to the French *irrité*. Now, metaphor turns its face backward, etymologically, toward the primal meaning buried in the word, the natural image latent in the arbitrary sign. At the heart of every word, then, is an image, and imagery promotes thought: "It is certain that the original sense of a word lets us discover an image [*ein Bild*], which affords us very considerable elucidations [*Erläuterungen*] of things, ones which are sought in vain along other paths" (190).

Sulzer's claims for metaphor are grander still. It is a means of general education and the building of a national culture. Institutionalized as teaching, metaphor can make difficult ideas known more

widely: "whoever reads the works of contemporary philosophers with sufficient care will note that . . . the latest ideas, which creative minds from time to time put forward, find no entry into the public consciousness until one discovers how to fix them into elegant expressions" (1773a, 180). Certain complex logical proofs cannot be followed, but can be understood through a felicitous image. This phenomenon is all the more true for "people of lesser abilities":

> There exist among our impressions an infinite number of obscure ideas, which we feel without being able to distinguish or draw them out. People with acute intelligence have fewer such ideas than others; the effort they use to clarify these ideas uncovers their similarities with ideas which are more easily grasped. *From this arise metaphorical expressions, by which obscure ideas are made clear to people of lesser abilities*. For as soon as someone tells us that an object, of which we have not been able to form a correct concept, is similar to another object which is more familiar to us, we endeavour to discover this similarity; we discover it step by step, and our obscure concept is thereby transformed into a clear one. (188)

We will now see that this is precisely the way Koch uses the metaphors of rhythm and language, "step by step," to teach "people of lesser abilities" musical form.

## 2. CLASSICAL PEDAGOGY: KOCH'S THEORY OF FORM

Heinrich Koch was the most important German theorist of the eighteenth century, and his *Versuch einer Anleitung zur Composition* (1782–93) included the first comprehensive theory of musical form. Koch's theories have been expounded expertly elsewhere;[17] my particular interest here is in the order of the *Versuch*'s exposition—its pedagogical pathway—and in the way that this order elaborates the metaphors of rhythm and language. The *Versuch*'s systematic layout, with its sequential progression from small phrases through miniature forms to expanded forms, puts into practice Sulzer's vision of metaphor as pedagogy. Sulzer's "people of lesser abilities" in this case are the "beginning composers" repeatedly invoked in Koch's treatise. The metaphoric journey from the concrete to the abstract, from the familiar to the new, is unfolded in the course of Koch's pedagogical progression from simple to complex form. The imperative of sequentiality is admitted by Koch: "It is recognized as a general rule that with every skill to be acquired, one must proceed gradually from the easier to the more difficult, from the simpler to the more complicated" (Baker 1983, 65). Sequentiality has also a paradigmatic dimension in the teacher's recourse to models, such as simple dance and song types: "the shortest compositions common in music are chosen first, because the different possible ways of connecting their few melodic sections can be most easily perceived and imitated" (78). These models constitute a "laboratory" for testing compositional principles, affording the beginner an opportunity for "practicing his inventiveness" (87). The models are not mere heuristics, for they actually share the qualities of the larger forms: they are "representations in miniature of larger compositions" (118).

The *conceptual* model for Koch's undertaking is the contemporary discourse about the origin and generativity of language. Most of Koch's aesthetic pronouncements were drawn from Sulzer. But it is not so much what Koch says as what he does that aligns his compositional theory with the intellectual mainstream. Like Sulzer and Herder, Koch is concerned to reconcile the conflicting narratives of origin and simultaneous emergence. His notion of the musical *Urstoff*, which he borrowed from Marpurg (see Baker 1988), is predicated on the coexistence of harmony and melody. In the French debates of the midcentury, centering on the Rameau-Rousseau polemic, harmony and melody corresponded to the categories, respectively, of synchronic and diachronic, space and time, reason and discourse. The doctrine of the linearity of speech accords with a progression from harmonic simultaneity to melodic temporality. By grounding music in an originary *Urstoff*, Koch rejects this model and moves instead toward the Wolffian model of simultaneous emergence. Koch believed that a melody is simultaneously an outline of a harmonic progression. Indeed, "the highest degree of perfection of the creative spirit among composers" is "nothing else than the ability to conceive of melody harmonically; that is, to invent it so that one is capable of bringing forth simultaneously the main features of its harmonic accompaniment" (in Baker and Christensen 1995, 181). Koch supported his claim with a quote from Batteux, in a passage I have already examined (see

chapter 4): “A painter who has chosen the color and position of a head, if he is a Raphael or a Rubens, sees at the same moment the colors and folds of the garments with which he must dress the rest of the body” (181). Likewise melody comprises “the outline of the painting, the specific content of the composer’s conception.” Koch thereby rehearses Sulzer’s identification of the painterly image with a rational concept.

Koch accommodates the notion of simultaneity within a broad trajectory toward the linear. The idea of form emerges only toward the end of the treatise, in the second half of volume 2 and volume 3. The first half of the *Versuch* deals with harmony and counterpoint; and the conception of music as a proper oration in tones, as a discourse unfolding in time, is reached through a process of gradual evolution. The *Versuch*’s structure, as we can see, begins with an exposition of fundamental harmonies and proceeds to passing harmonies and then to rhythm, phrase structure, and the arrangement of phrases to form complete movements (fig. 5.5):

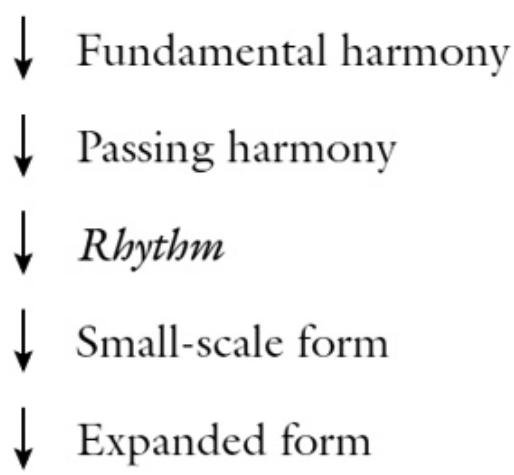



Figure 5.5

Koch presents each stage of this process as a balance between synchronic and diachronic forces. This is the chief reason why he succeeds in squaring origin with simultaneity. Koch’s starting point is the *locus classicus* of eighteenth-century harmonic theory, Rameau’s *corps sonore*. Koch argues that just as a fundamental note can generate the major triad, so a melody can imply its harmonic accompaniment: “Neither harmony nor melody is the primary material of music; both bear the characteristics of key, that set of notes whose pitches are determined by a given fundamental” (1782–93, 1:23). It is a matter simply of whether these notes are heard successively as intervals or simultaneously as chords. There are two ways of deriving intervals from the sonic material. The division of a cello string generates intervals successively from the fundamental. Alternatively, simultaneous harmony can be produced through sympathetic vibration with other strings. Thus Koch derives G by dividing the C string into three equal parts; he derives F by dividing it into four. Sympathetic vibration gives him the third and fifth of C, F, and G, producing the three basic triads and hence all the notes of the scale.

The synchronic and diachronic are reconciled at the next stage with Koch’s concept of passing harmony. His formulation of five species of counterpoint comprehends chords as agents passing within a key area, circumscribed by a melodic phrase. The step from here to the sections on form passes through the midpoint of Koch’s treatise, a chapter on rhythm.[18] Koch’s essay is closely modeled on Sulzer’s article “Rhythmus.” The chapter is striking, because it institutes the first rupture in the *Versuch*’s progression. It marks a fresh start, with no real continuity with the previous harmonic section. Similarly, the connection with what comes after, the chapters on form, is a metaphoric one, dependent on a leap of imagination. Despite the appearance of a break, I will show that the chapter on rhythm is in fact integral to the subsequent progression of the treatise. First, I argue that Koch’s concept of rhythm plays out the same opposition between synchronic and diachronic forces as in his harmonic theory, expressed now in terms of the principles of rhythm proper and punctuation. In Koch’s thought experiment (based on Sulzer’s), the listener is asked to parse a series of beats in two ways, in terms of either structural grouping (rhythm) or rhetorical

articulation (punctuation). The *Versuch* subsequently extrapolates these principles into a dialectic between dance and lyric. Whereas dances are rhythmic, the character of songs "depends upon the contents of the poetry," their form on the structure of the strophes (Baker 1983, 83). I will show how the dance/song dialectic is crucial to the treatise's representation of first-movement sonata form. Song enables Koch to wean the concept of symmetry away from the mechanical periodicity of the dance, leading to a broader, more metaphorical, notion of tonal symmetry. In sonata form, the symmetry of meter is recuperated on the level of tonal rhythm, the opposition between tonic and dominant key areas.

## *The Metaphor of Rhythm: Form and Time*

Koch's chapter "On the Nature of Measure in General" falls approximately midway through his *Versuch* and is the key to understanding his cognitive approach to musical form. It is closely modeled on the theory of rhythm proposed in Sulzer's article. Like Sulzer, Koch sees rhythm as arising "out of our perceptual faculties and powers of representation" (*in der Natur unserer Sinnen und unserer Vorstellungskraft;* 1782–93, 2:278). A rhythmic group, such as the measure, is a product of an imaginative act of division and organization. This view runs diametrically counter to Mattheson's typically baroque notion of the measure as a receptacle for rhythmic events. Mattheson saw the measure (*Zeitmass*) of a work as analogous to the ticking of a clock; as a yardstick laid against time from the outside, thereby giving time the appearance of spatiality. Seidel compares this external, imposed quality to "the schedule of religious and secular events for a town in preindustrial times" (1975, 56), a schedule imposed from without by the town clock.

Rhythmic grouping for Koch is not imposed externally, but constructed by the imagination of the individual listener. Moreover, Koch's theory sees a continuity between the group and the events it contains, since higher-order patterns arise as a natural product of lower-order events. In other words, the essence of the classical theory is a continuity between rhythm and form. Such continuity is alien to baroque thought, where form is not a product but a premise.

Like Sulzer, Koch takes as his starting point a thought experiment based on the perception of a series of similar objects, in this case a string of pearls or a row of billiard balls. Koch states that it is natural for the mind to separate them into groups, by instituting "resting points of perception" (*Ruhepuncte der Vorstellung;* 1782–93, 2:278). The same principle holds for a series of notes of identical duration (*Schlagreihe*), and so Koch writes down six quarter notes, without bar lines or time signature. He then argues that, if we were to sing or play them, we might attach the second note to the first, thereby instituting a resting point on the third (ex. 5.8):

Example 5.8a. Koch's *Schlagreihe*



Example 5.8b. *Schlagreihe* with resting points



Koch thus thinks of *Ruhepunct* in terms of punctuation, of grouping boundary, corresponding to the original sense of Batteux's *repos de l'esprit* as a punctuation of the stream of rhetoric. But Koch uses *Ruhepunct* in two separate senses, the other being metrical accent (*Taktteil*). A metrical accent falls not between groups of beats, but *on* specific beats. This accentual sense of *Ruhepunct* is evident in his comment that "if the imagination of someone who wants to sing or play these six notes comprehends with the first of these notes only a second one so that a resting point of the imagination arises on the third note, they will perform the passage as the following figure metrically illustrates" (2:280). Koch notates a bar line between the second and third notes, demonstrating that an accent occurs on the first beat of the second measure. A little later, he adds that "the resting point of

perception, and also the weight or expression through which it is made understood through performance, falls on the first, third, and fifth note[s]" (1782–93, 2:282).

Koch's concept of articulation is ambiguous because it pulls in two opposite directions. Articulation as punctuation is orientated toward the end of a phrase, as an interruption of a rhetorical stream whose sense is completed with the final full stop. Articulation as metrical accent, by contrast, is orientated toward the head of a phrase, toward the strong beat, which is completed by a subordinate weak beat. Koch can unite these opposite functions because, in his terms, to mark a division simultaneously bestows a metrical emphasis on a note. Koch sees articulation, grouping, and metrical differentiation as arising interdependently; the notes "become united under a single perspective, that is, the first of these notes must comprise the *Ruhepunct der Vorstellung* or point of division" (1782–93, 2:283). The second note (or, in triple meter, the second and third notes) is "grasped under the division point of the first note, that is, they are united with the first under a single perspective" (283). This metrically stressed note constitutes the first "essential part" (*wesentlichen Teil*) of the measure, the *gute Taktteile*, which is "intrinsically long" (*innerlich lang);* the second "essential part" (the arsis) is called the *schlechte Taktteile*, and is "intrinsically short" (*innerlich kurz*).

The interdependency of these principles in rhythmic grouping is yet another example of simultaneous emergence in Koch's thought, analogous to the unity of melody and harmony in the *Urstoff*. Although they emerge together, they evolve in opposite directions. In his theory of form, end-orientated articulation becomes punctuation by means of phrase endings; the *Ruhepunct* evolves into what we would today call a tonal accent. Conversely, Koch's head-orientated articulation becomes rhythm, the formal geometry we call hypermetrical grouping; or, in Koch's terms, the gathering together of time spans within a single concept, from the perspective of the initial *Taktteil*.

The head/end ambiguity comprises one source for the *Versuch*'s formal pathway. Another source is Koch's concept of *Paarigkeit* ("pairness"). Unlike Riepel, Kirnberger, and Sulzer, Koch's rhythmic prototype is not a four-beat measure but a pair of beats. Koch regards duple meter as the norm and 4/4 as compound meter. Similarly, although, like most of his contemporaries, he thought of the four-measure phrase as a conventional paradigm of unity, he understood it as a compound of a pair of two-measure segments. Koch grasped that dualism constituted a more flexible principle by which to map from rhythm to form. A strong-weak (*gute Taktteile–schlechte Taktteile*) alternation can be discovered at virtually every level of musical discourse and permits sideways moves in between form's geometric and rhetorical domains. In other words, *Paarigkeit* facilitates the metaphors of rhythm as well as language.

## THE FOUR-MEASURE PHRASE

Rhythm and punctuation—two aspects (synchronic and diachronic) of the *Schlagreihe*'s articulation—go their own metaphorical ways. We find them here at the level of the four-measure phrase, Koch's "basic level" in volume 2, part 2 (where his formal theory properly begins). Here, "punctuation" becomes ending formulas, while "rhythm" is "the length of these melodic sections . . . , and the proportion or relationship which they have among themselves" (Baker 1983, 2). Hearing formal articulation "as," respectively, "rhythm" and "punctuation" entails a number of metaphorical transformations.

## FORM AS RHYTHM

Metaphorical rhythm groups measures as if they were beats. Rhythmic *Paarigkeit* is expressed as symmetrical phrase structure. A four-measure phrase is ideal, but only because it is compounded of a pair of two-measure units (Baker 1983, 13). The essence of metaphorical rhythm is that this symmetry need not be literal. The proportions of a phrase are, in the final analysis, determined by its material, not by the number of measures. Hence a five-measure phrase may, in certain circumstances, be answered by a five- (or four- or six-) measure consequent phrase, with no sense of imbalance.

Koch sees a continuum, then, between rhythm and melodic substance. At the level of thematic discourse, rhythm gives up its oppositional structure and becomes more like a spectrum. In other words, the strong-weak opposition between primary and subsidiary material takes in gradations between *Hauptsatz, Nebensatz, Zergliederungssatz, Sätze mit Rauschern und Läufen*, and *Schlusssatz*. The symmetry of rhythm dissolves into the fluctuations of the thematic discourse.

## FORM AS PUNCTUATION

Hearing *Ruhepunct* as tonal accent, that is, as a phrase ending, entails two metaphorical acts. First, we endow what had been a durationless instant with an actual duration in real time. A resting point is an abstract boundary between note groups, with no temporal identity of its own. But a closing formula may occupy several beats of a measure, and an elaborated cadence even more (Baker 1983, 39). Second, the *Ruhepunct* assumes a tonal dimension. The *Paarigkeit* of thesis-arsis is projected onto the tonal rhythm of tonic-dominant. The weighting of these harmonies is in turn graded according to degrees of the scale, $\hat{1}$, $\hat{3}$ or $\hat{5}$. The main difference between rhythmic and tonal *Paarigkeit* is in the ordering. In a four-measure phrase, the likely sequence of phrase endings is V, followed by I (or imperfect cadence followed by perfect cadence), which is a reversal of the prototypical strong beat–weak beat rhythmic pattern. The only way to resolve this contradiction is to regard tonal rhythm in terms not of pulses but of processes. The antecedent/consequent phrase thus outlines a departure from the tonic, followed by a return. A departure from the tonic unfolds a head-orientated process; a return to the tonic unfolds an end-orientated process. The *Paarigkeit* of a phrase therefore embraces the two types of rhythmic principles themselves: a shift from one perspective (rhythm) to the other (punctuation). The binary pattern, ultimately, is rhythm-punctuation. The implications of this shift will be extremely important when we consider the dimensions of expanded forms.

## SMALL-SCALE FORMS

Next, at the level of small-scale form, rhythm and punctuation evolve into dance (synchronic) and song (diachronic). Koch's pedagogical pathway (section 4, chapter 2) zigzags between the two formal types, and the principles they represent. Dance epitomizes symmetry; song exemplifies tonal punctuation. To learn the concept of tonal rhythm—to make the metaphorical leap from mechanical symmetry to tonal symmetry—the student must apply lessons learnt from song back to dance at increasing levels. One may speak, therefore, of dance (which remains Koch's prototypical form) alternating with lyrical interludes, on the path to a mature concept of sonata form.

## DANCE

Surprisingly, tonality is almost irrelevant at the level of a miniature dance. Koch's paradigm of a well-formed piece is a sixteen-measure dance by Haydn in which, remarkably, all but one of the four phrases ends on a tonic. Although Haydn's dance demonstrates "the most perfect rhythmic relationship, on account of [its] even number of measures and their equal length" (Baker 1983, 84), it contravenes Riepel's stricture against *Tautologia* (1755, 43)—that is, repeating the same cadence or phrase ending (for an even more extreme case, in which "the caesuras of the melodic sections all fall on one and the same triad"; see example 234 in Baker 1983).

Thus quadratic geometry, not tonal orientation of phrase endings, guides form at this level. The situation changes after Koch's two lyrical interludes (Baker 1983, 93–94) (see ex. 5.9 below), in which cadences in a different key are introduced for the first time. After this, Koch returns to dance, but with greater tonal variety. One example, to be sure, attains the tonal symmetry of sonata form. Example 243 (in Baker 1983) gives a sixteen-measure Allegretto in which the opening period comprises a first phrase ending on I, and a second cadencing in the dominant (in G). The second period has a V-phrase in the tonic (on G), followed by the fourth phrase cadencing in the home key. Koch's Allegretto presents an exposition that is symmetrical with respect to both proportion (4 + 4)

and key (I–V). Nevertheless, its prototypicality notwithstanding, on the present level of small-scale forms this tonal symmetry is entirely contingent. The order of phrase endings is in fact extremely flexible, if not completely indeterminate. Koch gives the following options, all within the constraints of a sixteen-measure grid:

1. After a I-phrase can follow either (a) a V-phrase, or (b) a cadence.
2. A V-phrase can be followed either (a) by a cadence, or (b) by a V-phrase in another key, or (c) by a I-phrase if it does not stand at the beginning of a composition, or also (d) at times by another V-phrase in the same key.
3. After a cadence we may have either (a) a I-phrase, or (b) a V-phrase, or also (c) a cadence in a different key. (Baker 1983, 118)

After this conspectus of tonal variety, Koch reestablishes a sense of tonal normativity with his second lyrical interlude (125).

## SONG

Koch's two interludes on song types are instrumental in generating a concept of tonal rhythm on a formal level—that is, weaning symmetry away from dance's mechanical symmetry and restoring a sense of normativity associated with rhythmic pattern. Unlike dances, songs do not typically comprise four phrases: "In odes and songs often only three melodic sections . . . are connected into a whole" (Baker 1983, 118). In this case, the first phrase "usually closes with the cadence in the main key, but the second is a V-phrase," and "the last phrase must necessarily be a clear repetition of the first" (93). Such a scheme is illustrated by Koch's Ariette, "a short composition of three phrases" (94), in which a first phrase ends on the tonic and a middle phrase on the dominant (a V-phrase); the third phrase is a reprise of the first. Koch also gives an example of a song by Hiller in which the middle section cadences on the dominant (95). The essential feature, then, of Koch's miniature ode and song melodies is that their ternary cadential structure outlines I–V–I (93), a normative tonal scheme.

With the second lyrical interlude, this normativity is transferred onto the level of the opening period of an extended song form. Koch now considers twelve-measure periods made up of three four-measure phrases, unfolding a stereotypical progression of I-phrase, V-phrase, cadence on V (Baker 1983, 125). Koch illustrates this precept with a twelve-measure opening period of a Poco andante (ex. 5.9):

Example 5.9. Koch's Poco andante (1983, 126)




This example has particular importance in the *Versuch*, because its thematic profile will later be used as the model for Koch's sonata-form exposition. He will also return to this Poco andante (148ff.) in order to demonstrate "multiplication of phrase-endings and cadences." Furthermore, this twelve-measure scheme corresponds to the example Sulzer used to explain the periodicity of song texts, which we saw above (Haller's "Doris"). In his section on the aria, Koch writes that "with texts which

do not consist of many verses, the modulation usually occurs in the third melodic section, so that the real fragmentation of phrases and the first main modification of the feeling happens in this related key" (171).

It is striking that Koch, after Sulzer, connects the concept of modulation with "modification of feeling." Feeling represents an inner ethos that lies beneath the mechanical superstructure of formal grammar. With the advent of tonal rhythm—a normative tonic-dominant opposition—feeling reemerges so as to supersede mechanical symmetry as the main organizational principal. This is why lyric forms, with their concomitant associations of poetry and affect, constitute such a crucial stepping-stone from dance types to expanded forms.

## EXPANDED FORMS

The emergence of sonata form at the end of Koch's formal pathway represents a return to origin. His concept of sonata form recuperates both the symmetry and normativity of rhythm, expressed now in the higher language of tonality. Tonal rhythm is audible and thus rescues rhythm from the fading effect that besets the listener's perception of higher-order rhythmic groupings (hypermeasures).

Sonata form thus evolves through a dialectic of the principles of dance and song. This is reflected in Koch's hybrid definition of "the first allegro of the symphony" as a form comprising "two sections" but "three periods" (one period in the first section, two in the second). Koch makes clear the derivation of this ternary (three-period) scheme from the three-phrase song exposition. Section 128 ("The connection of melodic sections in the first main periods of larger compositions") begins by reminding the reader that the first period can be formed out of three melodic sections (Baker 1983, 213), as in song forms. Periods of larger compositions, however, tend to have more than three sections, and Koch now defines his terms tonally: "this first period thus divides into two sections, namely, one in which the main key prevails, and one in which the key of the fifth prevails." Koch's scheme runs as follows: an initial tonic section comprises a I-phrase and V-phrase, answered by a dominant section, containing a V-phrase and a cadence in the dominant. The opening period is thus symmetrical not on account of length or proportion (as in the sixteen-measure dance), but because it has four punctuation points. Even when there are many more phrases than four, the form is explained as an expansion of the basic quadratic punctuation model.

### *The Metaphor of Language: Concept and Expression*

Koch refers tantalizingly to a first draft of the *Versuch*, in which "I was indeed willing to compare further the similarities which are manifest between the phrases of speech and the way in which they are connected with the melodic phrases and the way they are joined" (Baker 1983, 6). We are left, however, with the *Versuch*'s beguiling yet tentative analogy, at its opening, with subjects and predicates:

> I shall pursue this comparison of melodic phrases with the phrases of speech for a moment. If, for example, the following phrase in example 1 [see ex. 5.10] were to be considered from this logical viewpoint, then it would be a complete basic phrase, because its main idea or the subject contained in the first two measures would receive a certain direction, a certain definition through the two following measures or through a predicate. (4)

We have already looked at the intellectual hinterland of Koch's lost version, and it is possible to use the ideas of Batteux, Ramler, Sulzer, and Herder to restore some of the linguistic gloss to the *Versuch*'s technical categories. In particular, Herder's conception of German as a hybrid language, mediating between poetic "natural order" and philosophical "regular order," illuminates the mixed orientation of Koch's musical language model. Koch's paradigmatic subject-predicate scheme blends the head orientation of natural grammar with the conceptual well-formedness of an antecedent-consequent structure. Indeed, both the expressive and the formal dimensions of language are captured in his category of "rhythm." The architectural rhythm of binary sonata form, expressed at the highest level by the thesis and arsis of its two sections, is both conceptually "civilized," and poetically "primitive" in the genealogical sense. Also hybrid is Koch's concept of melodic

punctuation, assimilating primitive rhetorical interruption (of the "stream of rhetoric") to the arbitrary signs of *galant* phrase endings.

Example 5.10. Koch's basic phrase (1983, 4)




Koch supplies alternative "predicates" in further examples (ex. 5.11a and b):

Example 5.11a. First predicate



Example 5.11b. Second predicate



As with Wolff and Herder's generative narratives, these oppositions coexist at every level of Koch's *Formenlehre*. What changes is chiefly their individual weighting. In Koch's paradigmatic four-measure "basic phrase" (*Vierer*), the language drifts diachronically from arbitrary to natural sign types. The weighting also changes with the progression from small to expanded form. Hence the drift is most pronounced at the level of expanded form—from the arbitrary articulation of a tonic group to the natural discourse of the lyrica second group. Metaphor breaks out in the lyrical second group, which filters natural expression through conventional form. Musical form for Koch, then, unfolds a trajectory toward metaphor. This trajectory is already implicit in Koch's description of his basic phrase. Turning back to Koch's account (above), it is evident that his definition of predication is essentially dual, and that his subject-predicate scheme switches the relationship between the two categories in midstream.

The complexity of Koch's subject-predicate scheme is that it puts into play two distinct functions of predication, namely, completion and definition. Koch, as a Wolffian thinker, designates these two senses of predication interdependently, whereby the second pair of measures "completes" the first pair in the very course of giving them "a certain definition." It is crucial for Koch's ethos of "simultaneous emergence" that these two functions be introduced interdependently. But "completion" and "definition" point in two opposite directions, paralleling the tension between head- and end-orientated articulation (rhythm and punctuation) implicit in Koch's original parsing of his *Schlagreihe*. Koch's examples are paradigms of his basic phrase: four measures long, articulated into two equal "incises" by a middle and final resting point, of which the second is the more stable. The balanced rhythm of the phrase, together with its clear punctuation, makes it a model of well-formedness. The subject, or main idea, is contained in the first two measures, and is completed by the predicate, just as a strong beat is completed by a weak beat. The subject, therefore, is metrically strong with respect to the predicate, with a particular stress on the first beat of measure 1 (the C). But this head orientation is contradicted by the weighting of the two resting points. The internal resting point (the D of measure 2) is weaker than the final one (the A of measure 4).

Koch's alternative predicates bring out and clarify thematic ideas that are only sketched in the subject. In particular, both predicates are marked by a motivic repetition absent from the subject. The predicate in Koch's example (5.11a) gives pride of place to a sixteenth-note run that had been marginal to the subject's rhythmic logic (it is subsumed between the subject's structural scale steps, C and D). Similarly, the predicate in example 5.11b begins with a fourfold statement of motivic unity. In Seidel's terms, we see here a switch from the rhythmic to the logical mode. The subject is

grasped rhythmically as a whole; the predicate is tracked logically from one motivic cell to the next. Articulation by tonal cue yields to motivic discourse, where the material is foregrounded.

The question arises as to whether the emergence of motivic discourse in the second half of a musical utterance should be understood in a grammatical or a rhetorical light. Is the predicate logical or metaphorical? In Forkel's musical genealogy, a melody is civilized because it is linear. But metaphor, as Sulzer and Herder argue, represents one step further down the line from logical grammar, backward, toward the natural. Koch's own pronouncements suggest that he saw the trajectory from subject to predicate in terms of the emergence of articulate language from undifferentiated, prediscursive feeling. Hence the subject enshrines the feeling of the work: "Among the various phrases of a melody, the first usually contains the main idea, which, as it were, defines the feeling the whole should arouse. This will be called the *theme* or *main phrase*." The predicates then break up the content of the subject and arrange them in a linear sequence: thus "the remaining phrases, . . . which present the different expressions of this feeling, may be called *dissection phrases* [*Zergliederungssätze*], because they are broken up in a different way in the realization" (Baker 1983, 3). Similarly, when Koch turns to expanded forms later in the *Versuch*, he will describe "subsidiary melodic sections" as a means by which "the feeling to be expressed is either more closely defined or modified" (215).

Koch's generative account of articulate expression emerging out of inchoate feeling thus recalls the linearity-of-speech doctrine, whereby the temporality of language is contrasted with the simultaneous, picturelike quality of prediscursive thought. It also parallels the passage from clear to distinct cognition in Wolffian philosophy, the shift from simultaneous presentation of features to features distributed along a succession in time as discourse. This trajectory from a simultaneous vision of the whole to a temporal sequence is evinced in Koch's three-stage theory of creativity: *Anlage, Ausführung*, and *Ausarbeitung* (see Bent 1984). For Koch, the creative process begins with an inspired plan that encapsulates the emotional essence and character of the work. This plan is then elaborated by plotting the work's formal junctures, adding connecting tissue, and refining the details. In contrast to Sulzer's view, Koch's *Anlage* constitutes a mental construct rather than a fully worked out plan. (As we have seen above, Sulzer's overbearing emphasis on the period's conceptual unity downgrades its linear dimension to a narrowly ancillary status).

This apparent contradiction between the predicate's logical and metaphorical functions is resolved when we remember that eighteenth-century theorists associated the distinction between grammar and rhetoric with differences in structural scale. Bonds, for example, argues that musical syntax dealt with the construction of small-scale units, while rhetoric determined "the ordering and disposition of all the periods that together constitute the whole" (Bonds 1991, 72–73). Certainly, Forkel seems to support this claim.[19] But we would be wrong to infer that the syntax/rhetoric opposition is simply a difference in degree. Rather, the implication is that, on the level of the phrase, syntax dominates rhetoric, while on the level of formal disposition, rhetoric comes to dominate syntax. In Koch's subject-predicate examples, grammatical and expressive elements interact, but order holds sway because mechanical symmetry is audible on the level of the phrase. As we rise from the level of the phrase to expanded form, from *Teil* to *Tonstück*, mechanical symmetry falls away as a compositional control, and poetic "feeling" (i.e., tonal rhythm) comes to the fore as a structural force. The *Versuch* charts a progression from the grammatical predicate to the rhetorical metaphor.

A further consideration is that predication itself, through periodicity, has both a rhythmic and a logical dimension. Periodicity is a much-misunderstood concept. Nineteenth- and twentieth-century theorists such as A. B. Marx and Schoenberg thought of the period as a type of phrase (in contrast to other phrase types such as the *Satz* or sentence). Koch, however, discusses the period in the context of expanded form, in which the "first period" may constitute the first section of a binary dance or the exposition of a sonata-allegro movement. Koch's periods are thus not phrases but arrangements of phrases, by analogy to the multiclause periods of literature. A period, as we saw with Sulzer, is the product of periodicity—itself a dual process, entailing both the discursive elaboration of a conceptual

*Hauptvorstellung* and the enchainment of originally paratactic clauses. This dualism is congruent with Koch's opposition between rhythm and logic (or rhythm and punctuation) and his two senses of predication (completion and definition)—all variants of Koch's basic synchronic/diachronic dichotomy.

Periodic expansion is rhythmic when it takes place through interpolation of parenthetical clauses; it is logical when the composer tacks on cadential clauses or an appendix. Remarkably, the priority of the rhythmic over the logical in Koch's thinking is reflected in the pedagogical progression itself. Koch outlines his techniques of phrase extension in three places in the *Versuch:* chapters 2 and 3 of volume 2 deal with "extended" and "compound" phrases; chapter 3 of volume 3 applies this technique to dance and song forms; chapter 4 of volume 3 turns to periodic form in larger-scale genres, such as symphonic first movements. Within this ternary scheme, Koch rehearses the same principles at increasing levels of formal complexity, and with the same order of argument—from the rhythmic to the logical. Thus each juncture begins with rhythmic extensions from within the phrase (internal repetition of segments, interpolation of passagework or fresh material) and follows on with logical extensions to the end of the phrase (appendices, multiplications of phrase endings, and cadences).

## *The Extended Phrase*

Predication through interpolation (i.e., completion) is effected, most simply, by internally repeating a measure, either literally, on the notes of the same harmony, or in sequence (ex. 5.12):

Example 5.12. Interpolation through repetition (1983, 43)



"The second means," continues Koch, "through which a phrase can be extended and the substance of it more closely defined is the addition of an explanation, an appendix, which further clarifies the phrase" (Baker 1983, 45). This is predication as definition, which Koch illustrates by showing how a two-measure phrase can be extended by means of a two-measure appendix. The appendix is given the more final phrase ending (ex. 5.13):

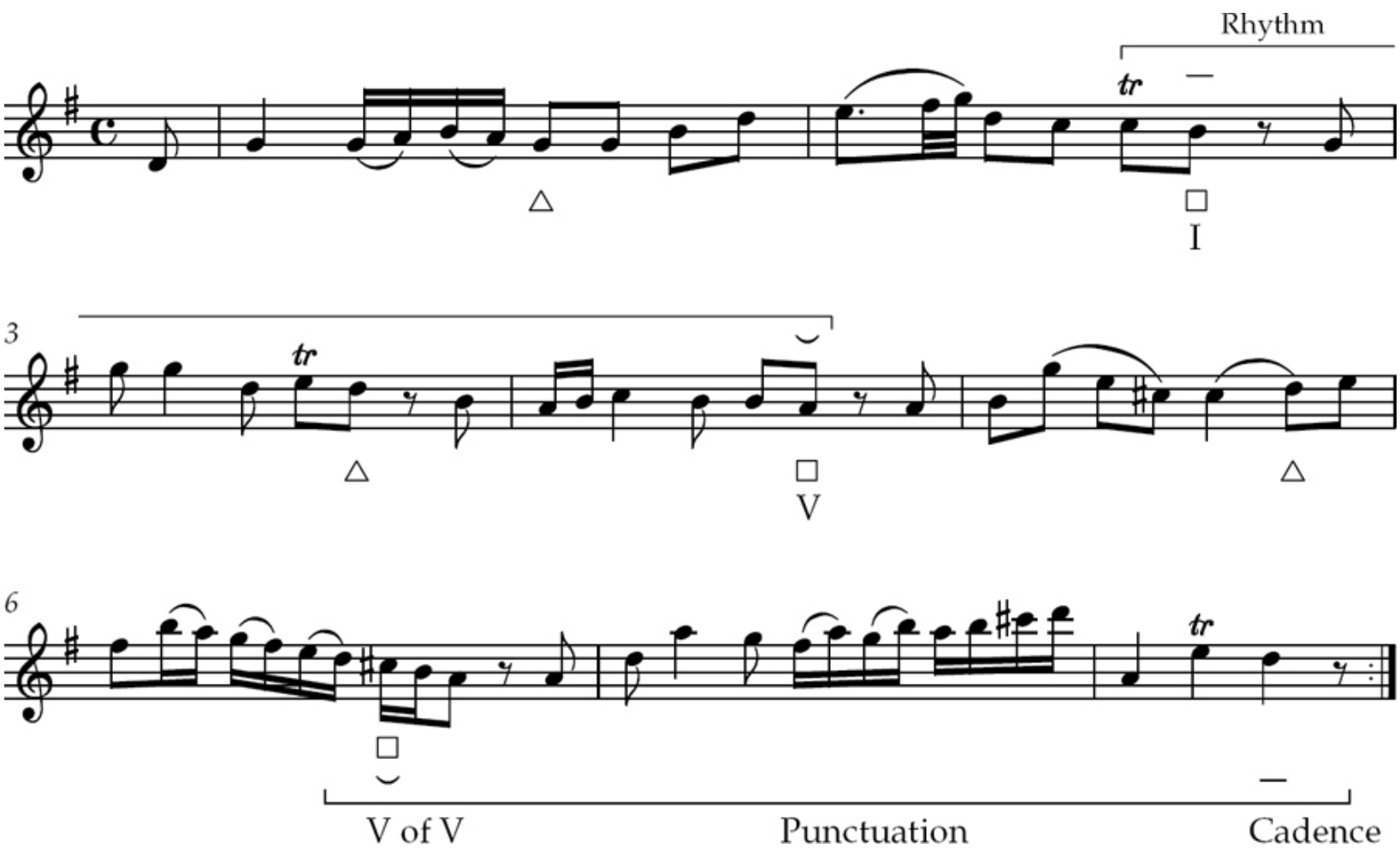
Example 5.13. Appendix (1983, 46)




THE SMALL-SCALE PIECE

The *Versuch* "comes home" with its most often cited example: an eight-measure model (ex. 5.14) of a sonata-form exposition based on the Poco andante of example 5.9 above:

Example 5.14. Koch's model of a sonata-form exposition



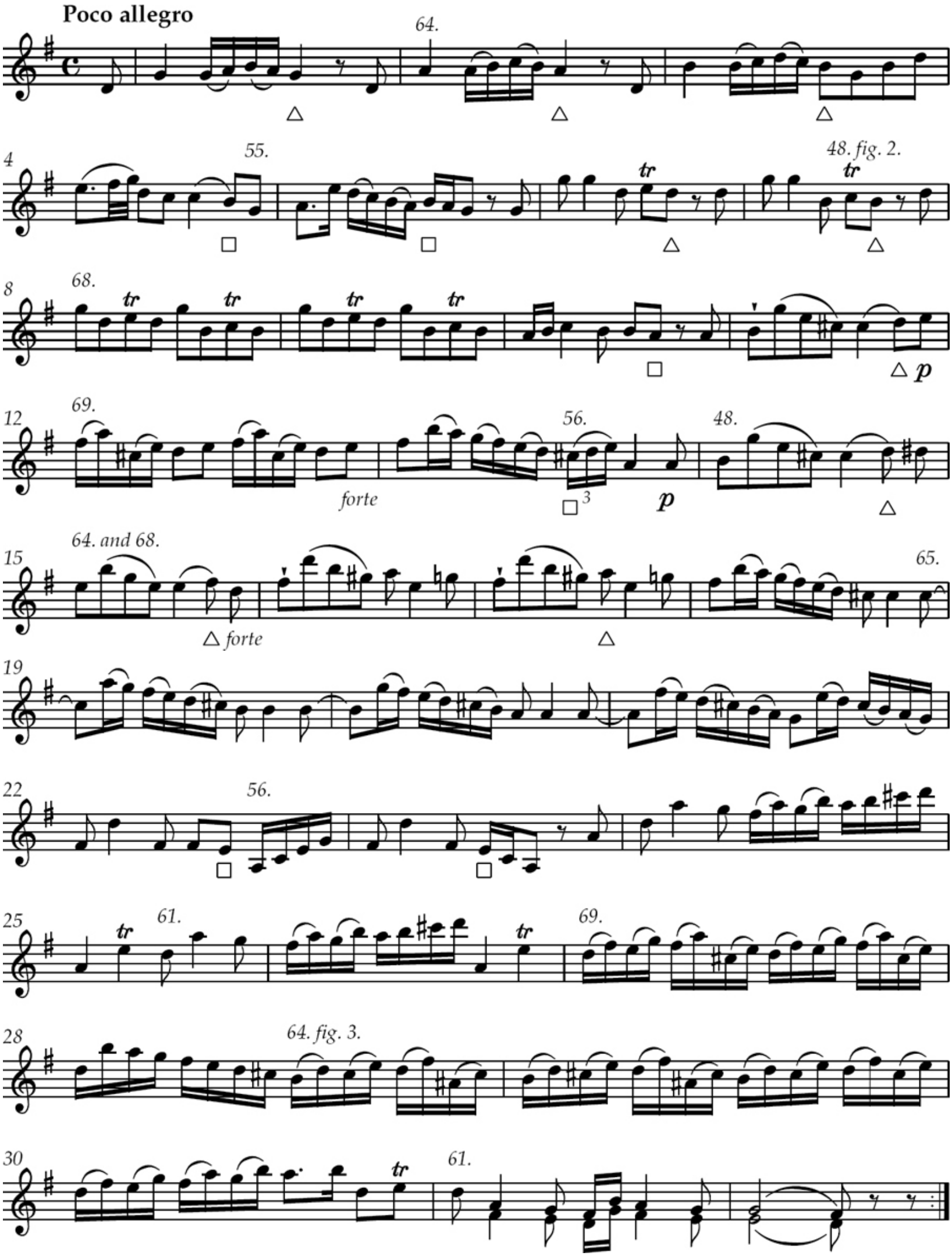

My annotations highlight Koch's quadratic punctuation scheme (I-phrase, V-phrase, V-phrase in dominant, dominant cadence). The quadratic structure echoes Cicero's rhetorical prescription that periods should not be more than four hexameters (cited in Sulzer 1777, 2:549, "Periode"). In other words, Koch's period formulates the quadratic structure of the rhetorical period as four-part tonal structure. My annotations also indicate the switch across the two halves of the period from rhythm to punctuation, and from predication as completion to predication as definition. These opposed grammatical functions are now inscribed within a normative structure. The first half, "in which the main key prevails," is rhythmic because it is orientated toward the opening tonic—the *head* of the period. The second half, "in which the key of the fifth prevails," is punctuated because it is directed toward the closing cadence—the *end* of the period (Baker 1983, 213). Measures 1–4 are thus head-orientated, measures 5–8 end-orientated. Although the first half ends with a caesura on the dominant, the tonic key of its opening holds sway across the whole section. Hence the V-phrase (measures 3–4) is subordinated to the I-phrase (1–2) as a weak beat to a strong beat.

The punctuation of tonic groups is paradoxical, since, although individual phrases are defined by their ending formulas, the overall section is orientated toward the opening tonic. This head orientation is reversed in the second group. Measures 5–8 are governed by the key of the dominant, but this tonality is not properly established until the cadence at the end of the period. The group is therefore end-orientated. Koch's blueprint is thus no abstract schema: it embodies a drift between Herder's two poles of discourse, from primitive rhythmic language to the more civilized and linear language of poetry. The second half of the period has the makings, therefore, of a lyrical second subject. This aspect, however, will only emerge on the level of expanded form.

## THE LARGE-SCALE PIECE

Next, Koch shows how the period can be expanded into a thirty-two-measure exposition through the interpolation and addition of subsidiary phrases (or predicates). A second, expanded version of the period is annotated with cross-references to earlier sections in the treatise that discuss the respective techniques of expansion (ex. 5.15):

Example 5.15. Expanded period (1983, 164)



Koch's various expansion techniques divide into the rhythmic (completion) and the logical (definition). Subordinate phrases are interpolated into the body of the period in the form of repetitions, passagework, or new parenthetical material. Conversely, one may add appendices, phrase endings, or cadences after the main action of the period is complete.

Koch's eight-measure period, with its thirty-two-measure expansion, falls midway in his pedagogical scheme and functions as a paradigm. But the "story" is now really all but over. The symphonic periods in the third and final part of his scheme (volume 3, chapter 4) take as their point of departure "these four main punctuation sections of the period" (Baker 1983, 215). Admittedly, their aim now is the "overcoming" or disguise of punctuation through elision of phrase endings for the purpose of continuity and melodic drive. But the quadratic model, enshrining the shift between the two predication types, remains in place.

## *Second Subjects, Second Nature*

Why are second subjects more lyrical or cantabile? Koch states that the V-phrase in the key of the fifth "is usually followed by a cantabile phrase" (Baker 1983, 230), and that, after the first group, "rushing and sonorous phrases are exchanged for a more singing phrase, usually to be played with less force" (199). His description of the second group chimes with that of Johann Friedrich Daube, who calls it "pleasant, lyrical, trifling." Similarly, Charles Burney refers to J. C. Bach's second subjects as "slow and soothing" (in Ritzel 1968, 105). There seems to be a consensus that the second group is more vocal and expressive than the first. The implication is that music's language character is not a steady state but a differential unfolded through time—that music becomes progressively more language-like in the course of a sonata exposition. Music's language character is a trajectory, that it shares with metaphor: a journey backward toward a "second nature."

The second group's second nature is measured against the arbitrary sign system operative in the first half of the exposition. The basic syntactic unit in the latter is the inflected phrase; in the second group it is the motive. The tonic group is articulated by normative tonal cues; the second group is punctuated by cadential evasions. The first half of the exposition is rhythmic and head-orientated; the second half is punctuated and end-orientated. All these factors conspire to give the lyrical group its feeling of sensate plenitude and rhetorical expressiveness. Although these "natural" signs are by no means excluded from the first group, Koch's exposition model illustrates a broad drift from one set of functions to the other. This drift had been implicit within his eight-measure period, and Koch's thirty-two-measure expansion serves to bring out the difference between its two halves. Most strikingly, the expansion is disproportionate. Measures 1–4 are expanded to ten measures (1–10); measures 5–8 are expanded to twenty-two measures (11–32), mostly through multiplication of cadences and appendices. This expansion is achieved by giving each phrase, respectively, a ten-measure and a seven-measure appendix. Moreover, it is astonishing how much of this material is dedicated to lower-order cadences, either on V or I.

In Koch's later examples of symphonic expositions, which illustrate the broader idiom of orchestral writing, the improvisatory rhetoric is taken away from the second subject and given instead to the transition that prepares it—Koch's "rushing and sonorous phrases" (Baker 1983, 199). It is notable, however, that the fast tonal rhythm and sequential repetitions of the transition are carried through into Koch's second subjects, albeit now disciplined by a squarer phraseology. The "singing phrase" might well be more "soothing," but in each case it is both harmonically faster and motivically more rigorous than its respective first subject. This is (second) nature *through* culture: the Kantian pastoral.

# 3. LINGUISTIC DISCOURSE

In the classical style, music's trajectory toward the dense is inflected by the linguistic paradigm. Metaphor is identified with the natural signs of poetic expression, arising in the second half, or toward the end, of musical utterances. At the level of expanded form, metaphor is achieved in the second group of a sonata-form exposition via a twofold return: a stylistic return to a "natural" mode of discourse, and a formal echo of the actual beginning of the piece. In this final section of the chapter, I will look at the expositions of two closely related C-major works by Mozart: the *Dissonance* Quartet, K. 465, and the String Quintet, K. 515. I will then examine Mozart's most explicit "origin-of-music" narrative—Pamina's recitation on the origin of the flute from act 2 of *Die Zauberflöte*.

As with baroque poetics, a knowledge of metaphorical thought can transform our analytical perspective on the classical style. In chapter 4, I argued that the metaphor of *Bildlichkeit* shifts the focus from matters of form (rhetorical *dispositio*) to issues of texture—that is, to the process of textural thickening. In the classical style, the formal approach that I rejected as anachronistic for baroque discourse seems to find its historical niche. Certainly, formalist analysis has had enormous success dealing with the music of Haydn, Mozart, and Beethoven. But it unduly foregrounds balance and closure over change and process, downplaying the experience that an exposition (and hence a sonata form as a whole) ends very differently to how it begins. Such an approach has particular blind spots for classical music's generative, evolutionary, and semantic aspects, and for the way these aspects are interwoven within a single work.

In a classical exposition, the trajectory toward linguistic density is borne out by the prevalence of topics such as "musette," "pastoral," and "singing style" (nos. 18, 21, and 25 in Agawu 1991, 30). A metaphorical (rather than Agawu's structuralist) perspective explains how these topics emerge from the guts of the musical fabric—Koch's dance/song dialectic—rather than being tacked on as "dependent" ("extroversive") signs.

### *The Kantian Musette in K. 465 and K. 515*

The chromatic introduction (ex. 5.16) that gave Mozart's *Dissonance* Quartet its sobriquet is a musical analog of the "irregular and dislocated" syntax that Herder imputed to primitive language: "the speech of a people that is still in the sensual stage of its development" (in Scaglione 1981, 75):

Example 5.16. Mozart, *Dissonance* Quartet, first movement, mm. 1–16




In fact, the evolution of Mozart's language across the three junctures of his exposition—introduction, first group, and second group—parallels Herder's ternary historical model:

> When language evolved from the primitive wild stage to a state befitting the newly found orderliness of social and political organization, it became a poetic and sensual medium, rich in the features that distinguish poetry from prose, these features including fresh inversions and simplicity in the use of connecting particles. (In Scaglione 1981, 74)

The periodic phrasing and clear articulation of the first subject evinces a "newly found orderliness" (ex. 5.17):

Example 5.17. Mozart, *Dissonance* Quartet, first movement, first subject




On the basis of this civilized syntax, the second subject, at measure 71, can relax into "a poetic and sensual medium" (ex. 5.18):

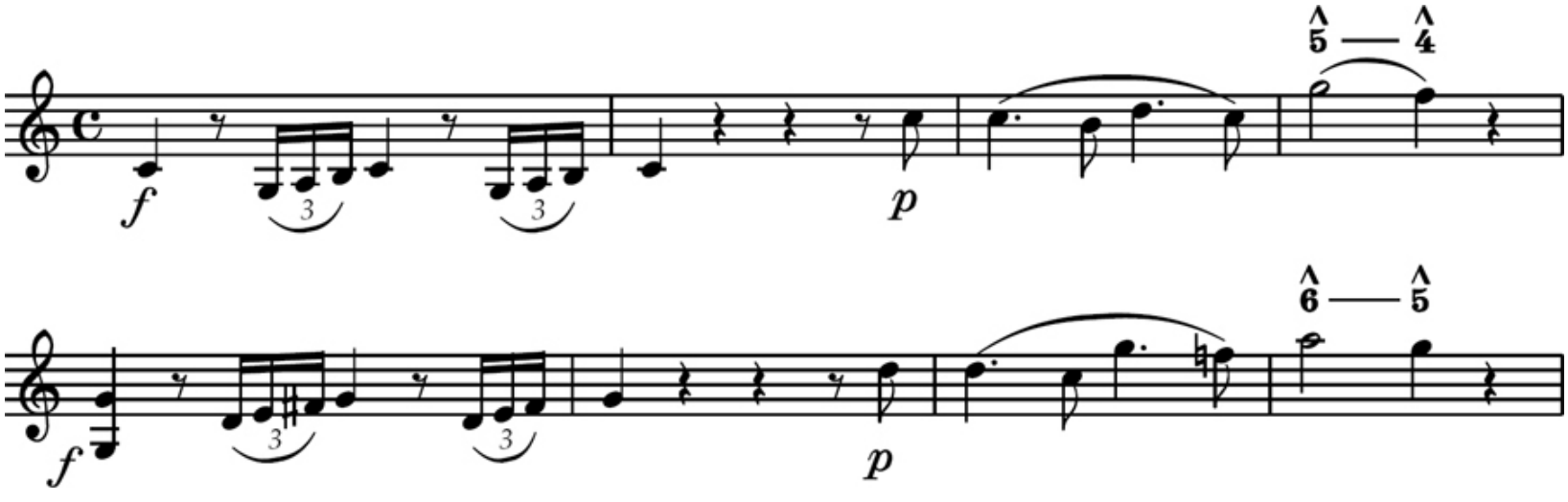
Example 5.18. Mozart, *Dissonance* Quartet, first movement, second subject




The theme is in the pastoral topic of a musette, complete with bass drone and augmented-fourth skirl. "Natural" topic is not bolted on to the syntax arbitrarily, as an "extroversive" sign. Rather, it elaborates the natural word order that Herder and others identified with poetic expression—those "fresh inversions" that "distinguish poetry from prose." The boldest inversion is the C♯ on the downbeat of measure 72, a signal instance of the gestural head-positions of primitive syntax. The appoggiatura has been displaced ("inverted") from its normative position as a syntactic phrase ending, that is, a tonal cue. Placing the appoggiatura in front liberates the expressive material dimension that civilized syntax brackets out. Nevertheless, the musette is by no means as irregular as the "wild" opening of the quartet, since its sonorities are disciplined by metrical phrasing. As a hybrid, Mozart's second subject corresponds to the median position of modern German in Herder's eyes, a language that can "still combine the advantages of the poetic stage with those of the philosophical, a high degree of order as well as freedom" (Scaglione 1981, 75). Mozart's is also a language both of the head and the heart, of civilization and nature. One is reminded of Mozart's description to his father of his concertos K. 413–415 as "a happy medium between what is too easy and too difficult": they are "pleasing to the ear, *and natural*, without being too vapid" (Anderson 1966, 833).

We can track the evolution of Mozart's "natural" language across his exposition by focusing on his use of appoggiaturas as tonal punctuation. These are deployed normatively in the first subject, as phrase endings. The theme in measures 23–26 is utterly conventional; indeed it instantiates the same 5̂–4̂ . . . 6̂–5̂ schema that opens the *Jupiter* Symphony (ex. 5.19):

Example 5.19. Mozart, *Jupiter* Symphony, first movement, mm. 1–9



The theme is thus read not in itself, but according to the arbitrary signs that inflect it, its conventional syntax. No matter, then, that the buffer between these cues is different: in K. 465 it is a rising scale, in the *Jupiter*, a fanfare gesture. The material of the schema is nonpertinent, utterly subsumed within its syntax. The transparency of this syntax is predicated on the metrical conformance of the two subphrases, whereby the complementary cues (5̂–4̂ and 6̂–5̂) answer each other. It also depends on the congruence of this rhythm with the harmony, so that the "question" and "answer" are supported by a departure from and return to the tonic (I–IV, then V–I). Syntactic conformance and congruence are scrambled in the introduction.

The introduction is "primitive" in three respects. First, measures 1–4 chromatically inflect the cues and conflate them into a single circling motive around the dominant: the viola's A♭–G–F♯–G. The cues thus function melodically, rather than as discretely separated metrical signs. Second, with conformance denied, congruence also disappears with the violins' overlapping entries, transposing the motive to E♭ and A♮. Third, and most striking, is the inversion of syntax: all three instruments begin with the cues (conflated) and end with the rising scale that serves Mozart as buffer in the theme of measures 23–26. Mozart's language beautifully illustrates the dual faces of rhythm as both metrical order and percussive gesture. The successive entries in measures 1–2 of A♭, E♭, and A♮are quintessential tonal gestures, mutually interrupting inversions that subvert the listener's sense of tonal center.

The musette of measure 71 echoes the inversions of the introduction, but through the grid of syntax. The theme begins with a chromaticized cue around the dominant (D–C♯) and ends with an inversion of the "buffer" scale into a descent from the tonic. The antecedent phrase cadences, however, with a G–F♯ punctuation mark, which follows smoothly from the falling chromatic scale. The phrase is thus topped and tailed with complementary cues: D–C♯ answered by G–F♯, a parody of punctuation. Mozart's musette is metaphorical, then, because it naturalizes the square phrasing and arbitrary signs of conventional language into poetry. It sings the Kantian pastoral: nature through culture.

Mozart's Quintet K. 515, very much a Fiordiligi to K. 465's Dorabella, expresses many of its younger-sister-work's ideas on a grander scale. It cannot be an accident that the longest instrumental first movement before the *Eroica* is also the one most in thrall to the musette topic. The quintet's musette occupies 120 of the movement's 360 measures. The secret of the exposition's architecture is that the musettes are confined largely to its second half, the second group and coda, enabling Mozart to ground the vast tonal arc launched by the first group in a series of pedal points. Moreover, the material of the first group is unusually neutral and schematic, making for a blocklike contrast between the two halves. The shift from regular to natural syntax has seldom been so clear. But neither has their coexistence within the Kantian pastoral. The question is, why does the second-subject musette at measure 85 sound so animated, so unpastoral? (see ex. 5.20). The answer goes beyond the surface melodic flourish in the first violin to the bridge passage that immediately precedes the Musette—ultimately, to the relationship of the bridge to the tonic group.

Example 5.20. Mozart, String Quintet K. 515, first movement, mm. 85–90


p
p
p
p

Example 5.21. Mozart, String Quintet K. 515, mm. 1–19






The first group is a composite of the neutral and the deviant (ex. 5.21). On the neutral side, it is transparently schematic, embedding a $\hat{1}$–$\hat{7}$ . . . $\hat{2}$–$\hat{1}$ schema within what Meyer (1989, 266) has called an "Adeste Fideles" schema (successive skips from $\hat{5}$ to $\hat{1}$, $\hat{2}$, and $\hat{3}$). The buffer between these punctuation marks is particularly blank—arpeggio "curtains" in the cello whose role is to fill tonal space. But it is the five-measure interval between these cues that is deviant. Mozart sets in motion a mechanism that will see this five-measure interval gradually contracted, squeezing the arpeggio curtain entirely out of the frame and installing the tonal cues in the cognitive space where the buffer had been. This process comes to a head in the transition, measures 69–85.

The transition revisits the opening in D major, but with striking changes (ex. 5.22):

Example 5.22. Mozart, String Quintet K. 515, mm. 68–84



Violin and cello have swapped roles (violin arpeggio, cello punctuation). The interval of entry has been reduced from five to four measures. Actually, the sense of compression is greater still. Mozart crafts this illusion by substituting 2̂–1̂ (the original "answering" subschema) with 4̂–3̂, thus enjambing the 1̂–7̂ "question" subschema with the 4̂–3̂ (F–E) "answer" that had originally rounded off the tonic paragraph (and the Adeste Fideles sequence) at measure 17. In other words, Mozart's first group had been framed by a 1̂–7̂ (C–B, measure 5) and a 4̂–3̂ (F–E, measure 17). The bridge knocks out the intervening twelve-measure sequence and pairs the corner cues as a new schema, 1̂–7̂ . . . 4̂–3̂. As we saw in chapter 1, this remarkable schema is a prototype; it is actually more familiar than the tonic-group schema it displaces, thus giving the bridge its air of arrival.

One of the 1̂–7̂ . . . 4̂–3̂'s most useful properties is the tritone relationship between the 7̂ and 4̂, making it possible to elide the subschemas into a single dominant-seventh harmony. Mozart can thereby compress the interval between the cues into a single measure, creating a powerful stretto at measure 77. Mozart has accelerated his syntax to the point where punctuation penetrates the content of the discourse: the cues become melodic. Rather than halting on the brink of the second group, the process runs into the musette itself. The innocuous-seeming filler harmonies from measure 86 in the viola and second violin actually continue the pendulum between 1̂–7̂ and 4̂–3̂, enjambed into an alternation of tonic and dominant-seventh harmonies. Pastorals are normally static, but beneath the pedal the musette's phrase rhythm is in fact superfast, a climax of a process of cumulative acceleration. The quintet marvelously bears out Koch's observation (see above, p. 260) that the fast tonal rhythm and sequential repetitions of a bridge are often carried through into the second subject.

Another of the 1̂–7̂ . . . 4̂–3̂'s remarkable properties is that transposing the 4̂–3̂ to the dominant gives it the same pitches as the 1̂–2̂. We explored this phenomenon in chapter 1 with respect to Mozart's sonata K. 283 and saw how the G–F♯ cue functions as 1̂–7̂ in the tonic group and as 4̂–3̂ in the dominant group. The twisted "rhyme" of this effect compounds the sense of qualified return, whereby the second half of the exposition reflects upon the first from a distance. Reflection takes the form not just of an abstraction of pitch from function, but of a code switch from punctuation to expression. In other words, the second group manipulates the cues melodically. Mozart's technique in K. 515, could not be more efficient, since the cues are simply reiterated as a chain, with no intervening buffer. The punctuation *is* the substance. The rhyme here concerns the pitches C and B, which are disposed as 1̂–7̂ in the first subject (measure 5) and as 4̂–3̂ in the two musettes that comprise the second subject and coda. The two musettes are almost entirely made up of 4̂–3̂s. In musette 1 (second subject), 4̂–3̂ and 1̂–7̂ are interlocked. In musette 2 (coda), 1̂–7̂ drops out, resulting in a chain of 4̂–3̂s (ex. 5.23):

Example 5.23. Mozart, String Quintet K. 515, mm. 129–35




Incidentally, Mozart is so concerned to project the pitch-rhyme between the coda and first group that he resorts to the extraordinary expedient of bringing back musette 2 in the recapitulation using the same pitches as in the exposition. Rather than transposing musette 2 from the dominant to the tonic, he simply reinterprets it in the context of C major. The exposition's rhyme of beginning and end thus survives into the recapitulation. Twice, then, at the ends of both the exposition and of the movement as a whole, Mozart conjures up a haunting illusion. By rhyming the schematic syntax of the opening with the melodic poetry of the ending, he lets us view classical artifice through a pastoral telescope.

Mozart's musettes are perfect examples of Enlightenment metaphor. The end is identified with the beginning, culture is mitigated with a return to origin, and the arbitrary sign is naturalized into poetic expression. Moses Mendelssohn tells us that metaphor is about "making discourse sensate," so that "our cognition is rendered intuitive" and "objects are presented to our senses as if without mediation"

(in Wellbery 1984, 79). The "as if" condition is vital. Yes, discourse thickens in the musette into a hypotyposis of pastoral, but one airbrushed with arbitrary linguistic signs.

## *The Origin of the Flute*

After a painful separation, Tamino and Pamina are reunited toward the end of *Die Zauberflöte*'s second act and declare their love for each other. They stand confronting the "gates of terror," behind which await the trials of fire and water. Just before they enter, Pamina sings an astonishing narrative about the origin of the flute: "In a magic hour, in thunder and lightning, storm and shower, my father carved it from the deepest heart-wood of a thousand-year-old oak-tree" (ex. 5.24). If this narrative suggests the World Ash-Tree from which Wotan will fashion his spear, or even the tree growing in Hunding's hut beside which Sieglinde will tell Siegmund her life story, then Pamina's idiom is prophetic also of Wagnerian music drama's declamatory style. *Die Zauberflöte* generally looks forward to the fluid musical prose of the nineteenth century, but never more so than here.

Example 5.24. Mozart, *Die Zauberflöte*, act 2, finale



312

Fl.

Ob.

Bn.

Vl. I

Vl. II

Vla.

Pam.

uns auf uns'-rer Bahn. Es schnitt in ei - ner Zau-ber-

Vc. and D.B.

317

Bn.

Vl. I

Vl. II

Vla.

Pam.

- stun - de mein Va-ter sie aus tief-stem Grun-de der tau-send jähr'-gen Ei-che

Vc. and D.B.




The passage is portentous on so many levels. As a creation myth, it recounts the origin of music, in particular, of the musical instrument that gives the opera its name. Like Enlightenment semiotics, it engages with the materiality of language, that sensuous element suppressed by regular syntax. Herder often compares the evolution of language to a tree, the roots of which are metaphors (see Schick 1971, 35–37). Echoing Herder, Wagner would write in 1851 of "the enormous wealth of leaves and branches of the Germanic Folk-tree" (Wagner 1993–95, 2:162). Pamina reveals the flute's material to be wood, and with matchless astuteness, Mozart evokes this wooden instrument not with a flute but a bassoon. The bassoon is "the deepest heartwood" of the flute's transparent neutrality. This timbral *Verfremdungstechnik*, or "alienation technique," underscores Mozart's word-setting, which goes against the grain of Emanuel Schikaneder's libretto. Initially, Mozart shadows the rhyme scheme of Schikander's nine-syllable lines. Pamina's "Spiel' du die Zauberflöte *an*" is answered cadentially by "sie schütze uns auf uns'rer *Bahn*." Once she begins her narration, however, Mozart abandons the square periodicity of the poetic couplets and writes fluid musical prose (*stunde* is swallowed midsentence, losing its affinity with *Grunde*). As with his musettes, he shifts from a style articulated by phrase endings to a more naturally expressive idiom. But nature is now part of the story—the thunderclap that resounds at the climax of the narration. The dominant seventh on "Donner" is the loudest and most dissonant noise in the scene, and it is played by the first tutti, capped by a high E♭ on flute. *Donner* (thunder) is the paradigmatic *Machtwort* beloved of genealogists of language such as Herder and Sulzer (Sulzer traced it to the Latin *tonitru*). Mozart sets it as a musical gesture, a relapse to head-orientated "natural" word order. It is significant that the thunder-chord features a high

E♭, the opera's keynote. The narration begins in the distant key of C major, and Mozart toys with E♭ onlysoastodistanceitfurther: first as part of a diminished seventh chord ("in einem Zauberstunde"), then, at *Donner*, as the seventh of a $V^7$ of B♭. But this is not an alienation of E♭ so much as its metaphorical *epochē*. The narrative's ultimate reference is Tamino's first aria, "Dies Bildniss ist bezaubernd schön," in E♭, in which he falls in love with Pamina's image in a picture. This scene is full of motivic references to Tamino's opening phrase, the descending sixth from G to B♭ (ex. 5.25a and b):

Example 5.25a. Mozart, *Die Zauberflöte*, act 2, finale




Example 5.25b. Mozart, *Die Zauberflöte*, act 1, No. 3, "Dies Bildniss is bezaubernd schön"




This sixth is recalled by Pamina when she addresses Tamino not as a pictorial object but as a woman in command: "Spiel' du die Zauberflöte an," remarkably at the same pitch as "Dies Bildniss ist bezaubernd schön," albeit with E and B naturalized. The pitch E is redescribed at the very point of being recalled, and it is the locus for a liminal transition from one side of the canvas to the other. Picture becomes person, representation material. The flash of lightning reveals an image of a very different Pamina to the childlike object introduced in act 1, one empowered by thunder into a Valkyrie *avant la lettre*. The metaphorical idiom of the narration expresses a new subjectivity: Pamina, like the heroines of all the great Mozart operas, begins as a clockwork object and matures into an authentic subject.

The metaphor of language evolves, then, into the organicist metaphor of life, which will concern us in the next and final chapter. Pamina paves the way for us with flowers: *Sie mag den Weg mit Rosen streu'n*.

# 6
# *Melody and Life*

> . . . that small poetic flower, the metaphor.
> Jean Paul Richter, *School for Aesthetics*

## *Gazing on Flowers*

The sunflower, metaphor of metaphors, sings back in Schubert's "Aus 'Heliopolis' I" (Op. 65 No. 3), a setting of the fifth poem from Johann Mayrhofer's *Heliopolis* cycle. The song's first half describes a *Winterreise* through "the cold, bitter North" in search of Heliopolis, the city of the sun, which the poet associates with an artistic haven from a hostile society. Schubert depicts the journey in a bleak E minor, with bare unisons between the piano and voice. As with "Der Lindenbaum," from a more famous winter's journey, the key brightens into the major and the texture thickens into a chorale idiom when the traveler encounters, and apostrophizes, vegetal life (the later song plays with the same E minor/major modal contrast): "I turned now to the flower that the sun has chosen, that looked eternally into its countenance, and I was enraptured." Schubert marks this moment of "turning" ("Wandt' ich mich") by sharpening the G on a couple of magical dominant seventh chords, which nudge the music into a radiant A major (ex. 6.1). The cadence turns its circle through subdominant and dominant and resolves into E major proper only when the sunflower begins to speak: "turn your eyes, as I did, to the sun. There is rapture, there is life! Loyally dedicated, make pilgrimage and do not doubt; you will find rest in the light."

Example 6.1. Schubert, “Aus ‘Heliopolis’ I,” Op. 65 No. 3, mm. 20–37




At first glance, Schubert’s modal switch from minor to major seems to reflect that classic Enlightenment trope that Haydn had made his own in *The Creation*, the dispersal of chaos and darkness by the dazzling “Und es ward Licht.” But Schubert’s light is far more ambiguous, even sinister. The sunflower is a staging post, not a journey’s end; it only *points* to the sun. Anyone familiar with the many *maggiore* episodes in *Winterreise* will recognize the flower’s song as a dangerous deception, distracting the poet from the onward motion that keeps him warm and alive. Like the lethal will-o’-the-wisp, its light is fake. The crisis in “Der Lindenbaum” comes when the traveler shakes himself free of the illusion and decides not to turn off his path: *Ich wendete mich nicht*. Twice does the traveler turn his eyes: first to the flower (*Zur Blume . . . wandt’ ich mich nun*), then, at the flower’s bidding, to the sun (*Wende, so wie ich, zur Sonne deine Augen*). To turn is to trope, and the trope of metaphor turns toward the light of truth like sunflower toward the sun (which

turns in its orbit). Is the metaphor, then, a *fleur du mal*, like the nineteenth century's arch-seductress Kundry, Wagner's "rose of hell"?

When Jacques Derrida reveled in the heliotrope as the metaphor of metaphors, he forgot to mention that only in the romantic age does the sunflower become human. Jean Paul Richter calls metaphor an "abridged personification." To metaphorize in the nineteenth century is to compare music to a person, rather than a picture (baroque) or a language (classical). More broadly, this comparison is itself mediated through the metaphor of human beings as vegetal life: plants symbolized a state of preconsciousness associated with the aesthetic. Mixing the human, the vegetal, and the tropological, Jean Paul could thus exclaim: "how lovely it is that one now discovers how metaphors, these transubstantations of the spirit, resemble flowers" (1973, 131). And there comes the difficulty. Since life is dynamic, the romantics can never decide whether the organism is an end in itself or merely a metaphor for the spirit, a stepping-stone in *Geist*'s endless journey of self-development. On the one hand, the "metaphor of personification" marks the culmination of metaphor's trajectory toward the dense. Ricoeur's notion of "living metaphor" (*metaphore vive*) is, first and foremost, a romantic conceit. What could be more final than the human subject? And yet, for this precise reason, human subjectivity can never be captured and objectified, in the symbol, which is thus only able to function negatively—"ironically" or "allegorically," as Schlegel would say. Life moves and can only be known in motion. What is true of the organism holds also for the status of aesthetics, metaphor, and music itself. Does the sunflower's speech in Schubert's song mark a satisfying culmination, or merely a pause for momentary reflection? The power of romantic metaphor is that its static and dynamic poles circle each other endlessly.

Schubert's song condenses many of the themes I will explore in my last chapter, not least the idea of circling. For, in many ways, I will be circling back to themes I discussed in the baroque. "Aus 'Heliopolis' I" reminds us of Schütz's heliocentric harmony, of the stars in their circle-of-fifths orbit around the tonic. (Donald Francis Tovey called Schubert's harmony "as wonderful as star-clusters." A lovely example is the song "Die Sterne," D939, whose key changes portray the stars' axis as a cycle of thirds from the tonic E♭ to C, from C♭ to G, and then back home.)[1] Universal harmony is reinvented by the romantics as a pantheistic philosophy of nature, a "natural supernaturalism" (Abrams, 1973). Abrams makes a convincing case for viewing romantic philosophy as a return to Hermetic and Neoplatonist ideas; in particular, the notion of human life as a "circuitous journey" (1973, 141–95) to the absolute (as in Fludd's "Divine Monochord"). According to Abrams, the history of this idea unfolds in three phases. Initially, with Plotinus, the rhythm of division and restitution is circular and eternal. Second, Christian theology temporalizes the circle into an historical line, in the form of eschatology: a steady, nonrepeatable, progress in real time from the Fall to the Resurrection. Finally, the romantics secularize and internalize this process as moments of thought, blending the circle and the line into the spiral of self-consciousness. The recursive splitting and synthesis of the Hegelian dialectic rehearses the circuitous journey as personal experience and growth.

When we combine circle and line, we also get the spiral of melody. Melody is the paradigm of romantic music; it is a musical journey, identified with the journeys both of thought and of organic life. Melody is thus the natural complement of the metaphor of organicism, "music as life." A. B. Marx derives sonata form from melody, just as he compares sonata form to the journey of a hero. That melodic form par excellence the romantic lied is typically an inward journey toward enlightenment.

Circular return is evinced also in the strange accommodation melody and life negotiate with their precursors: harmony and painting, and rhythm and language. At one level, the latter are negated; the organic defines itself by rejecting the mechanical, melody quarrels with rhythm, life with language. Yet at a higher level, these older categories are subsumed into the "rhythm" of melody, a ceaseless formation and reformation that assumes many guises: formal process and closure, Marx's *Gang* and *Satz*, Nietzsche's Dionysiac and Apollonian, theories of symbol and allegory, even Schelling's and

Goethe's model of how nature evolves dialectically toward consciousness. Furthermore, harmony's vision of a universal network of correspondences is restored in the romantic affinity between nature and the symbol (metaphor). One is led to the surprising conclusion that, coming between these two great periods of affinity—periods, as Walter Benjamin would say, that have an "elective affinity" with each other (1998, 213)—the classical era is something of an aberration, a hiatus. It is the only period in which nature is bracketed as "in itself" (in Kant's terms) unknowable. Metrically speaking, rhythm and language constitute the weak beat in the historical measure. This is, of course, a narrative constructed from the viewpoint of the victors, melody and life—from the perspective of the present. But it is the only perspective we have.

# 1. THE DIALOGUE OF MELODY AND LIFE

Melody and life not only talk to each other, they also enter a dialogue with their precursors: harmony and rhythm on the one side, painting and language on the other. In this first section, I review each of these relationships in turn, asking such questions as what it means for musical language to have a "body," or for melody to become "visible." Why is the natural "color" of melody red? I will then pursue this dialogue into the opposition between the educational and aesthetic sides of metaphor (*Bildung* and *Sinnbild*), as well as the rhythm between metaphor and allegory. Section two explores how these ideas influence the teaching and reception of musical form. Two composers feature in my discussion of the "metaphor of personification": Beethoven and Wagner, the two heroes of the romantic cult of personality. Their achievements are reciprocal. Beethoven's autonomous instrumental forms create the effect of human subjectivity; Wagner's dramatic music is embodied in mythical characters and flesh-and-blood singers.

## *Melody and Rhythm*

Melody and rhythm were at war. The metaphor of rhythm persisted long into the romantic era, but it was demonized as the enemy of organic life, as the mechanical. One of Wackenroder's *Phantasien über die Kunst* allegorizes the struggle between melody and rhythm as a fairy tale of "The Naked Saint" (1967, 197–202). This *Märchen* tells the story of an Oriental hermit, living in his cave, who is maddened by the imaginary sound of the wheel of time. The hermit was especially enraged when passing travelers failed to hear this *Rad der Zeit:* "he shook violently, and pointed them to the unceasing rotations of the eternal wheel, the regular, metrical, beat of time" (198). And then one moonlit night two lovers sing a beautiful melody that wafts down to the cave, and the rhythm is immediately stilled: "with the first note of the music and the song, the roaring of the wheel of time fell silent for the naked saint" (201). The hermit's spirit leaves his body, rises through the sky, and dissolves into the spiritual melody resounding in the firmament, the music of the spheres. Pointedly, the music of the spheres is now not a harmony, but a melody.

Wackenroder's fantasies are famous for giving music to the nineteenth century as a new religion. But the musical parameters of this religion are overlooked: the spirit is saved from rhythm through melody. Wackenroder's rhythm/melody opposition reflects a broader distinction between the organic and mechanical. This distinction was formulated most influentially by August Schlegel in his *Dramatic Lectures*, as both a critical and a historical yardstick:

> The form is mechanical when through outside influence it is imparted to a material merely as an accidental addition, without relation to its nature (as e.g. when we give an arbitrary shape to a soft mass so that it may retain it after hardening). Organic form, on the other hand, is innate; it unfolds itself from within and acquires its definiteness simultaneously with the total development of the germ. (in Wellek 1955, 48)

Schlegel uses the mechanical/organic opposition, paradoxically, as much to assess opposing tendencies in contemporary art as to characterize the difference between classical and romantic drama. The problem with Schlegel's conflation of form with history is his claim that the present contains mechanical aspects while at the same time being organic with respect to the past. A similar

contradiction besets writers who try to import this distinction to music. At first reading, Novalis seems to be identifying the mechanical with the rhythmic, as in Wackenroder's tale:

> Seasons, times of day, lives and destinies, are all, strikingly enough, thoroughly rhythmical, metrical, according to a beat. In all trades and arts, in all machines, in organic bodies, in our daily functions, everywhere: rhythm, meter, beat, melody. Anything we do with a certain skill, we do rhythmically without being aware of it. Rhythm is found everywhere. All mechanisms are metrical, rhythmical. There must be more to this. Could it be simply the influence of laziness? (in Passage 1977, 71)

One may infer that rhythm is mechanical, while melody is organic, which would fit with the stock romantic conceit that the world was governed not by harmony but by song. At the end of his spiritual journey, Friedrich Hölderlin's Hyperion emerges from his "midnight of anguish" to hear "the world's song of life," *das Lebenslied der Welt* (1965, 167). It is the same "song of the earth" that Schopenhauer put at the centre of his cosmic theory of music. Melody is for Schopenhauer "the highest grade of the objectification of the Will, the intellectual life and effort of man" (1948, 335). But, if we read more carefully, we notice that Novalis groups meter *with* melody ("rhythm, meter, beat, melody"), the mechanical *with* the organic ("in all machines, in organic bodies") within a single metaphor. After all, the rhythm of respiration and the beating heart is just as "organic" as a melody, as witness William Wordsworth's "The pulse of being everywhere was felt" from the *Prelude* (in Abrams 1973, 435). Faust's opening verse from the second part of Goethe's play crisply elides the two metaphors as emanations of a single world soul. On the side of rhythm, life has a beating heart: "Des Lebens Pulse schlagen frisch lebendig" (Goethe 1992, 5). On the side of melody, the forest resounds with the thousand voices of life, a Schilleresque ode to joy: "Der Wald ertönt von tausenstimmigem Leben." Could it be, then, that rhythm, rather than being a rival of melody, was actually its accomplice, another organ within the same body musical? The point about metaphorical melody is that it operates beneath the level at which the literal distinction between rhythm and melody applies, a level denoting dynamic, energetic flow. Just as melody for Rousseau was a metaphor for expression, rather than the literal melodies of opera, romantic melody ultimately means "energy," *energeia*. As we will see, the relation of rhythm to metaphorical melody is dual. On the one hand, theories of rhythm become melodic in that they shift from the metrical, "pulse" model of Sulzer to a model of rhythm as continuous: a move from particle to wave. On the other, rhythm and, at a higher level, form are reconstituted as a force of resistance against which melody pushes: a formal drive working in tandem with a dynamic drive. It is this metaphor of "melody as energy" that enables theorists such as A. B. Marx to metaphorically map melody onto form. It also explains how Wagner, in "The Art-Work of the Future," could understand a Beethoven symphony as a "harmonized dance" (1993–95, 1:120), and his own music drama as a dialectic between the spirit of the dance and "infinite melody."

The triumph of melody is attested everywhere. For E. T. A. Hoffmann, "the first and foremost element in music is melody, which seizes the human imagination with magical power" (in Charlton 1989, 156). Wagner writes that harmony and rhythm are merely "the shaping organs," whereas melody is "the first real shape of music" (1993–95, 2:104). Nietzsche calls melody "primary and universal" (1967, 53), echoing Schopenhauer, who saw the dynamic of melody ("a constant digression and deviation from the tonic in a thousand ways" [1948, 336]) as linking both man and nature on the basis of the will. Hegel and Schelling, the other two front-rank philosophers of the early nineteenth century, also place melody at the top of their musical systems. Hegel's system unfolds in three rising steps: rhythm, harmony, melody. Melody represents not just a culmination but an *Aufhebung* of the others (a synthesis by which rhythm and harmony are at once negated, assimilated, and lifted up): "the final sphere in which the earlier ones [rhythm and harmony] form into a unity, and in this identity provide the basis for the first free development and unification of the notes, is melody" (1998, 929). Schelling claims that "melody is in music the absolute informing of the infinite into the finite, and thus the entire unity" (1989, 113). Then, with a radical twist on Kepler's music of the spheres, he declares of the planets that "their movements are *pure melody*," because they express an ordered, centripetal "yearning toward the centre." In contrast, the disordered paths of the comets "express mere harmonic confusion" (117), where "harmony predominates."

Universal harmony is *aufgehoben* into what one might call "cosmic melody"—the prevailing worldview of the romantics. The triumph of melody is reflected also in compositional theory. Whereas even Koch's treatise reaches melody only after counterpoint and harmony, A. B. Marx's *Lehre* introduces "the general principles of melodic construction" at the very outset (preface to first edition, x).[2] Marx proposes psychological or developmental arguments for melody's "natural' status more seriously than Rousseau had ever attempted. In a polemical study of 1841 titled *Die alte Musiklehre im Streit mit unserer Zeit*, Marx claimed that "as the psychologist already takes for granted, most people are endowed with their own joyous faculty for singing; and this gift has already blossomed in most well-constituted children"; moreover, "melodic form is the first of all musical structures which man acquires" (1841, 31). Melody's primacy survives when we move from the developmental to the formal: claims for music's "organic unity" are generally supported with evidence from themes and motives. This became a mainstream nostrum, promulgated even by second-division theorists such as Arrey von Dommer: "Just as the blossom and the fruit lie dormant in the bud, so too does the further development of a musical movement reside . . . in the theme, and more specifically, within the theme's individual motives" (in Bonds 1991, 143).

Although melody certainly replaced rhythm as the musical paradigm, rhythm adapted to meet melody halfway. Sulzer's rhythmic theory was, to use Hasty's distinction, essentially metrical, predicated on a succession of beats (his *Schlagfolge*) with no motion from one instant to the next. In the nineteenth century, the intervals between these beats were filled up with linear flow. In Hasty's terms, "meter" yielded to "rhythm" proper. Of course, meter and rhythm interact in all music, producing a "tension between the fixity of what can be grasped as order in abstraction ('meter') and the fluidity of a felt order in experience ('rhythm')" (Hasty 1997, 3). But the weighting shifted from mechanical pattern to energetic process, suggesting a switch from the particle to the wave model of motion—a model with an obvious affinity to the "waves" of melody. Hence, in another fragment, entitled "Musik und Rhythmik" (*Allgemeinen Brouillon*), Novalis speaks tellingly of rhythm in terms of "oscillations" (*Schwingungen*). The concept of oscillation enables Novalis to bind rhythm, nature, and thought into a complex metaphor: "We cast a deep, searching glance into the acoustic nature of the soul, and find a new affinity between light and thought—the two oscillate together" (1981, 462). The turn toward a more "energetic" concept of rhythm is evinced by the major theorists of the nineteenth century. For Hauptmann, a metrical accent is not a point of articulation, a mark of interruption. Rather, it is "the accent of beginning—*die Energie des Anfanges*, that 'energy' being an active, creative potential for duration" (in Hasty 1997, 104). According to Riemann's theory, accents generate motion toward or away from moments in time. Rhythm becomes anacrusic, a *Taktmotive* moving toward a point of arrival, so that the ends or goals of motion receive weight or accent.[3]

The reaction to Sulzer is illustrated most vividly by Schelling's extensive discussion of rhythm in his *Philosophy of Art*.[4] The section is particularly valuable because Schelling, like Sulzer, draws profound connections between rhythm and the process of thought. In so doing, Schelling captures the shift from Enlightenment to romantic epistemology in musical terms. Briefly put, Sulzer's genetics of rhythmic perception takes the student's rational faculties for granted. What evolves is not reason but perception. By contrast, Schelling considers rhythm as part of a genetics of consciousness. As I will show more fully in the next section, Schelling's system contributes to the romantic project of understanding the origin of reason in nature—thus overcoming the dualism of eighteenth-century rationalist philosophy. Within the two rhythmic theories, the change turns on a difference of premise. Sulzer's premise is a metrical pattern, his *Schlagfolge*. Schelling's is the linear continuity of time—time's arrow—the unity from which the *varietas* of rhythm deviates. Schelling's premise, therefore, is linear, not broken.

After sniping at Sulzer's affective view of music ("Sulzer . . . says that the purpose of music is to awaken the emotions—something that could just as easily be applied to many other things, such as concerts of fragrances or tastes"; Schelling 1989, 103), Schelling then proceeds to give a periodic theory of rhythm heavily indebted to Sulzer's article. Likewise, he asks himself a question inspired

by the contemplation of a Sulzerian *Schlagfolge:* "How can a series of such beats become significant, exciting, or pleasing?" (110). Schelling seems to agree with Sulzer that the tones only entrain our "attentiveness" when "they acquire regularity such that they continually recur in equal intervals and collectively constitute a unity." This springs from a human tendency, "driven by an impulse of Nature," to "impose variety or diversity onto everything that in and for itself constitutes *pure identity* of activity" (110). Again, just like Sulzer, Schelling moves from this "lowest" kind of rhythm—regularity—to one of metrical differentiation—*Takt*. Further, this can be grouped into the compound rhythm of phrases, and Schelling uses Sulzer's term, *zusammengesetzter Rhythmus*. Similarly, at the highest level, Schelling identifies this compound rhythm with the poetic form of couplets and stanzas.

Yet there is a crucial difference between Schelling and Sulzer's approaches. For Sulzer, the premise is the regular series of drumbeats, the *Schlagfolge*, considered as a heuristic thought experiment. Schelling's premise is a stage *before* the *Schlagfolge:* a linear continuum that is identified with the flow of time, each moment yielding to the next. Linear time represents a state of absolute unity—in fact, the primal state of unity, which Schelling terms *das Absolute*. Here, *das Absolute* is *der Gleichartige*, or "homogeneity," which rhythm breaks up. Thus rhythm "is nothing more than the periodic subdivision of homogeneity whereby the uniformity of the latter is combined with variety and thus unity with multiplicity" (Schelling 1989, 110). Putting the difference as schematically as possible, while both philosophers appeal to rhythm as an expression of "unity in variety," Sulzer understands unity as regularity, that is, as *meter;* Schelling sees it as *rhythm proper*, in its archetypal sense of energetic and continuous flow. Schelling's fundamental musical experience, then, is not rhythm, but the linearity of time. It is this very linear quality of time that motivates melody as both culmination and return. Time is expressed initially in the quantitative differences of rhythmic succession. Schelling's pendulum swings from the temporal to the formal, from the rational "quantities" of rhythm (thesis) to the ontological "qualities" of tonality, or what he peculiarly terms "modulation" (antithesis). Modulation denotes rising in levels from the fundamental, to the single tone, triad, cadence, phrase, and tonality. Melody, the third step, is a synthesis of the quantitative and qualitative: "the union of rhythm and modulation is *melody*" (112).

This dialectical process (rhythm-modulation-melody) is the same as that which drives the evolution of nature from the absolute. At the primordial level, light essence (*Lichtwesen*) is the thesis, opposed by gravity (*Schwere*), its antithesis, and united in matter, a synthesis (Esposito 1977, 91–92). This generates a higher, inorganic, triad of magnetism, electricity, and chemistry, followed by an organic triad of sensibility, irritability, and creative instinct. Music branches out of "magnetism," and Schelling claims that "the hearing organ itself is merely magnetism that has developed to organic perfection" (1989, 109). Magnetism expressed in time is sonority, which is detached from corporeal objects and moves in time. Within music, the dialectic continues from rhythm through harmony to melody. We seem to be back in the world of universal harmony: a network of identities between man and nature with music as the hinge. But universal harmony has evolved into cosmic melody, as we can see when we turn to an essay that immediately follows "The Naked Saint" in Wackenroder's collection of *Phantasien*.

## *Melody and Harmony*

Wackenroder's essay "The Miracle of Music" recuperates all the ingredients of universal harmony for a melodic world. Taken in isolation, many of his hyperboles are pure Kircher. Wackenroder expresses his wonder that "the invisible harp of God chimes [*mitklingt*] with our tones, and that heaven lends her power to the human web of proportions" (1967, 205). But the link between human and angelic realms (*die Sprache der Engel*, 207) is now not proportionality ("a miserable web of mathematical proportions, rendered palpable [*handgreiflich*] through bored wood, rows of gut-strings, and brass wires," 205) but motion. That *schöner Zug von Tönen* (203) that Wackenroder observes, at the beginning of his essay, rising and falling through the air like the smoke of a

sacrificial offering (*Opferrauch*) is continuous with the rise and fall of the emotion within our hearts, which music simultaneously objectifies, lifts up, and rarifies: "[Music] shows us, above our heads, the motions of our feeling [*Gemüts*] in a disembodied way, clothed in golden clouds of airy harmonies" (207). In brief, cosmic melody is universal harmony with figure and ground reversed. For Kircher, it is the harmony within the emotion that is divine; Wackenroder, by contrast, lifts the emotion, and the motion, above the harmony. The table of affinities between microcosm and macrocosm is reconstituted on the basis of an essentially dynamic vision of both subjectivity and nature. Melody slips into the role previously occupied by harmony as the linchpin of the "man/universe" metaphor.

The drama of this return is not to be understated. Blumenberg's caveats notwithstanding, M. H. Abrams (1971) taught us to see romanticism as a return to a theological worldview and a Neoplatonist and Hermetic mythology that has influenced European thought since at least Plotinus ("the philosophical history of this way of thinking has in the main been a long series of footnotes to Plotinus," 146) and that, with the signal exception of the Enlightenment, has never really gone away. Enlightenment philosophy, epitomized by Kant's argument that the world "as it really is" is unknowable outside the structures of human consciousness, enforced a split between man and nature —one post-Kantian philosophers endeavored to heal. In Peter Szondi's words, "One could say crudely that the philosophy of German Idealism tried to win back via the path of speculation what Kant's criticism had to renounce: the unity of subject and object, of mind [*Geist*] and nature" (in Bowie 1990, 41). Thus the "identity thinking" and *Naturphilosophie* of early romantics such as Schelling represents not so much a return as a volcanic resurgence of the "repressed," a nature provisionally bracketed by the Kantian critique. This nature was transmitted, in the main, via the writings of the seventeenth-century philosopher Baruch Spinoza. Spinoza's conception of man as just one link in the great chain of being linking nature and God lent itself with surprising ease to the romantic project of discovering the material, or biological, foundations of consciousness (Bowie 1993, 17–29). Of course, the ground of this reductionism changed in line with a shift from a mechanistic to an organic view of Nature. Nature was no longer objectified as inert, moved mechanically through the application of external forces, as in the Newtonian model. Now, it was seen as a closed and self-moving dynamic system, driven by an interplay of opposing forces: light and dark, the poles of a magnet, systole and diastole, cohesion and expansion, attraction and repulsion. Human consciousness was no longer posited as a God-given axiom, or even, following the Cartesian *cogito* ("I think, therefore I am"), as somehow self-grounding. Now, the dialectical and productive quality of human nature was seen to reflect the dialectical and productive quality of *natura naturans* —in fact, as the ultimate refinement of its process. Thoughts organize themselves, develop, and grow in the mind like a plant, which is why Hegel could claim that an idea is "essentially concrete, like a flower," one, moreover, that develops as "an organic system [containing] a wealth of stages and moments" (in Abrams 1973, 432).

But what is to stop the freedom of reason collapsing into scientific determinism? (A modern descendant of this argument is that thought is determined by our genes.) Moreover, how can the foundations of reason ever be accessed by conscious thought, given that consciousness is not a declarative fact (*Tatsache*) but an activity (*Tathandlung)?* It is all very well projecting a natural and unified source for the divisions of self-consciousness ("I know that I know that I know"), but this is a ground that, by its very definition, can never be *consciously* known. This is the point where the aesthetic comes in, as a panacea for both problems. In the first respect, a work of art represents a mode of knowledge and a realm of creativity that cannot be assimilated into instrumental reason or articulated factually. In the second respect, aesthetic intuition gives us conscious access to a quasi-natural state of reason, a little like being asleep and awake at the same time. According to Schelling, for whom the aesthetic is the culmination of a philosophical system, art "documents anew what philosophy cannot represent externally, namely the unconscious in action and production and its original identity with the conscious" (Bowie 1990, 96). Music, particularly the "absolute,"

autonomous, nonrepresentational music that came into its own in the nineteenth century, is particularly emblematic of this aesthetic realm of human freedom. Music, in Andrew Bowie's words, "makes evident the fact that understanding subjectivity can never be fully achieved through theoretical articulation" (1990, 2–3). On the other hand, music is a concrete representation of the very truths to which philosophy aspires: in Wackenroder's terms, it is a "monstrance"—it *shows*. Music "shows us, above our heads, the motions of our feeling" (1967, 207). It does this, as Wackenroder himself shows, through melody. If the aesthetic is typified by music, then music is epitomized by melody. When the romantics describe the musical unconscious, they instinctively draw on metaphors of melodic germination and growth. We can see this in the apocryphal, yet nonetheless pertinent, account Beethoven gives of his compositional process, reported by Schlösser: "The elaboration begins in my head: expanding, compressing, raising, and deepening. . . . It rises, it grows tall, I hear and see the image in its entire extent, as if cast in a single mould" (in Dahlhaus 1991, 142). But the philosophical unconscious is enshrined also in the melodic discourse of finished, waking music. Friedrich Schlegel probably gave this metaphor its definitive stamp in a well-known fragment on music and philosophy, in which thought is compared to the presentation and development of a theme: "There is a tendency of all pure instrumental music toward philosophy. . . . Is the theme in it not as developed, confirmed, varied and contrasted as the object of meditation in a sequence of philosophical ideas?" (in Bowie 1990, 201). This metaphor becomes conventionalized in the twentieth century with Schoenberg's concept of "musical logic," a concept that also informs Adorno's attitude to musical rationality (see Paddison 1997, 235–37).

By a process of metonymic slippage, then, philosophy becomes art, art becomes music, and music becomes melody. Melody is the hinge between a melodicized concept of mind and nature. As such, it plays the same intermediary, metaphorical role fulfilled by harmony in the baroque, and by rhythm in the classical era. But there is something peculiarly problematic about melody. We know a triad, we recognize a four-measure phrase, but who has ever managed to define a melody? Just like the idealist philosophical system, a melody cannot be limited by any conditions outside itself. By contrast, harmonic and rhythmic metaphors could appeal to external systems of proportions or conventions. Melody's character, however, is entirely context-dependent, holistic. Since the successive notes of a melody refer to each other in an indefinite chain, a "melody" cannot be extracted from the overall context of its unfolding, from the piece as a whole. Or rather, it *can*, but only through an essentially negative act: to identify a melody is to say what it is not—namely, the context around it. The popular belief, therefore, that a romantic work is built up from discrete motives is exactly wrong: on the contrary, a theme or motive is a derivative of the work conceived as an organic whole.

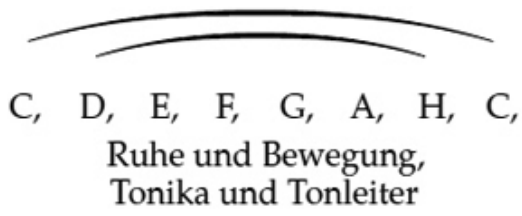
So what is music theory to do? Is a romantic theory of melody even conceivable? Depending on which way one looks at it, melody is either emptied out or anchored at both ends, the extremes, respectively, of nature and mind. On the side of nature, melody is reduced to kinetic drive, an alternation of motion and rest. On the side of mind, melody is the unfolding in time of an idea. The problem is a question of boundaries and beginnings. At what point does technique stop and artistry begin (i.e., when does musical nature become self-conscious)? When does the process achieve closure (i.e., when does musical consciousness mature)? The theorist who gave the most compelling answer to these questions is A. B. Marx. I will defer detailed discussion of his theories to the second section of this chapter, but it is useful to sketch out how Marx's concept of melody mediates the natural and the self-conscious within a flexible, and much-worked, metaphor.

## THE NATURAL

Marx's compositional theory, his *Formenlehre*, takes the student from small-scale to expanded forms. But unlike previous systems such as Koch's, it grounds the order of derivations in a foundational stage that manages to be both primitive and holistic at the same time. Marx's fundamental is not a contrapuntal genus, a harmony, a motive, or, for that matter, a *Schlagfolge*. It is a primordial gestural contour, an intensity curve. Tellingly, rather than trying to capture this *Urgestalt*

in music notation as an abstract category, Marx verbally reports it as a physiological observation: "One can easily observe that ascending successions awaken the feeling of intensification, elevation, and tension, while falling successions awaken the contrasting feelings of slackening, depression, and the return to rest" (2d ed., 1:22) Although register features strongly, the basis for this intensity curve is in fact dynamic: an alternation between motion (*Bewegung*) and rest (*Ruhe*). Marx interprets the C major scale as a departure and return to a point of rest represented by tonics an octave apart, an alternation of *Tonika (Ruhe*) and *Tonleiter (Bewegung*) (ex. 6.2):

Example 6.2. Marx's motion-rest-motion schema




Everything is generated from the *Ruhe*/*Bewegung* opposition, which functions like the prerational elemental drives in Schelling's genetics of consciousness. It follows that musical form can no longer be viewed as an assemblage of distinct parameters, since music is experienced holistically even at its most basic level. As Marx puts it, "the abstract conceptions" of melody, harmony, and rhythm may very well be "mentally distinguished," yet "Art knows no such abstract division. There is no melody without rhythm; no composition consists of harmony alone," since this goes against "the indivisible nature of art" (1854, 3).

The motion/rest dynamic, like Schelling's dialectical nature, strives toward ever greater differentiation and individuation, with levels of equilibrium alternating with stages of tension, culminating in sonata form, which represents the highest state of artistic consciousness.[5] Sonata form, according to Marx's ternary conception (Koch saw it as binary) expresses the *Ruhe-Bewegung-Ruhe* scheme as exposition-development-recapitulation, with motion reaching its apotheosis in the Beethovenian development section ("this part is the motion-oriented part"; in Burnham 1997, 146). Between the *Urgestalt* and the sonata comes a chain of song, dance, and rondo structures, all of which emerge through a dialectic of two formal prototypes that Marx names the *Gang* and *Satz*. Marx gets from raw nature to musical structure through the slippery expedient of giving his *Gang* and *Satz* a foot both in psychology and grammar. Marx is infuriatingly, albeit necessarily, inconsistent as to whether *Gang* and *Satz* comprise natural drives or artistic forms. On the one hand, Marx presents them in chapter 1 of the *Lehre* as "musical structures" (*Tongebilden*) (2d ed., 1:28) or "fundamental forms" (*Grundformen*) (30). Hence a *Satz* is "a simple, self-sufficient, well-formed structure" (27), as in a simple C major scale, whereas a *Gang* is "a structure which eschews such formal closure" (29), typified by an open-ended motivic sequence (ex. 6.3):

Example 6.3a. *Satz*



Example 6.3b. *Gang*



On the other hand, Marx later speaks of *Satz* and *Gang* not as structures but as principles, respectively of formal definition and dynamic development. In the sixth edition of the *Lehre*, Marx describes form as a result of opposing drives: "formal definition [*die bestimmende Form*] works against the motive's drive [*Triebe des Motivs*] toward indefinite continuation" (6th ed., 1:41).

Marx's *Satz*/*Gang* opposition is all of a piece with the proliferating dualisms of the nineteenth century, from Schiller's notion of the aesthetic as a "play drive" reconciling the "sense drive" with

the "formal drive" (Schiller 1985, 77), to Nietzsche's theory of drama as an interaction between the Apollonian and the Dionysiac (1967). But, closer to home, we recognize at the heart of Marx's system none other than the quarrel between rhythm and melody. Marx's *Lehre* plays out the ambiguity of rhythm's new status: it is both a counter to melody and an aspect of melody—the *Satz*, after all, is really only a projection of the *Ruhe* moments of the intensity curve. Marx thereby helps us imagine form as closed (*Satz*) and processive (*Gang*) at the same time; that is, as an organism.

## THE CONSCIOUS

Like many critics, Marx regarded the Beethoven sonata form as an artistic pinnacle to be explicated instead of judged (see Burnham 1995, 69–81). Rather than being subject to theory, composition thus became the source of theory, which shaped itself around the self-legitimizing work of art as the new sun of the musical universe. From this perspective (goal, not origin), the genetics of consciousness looks very different. Music's primal shape can no longer be a well-formed utterance—the *Ruhe-Bewegung-Ruhe* schema—but a *motiv* that has no meaning outside the context of the piece's argument. Of course, Marx, is ambiguous. "The motive," he claims, "is the primal configuration of everything musical" (in Burnham 1997, 66), and can be as little as two notes. And yet he presents a contextualist argument for the nature of the "fate" motive from Beethoven's Fifth Symphony: "It is not the motive for its own sake, but both that *and* the manner in which it is developed, which constitutes the value of any artistic production based upon it" (4th ed., 1:28). Marx underwrites the emptiness of the motive with the plenitude of the artistic whole, toward which the motive is heard to "strive." The argument works because the motive is not unsettled in itself, but is a vehicle of *Geist*, "spirit striving upward toward reason in art" (in Burnham 1997, 62) that, "in order to reveal itself in music, seizes upon musical material" (66). This striving is just as teleological as the restlessness of the *Gang*, but it is an activity propelled from the opposite end: not *from* Nature, but *toward* Mind. Technically, it is a fudge between Hegel and Schelling, between *understanding* melody as an expression of intellectual argument unfolding an *Idee*, and *feeling* melody as a somatic drive embodying a natural principle (for the Hegel/Schelling debate, see Bowie 1993, 127–77). A fudge, to be sure, yet a necessary compact between *ratio* and *sensus*.

### *Life and Language*

"The object of music," wrote Friedrich Schlegel, "is life" (fragment 1469, 201). The waning of the old language metaphors and the rise of organicism are dramatically illustrated by a detail in the *Lehre*'s publication history (fig. 6.1). At the start of the Dritter Abschnitt of volume 1, Marx's first edition (1837, 34) presents a résumé of the theory's *Grundformen*, and, surprisingly, Marx goes well beyond the *Gang*/*Satz* pair to include the *Klausel* and *Abschnitt*—relics of the eighteenth-century language model. The second edition (1841) drops the *Klausel*, and, by the fourth edition (1852), the *Abschnitt* falls off too. And yet Marx dispenses also with *Motiv*—surely a staple of biological thinking. Echoing Goethe's theory of the *Urpflanze*, the 1856 essay "Form in Music" refers to the motive as "the germinal vesicle, that membranous sac filled with some fluid element . . . the primal shape [*Urgestalt*] of everything organic—the true primal plant or primal animal [*die wahre Urpflanze und das Urthier*]" (1856, 29). Still more curious, a posthumous edition, edited by Riemann (1887), lets go of the most quintessential of Marx's organicist categories, the *Gang*, while keeping the period. The resilience of language, and its accommodation with life, exactly parallel the complex negotiations between rhythm and melody. Painting too, the analog of universal harmony, makes a reappearance in the guise of myth. Rather than organicist metaphors triumphing over the linguistic and painterly, painting, language, and life actually danced upon the same stage.

| Marx 1 | Marx 2 | Marx 4 | Marx 6 (Riemann) |
|---|---|---|---|
| *Motiv* | *Motiv* | — | — |
| *Klausel* | — | — | — |
| *Abschnitt* | *Abschnitt* | — | — |
| *Gang* | *Gang* | *Gang* | — |
| *Satz* | *Satz* | *Satz* | *Satz* |
| *Periode* | *Periode* | *Periode* | *Periode* |

Figure 6.1. Marx, *Die Lehre*

Perhaps the most extraordinary card game in all literature occurs early on in the fairy tale *Eros und Fabel* that Novalis embeds into chapter 9 of his novel *Heinrich von Ofterdingen*. The narrative has the logic of a dream, with a complexity that forbids paraphrase (see Birrell 1979, 25–38). But it is enough to say that the various allegorical characters—Sophia (wisdom), Freya (peace), Eros (love), Ginnistan (imagination), and Scribe (reason)—are manipulated with the arbitrariness and caprice of musical themes. The link of dream logic with music is sanctioned by Novalis himself, who in a fragment of 1799 (no. 131 from his *Allgemeinen Brouillon*) writes that "a fairy tale is actually like the image of a dream [*Traumbild*]—without coherence—an ensemble of wonderful things and events—for example, *a musical fantasy*—the harmonic process of an Aeolian harp—Nature herself" (Novalis 1981, 494).

> The King embraced his daughter with tenderness. The spirits of the constellations surrounded the throne, and the hero took his place in the procession. Countless stars filled the hall in ornamental groups. The servant-women brought in a table and a casket, in which a heap of cards lay, bearing holy and profound symbols made up solely of star-formations. The king kissed the cards reverently, carefully shuffled them, and handed several of them to his daughter. The rest he kept for himself. The Princess drew them out one by one and laid them on the table, and the King inspected his own and chose with much reflection before adding one to the rest. At times he seemed to be constrained to choose this card or that. But often one could see his joy when with a lucky card he could lay down a beautiful harmony of signs and figures. . . . Simultaneously a soft but deeply moving music was to be heard in the air, which seemed to arise from the stars that were wondrously interweaving in the hall, and from the other strange movements. . . . The music varied, like the symbols [*Bilder*] on the table, without pause, and wondrous and intricate as the transitions tended to be, one simple theme [*ein einfaches Thema*] seemed nevertheless to connect them all. (234–35)

At one level, Novalis's dancing constellations convey the fascination that universal harmony held for the romantic imagination. There is a fragment from Novalis's scattered philosophical writings that suggests he conceived of harmony as an historical or narrative goal, to be attained only via a detour through dissonance: "Both worlds, as two systems, should form a free harmony, rather than dissonance [*Disharmonie*] or unison [*Monotonie*]. The transition from unison to harmony will admittedly proceed through dissonance—and harmony will arise only at the end" (386). In the present *Märchen*, harmony is achieved at the end of the tale when, after many mishaps, Eros and Freya marry, initiating a new Golden Age when spirit unites with matter, and the mind is joined with the heart.

At a deeper level, however, the episode is a metaphor for Novalis's theory of language as a combinatorial system analogous to mathematics and music. The "harmony" is a semiotic configuration of "signs and figures," of "symbols," which the king lays down in the form of playing cards. The "wondrous and intricate" pattern of the cards is the story that is soon to unfold; this is a conceit made famous more recently by Italo Calvino in *The Castle of Crossed Destinies*, whose "crossed" tales are improvised around a tarot pack. But Novalis's card game is the forum for the *real* game, which is between language, music, and nature. Musical nature was not necessarily astronomical. A favored metaphor for Novalis, as well as the other early romantics, was the interactions of a chemical process; another Novalis fragment speaks of "the art of life" as "combined chemistry and mechanics (Harmony)" (*die verbündete Chymie und Mechanik [Harmonie] die Lebenkunst;* 1981, 429). The crucial point is that Novalis situates the workings of language at the same preconscious level at which romantic philosophers place the aesthetic in general, and music in

particular. He expresses this view most trenchantly in the much-cited *Monologue*. Like a card game, "a real conversation is just a game of words." "With language it is as with mathematical formulae—They constitute their own world—They only play with themselves, express nothing but their wonderful nature" (Bowie 1997, 65–66). Novalis's target is the fallacy that language can express intention or refer directly to objects in the world. We may think that we are masters of language, but we are cast into a world of language that precedes us, and that speaks *through* us, so that a writer is only a S*prachbegeisterter*, "one who is enthused by language" (Bowie 1997, 66). The essence of language, then, is not correspondence with things, but a set of internal relations, a "strange game of relations" that is language's "musical spirit." To write or speak, therefore, is to attend to this secret music: "Whoever has a fine feeling for [language's] application, for its rhythm, for its musical spirit, who hears in himself the gentle effect of its inner nature and moves his tongue or hand accordingly, will be a prophet" (in Bowie 1997, 66). We are playthings of this language-music, just like the characters in Novalis's fairy tale, who are manipulated by the king's stellar card game.

Broadly speaking, the background to Novalis's ideas is a shift in the history of linguistics from a correspondence theory to a theory of the symbol (see Todorov 1982, 147–221). Enlightenment semiotics was tied to a problematic of "imitation and motivation" (129–46). To be sure, it conceived of signs as "empty" or "arbitrary," but still in terms of a lingering picture-theory of reference, where fixed and determinate signs enjoyed a one-to-one relationship with their signifieds. Todorov selects Karl Philipp Moritz as the key figure in the change to a more intransitive and systemic theory of signification. For Moritz, language is like a work of art: it is defined by internal coherence, and "forms an arbitrary whole existing in itself" (154).

Language's new holism was reciprocal—thought was conditioned by the play of language to the same extent that language systems were grounded in human nature and consciousness. The Enlightenment's endless debates about the relative priority of language and thought rested on the assumption that the two were separable, a premise that was questioned by Herder and canceled by Humboldt. Herder's idea that thinking and signification arise simultaneously as manifestations of one and the same mental force influences Wilhelm von Humbold's theory of the *Weltansicht*. A speaker's worldview is informed by his or her language, since languages embody in their very structure the perspective through which people view and experience the world (see Koepke 1990, 13). Herder's concept of metaphor proves to be neatly transitional between the mimetic and the organic views of language. Herder, as we saw in chapter 5, associates *Metapherngeist* with the "roots of words" (*den Wurzeln der Wörter*). He employs the botanical analogy of roots to explain the sensuous force of metaphor as *image*, thus beholden to the old mimetic view (see Schick 1971, 34–36). And yet his imagery flows the other way too, portraying language as botanical. In brief, "roots," "sap," "trunk," and "leaves" begin as auxiliary to an imitation theory and end up absorbing language into nature. By the mid-nineteenth century, this process was complete. The title of the philologist K. F. Becker's study *Organism der Sprache* speaks for itself. One is not surprised, therefore, when Richard Wagner imagines language as a human body:

> We have called the enclosing consonants the garment of the vowel, or more precisely, its physiognomic exterior. In view of their inward agency, let us call them still more accurately the fleshy covering of the human body, organically ingrown with the interior; we thus shall gain a faithful image of the essence both of Consonant and Vowel, as well as of their organic relations to one another. (1993–95, 2:272)

The language/life synergy is compounded by romantic music, which, though "organic," never really stops talking. Again, Marx's theories throw music's dual nature into sharp focus. According to Lotte Thaler (1984), Marx's *Ruhe–Bewegung–Ruhe* intensity curve syncretises ideas from Becker's philology and Goethe's morphology of plants, thus fusing language with life. Becker sees the history of language as progressive individuation, moving from the general toward ever greater determination. As with Marx, the process is driven by a polar opposition, here between sound and concept (*Laut* and *Begriff*). The "primal sound" is a vowel, and language develops by gradually differentiating and strengthening the initial and final sounds (*Anlaut* and *Auslaut*) of utterances. The primal concept (*Urbegriff*) is motion (*Bewegung*), the mark of natural organisms in their sensory

activities (*sinnlicher Thatigkeiten*) (Thaler, 82). Thaler sees the stable tonics that frame Marx's *Tonleiter* as corresponding to the initial and final consonants (*Anlaut* and *Auslaut*) of Becker's *Urlaut*.

But, following Goethe's morphological theories, Thaler also sees the rising and falling contour of Marx's *Periode* as resembling the growth of a plant, which "divides into a downward direction (roots) and upward direction (shoots)" (Thaler 1984, 69). Moreover, Goethe's definition of a "living organism" (*geistige Organismus*) fits Marx's prescription of musical form as an ongoing accommodation between extremes (68). These extremes are Goethe's dual principles of polarity and intensification (*Polarität und Steigerung*). For Goethe, everything in nature exhibits the interaction of polar forces. Although these opposites are attracted to each other, they cannot rest, because the principle of intensification causes all things to strive upward toward higher levels of organization (see Pastille 1990). In terms of color theory, for example, Goethe's work on optics demonstrated that the polarity between yellow and blue can be intensified by increasing the opacity of the medium, so that, on mixing, they produce an unexpected color—not green but *red*. In living organisms, the process of polarity and intensification continues indefinitely, inducing metamorphosis. Similarly, polarity and intensification drives Marx's metamorphosis of musical form, his chain of derivations, which climbs a Goethian S*tufengang* from *Satz, Gang*, and *Periode*, through the song and dance forms, the family of five rondo forms, up to sonata. The *Stufengang* alternates between forces of expansion (*Ausdehnung*) and unification (*Zusammenziehung*), aiming at an optimum blend of unity and variety: "the more dissimilar the parts are to one another, the more perfect the organism [or musical form]" (Thaler 1984, 70). I will explore Marx's *Stufengang* at length in section two of this chapter. For the moment, I want to pursue Goethe's concept of *Steigerung*, which is one of the most suggestive links between language and biology.

As a practicing scientist and poet, Goethe personally embodied the crossovers between biological and linguistic fields. *Steigerung* is one of his most versatile and influential concepts, and he readily applied it to aesthetic matters himself. For example, he invokes *Steigerung* to explain the sudden change from prose to poetry at the end of his *Novelle:*

> There had to be some intensification [*Steigerung*]: I had to go over into lyric poetry, indeed into song itself. If you want an analogy for the development of this *novella*, you might think of a green plant shooting up from the root, and for a long time putting forth nothing but sturdy green lateral shoots, until suddenly it ends up with a flower. (Wilkinson and Willoughby 1962, 71)

The virtue of *Steigerung* is that it can blend aspects of biological development, spiritual growth, intensification of feeling, and lyrical efflorescence in a single metaphor. A further virtue is the close affinity between *Steigerung* and the verb "to climb," *steigen*, suggesting that intensification is also an ascent. Unsurprisingly, Marx seizes on this ambiguity as a mainstay of his theory. He describes his rising-and-falling period (ex. 6.4): "Elevation from rest and intensification [*Steigerung*] in melody and rhythm up to a natural peak; return, likewise with intensified [*gesteigerter*] motion (but with melody leading to rest), to the true rest-note" (*Die Lehre*, 2d ed., 1:28).

Example 6.4. Rising-and-falling period




Marx impales himself on an oxymoron: how can the descending consequent phrase be both "intensified" and "with melody leading to rest" (*aber zur Ruhe führender Tonfolge)?* The problem is obvious. Marx's intensity curve is symmetrical, a rise followed by a descent, encapsulating a sense of balance that is essential to his concept of well-formedness. Yet *Steigerung* proper is unidirectional; intensity only rises. Nevertheless, the metaphor of biological intensification as rhetorical contour, of *Steigerung* as *steigen*, was too compelling for Marx ever to let go. He was not alone in this: Ernst Kurth's Schopenhauerian analytical method looks at music in terms of lines and waves of psychic

energy. Writing in the early twentieth century, Kurth was especially drawn to romantic harmony, attending, in his essay on *Tristan und Isolde*, to its "urge for *intensification* [that] grows powerfully and transforms the harmonic development into a restless, fitful, elementally unbounded flux" (in Rothfarb 1991, 144). But Kurth was just as liable to speak of intensification in his work on Bach; referring to the Clavier Duet in G Major, BWV 804, he writes: "Here the preservation of the polyphonic character lies above all in the melodic differentiation by means of staggering the intensifications" (50). The consanguinity Kurth discovers between romantic and baroque metaphors of motion casts new light on the blend of life with language by revealing its links with *Figurenlehre*. Eggebrecht suggests this connection in his commentary on Heinrich Besseler's analysis of a Bach prelude. Besseler, in the style of Kurth, describes the piece in terms of a S*teigerung der Dynamik*, and Eggebrecht points out that *Steigerung* maps onto *Figurenlehre*'s climax or *gradatio*—figures that denote repetition in rising sequence (Eggebrecht 1992, 32).

*Steigerung* as *gradatio* helps us understand why Beethoven's "language," while keeping within the classical grid identified by Riepel and Koch, also sounds so physically embodied, seeming to emerge from an organic subject. The opening of Beethoven's *Pathétique* Sonata is grammatically well formed because each measure is clearly articulated by a Kochian *Einschnitt*. But these incises are also "pathetic," because they flow naturally out of a linear discourse that begins on the very first note, climbs (*Steigen*) the scale (C–D–E♭), and is expressively turned back by the appoggiatura halfway through the measure. Language, then, is not imposed from above as a normative grid, but rises "from below," as in the Novalis *Monologue*. The *Pathétique* is *sprachbegeistert*. Riepel (1755, 39) had compared the antecedent-consequent syntax of a classical phrase to a question and answer, a *fragender Absatz* followed by an *antwortender oder bejahender Absatz*. The linearity of Beethoven's discourse, however, is closer to the rhetorical questioning of the baroque *interrogatio* (Sisman [1994, 100] interprets the opening in this way). Likewise, the sequential repetitions, climaxing on the A♭ melodic apex of measure 4, outlines a *gradatio* (Sisman hears the *gradatio* from measure 5, but it arguably begins at the outset). The baroque feel of the music is compounded by the French overture–style dotted-note figures, which recall the Sinfonia of Bach's C Minor Partita for Keyboard, BWV 826.

The fundamental issue here, once again, is the shift in the nineteenth century from a metrical to a linear, that is, *melodic*, conception of rhythm. But what is the connection between melodicized rhythm and Beethoven's subjectivity effects? Dahlhaus reminds us that baroque rhythmic theory "was simultaneously a theory of the representation of character." Mattheson ascribes specific characters to his musical feet: the spondee is "honorable and serious"; the iambus is "moderately merry, not quick." The ethos of the *Pathétique* is thus a projection of a rhythmic pattern, and Dahlhaus appeals to Christian Gottfried Körner's essay "Über Charackterdarstellung in der Musik" (1795) for a romantic perspective on this effect. According to Körner, "character" is produced by the "regular element" (*das Regelmässige*). Most strikingly of all, "rhythm" for Körner is "not "empty" ("pure" or "abstract") meter but "filled" (or "rhythmicized") meter" (Dahlhaus 1991, 134). The gaps in the classical grid have been literally filled in with the subject; language has solidified into a human being. The wholeness of a grammatical utterance has been commuted to the wholeness of the person who speaks it.

## *Life and Painting*

For the human beings who populate Wagner's music dramas, *Steigerung* leads not to metamorphosis but to *Verklärung*. On the cusp of her transfiguration in the "Liebestod," Isolde asks us three times, as if in rising panic, to *see* melody: "Seht ihr's nicht?" "Freunde! Seht!" "Fühlt und seht ihr's nicht?" Isolde is directing us toward the melody, "diese Weise," which she believes to be pouring from the dead Tristan's heart and lips: "How softly and gently from his lips sweet breath flutters." This melody transfixes her and becomes both the "clouds of heavenly fragrance" above her and the "surging swell" of the ocean. So, in expiring "in the vast wave of the world's breath," Isolde both

rises and sinks. In cardiographic terms, the contour of Tristan's cosmic melody, a dual emanation of heart-blood and "sweet breath," ultimately flatlines.

Isolde's double dissolution, into both water and air, combines in a single effect two tropes that are traversed sequentially in the fifth of Wackenroder's *Phantasien (Das eigentümliche innere Wesen der Tonkunst;* in 1967, 218–28). At the beginning of the essay, music is *ein fliessender Strom*, whose waves dissolve all distinctions and overleap all bounds (223–24). At the end, Wackenroder is himself taken up into the "shining clouds" of music, into the "embrace of all-loving heaven" (228). More particularly, Isolde endures the same melodic apotheosis as the Naked Hermit, but with one crucial difference: Wackenroder's *Märchen* is to be read on the page, Wagner's music drama is to be enacted and *seen*. It is one thing to write that that music "shows us . . . the motions of our feeling" (*Die Wunder der Tonkunst;* 1967, 207), but *Tristan und Isolde* portrays this showing in a literally visual and concrete manner. So what do we actually see? Isolde points us to Tristan's body: "Do you not see? How his heart swells and, brave and full, pulses in his breast." But Wagner's reverse hypotyposis (not hearing a picture but picturing a sound) is deeply paradoxical. Tristan's body is lifeless (or are we intended to look at the singer?), and, with a calculated slippage, Isolde immediately relapses to the sonic: "Do you not feel and see it?*Do I alone hear this melody?*" The focus is thrown back onto the fully audible "waves" of the "Liebestod," the "escalating waves" that Kurth analyzes in his *Tristan* study (Rothfarb 1991, 140). Is visualizing musical waves in the score any different from projecting them onto a human actor?

Grandiose claims are still made of Wagner's *Gesamtkunstwerk*, as if it needs any more. The distinguished poststructuralist philosopher Philippe Lacoue-Labarthe argues (1994), in epochal terms, that music drama is the first coming together of music and philosophy since Plato. More modestly, it is enough to claim that Wagner's work epitomizes the ambition of romantic music, as melody, to become human. "Harmony and Rhythm," states Wagner in *Opera and Drama*, "are the blood, flesh, nerves and bones. . . . Melody, on the other hand, is this finished Man himself" (1993–95, 2:104). In Beethoven's symphonies "we marvel at the gigantic efforts of Mechanism longing to become Man; efforts to resolve its every component parts into the flesh and blood of an actual living organism, and through that to reach an unerring utterance as Melody" (2:106). In the music drama, melody "becomes man" not figuratively but literally. But how do we square this argument with the Schopenhauerian line, maintained in *Opera and Drama* and articulated most forcefully in Nietzsche's *Birth of Tragedy*, that what we see on stage is only a surface reflection of the music? As Nietzsche puts it, "the identity between the melody and the living figure" in fact works in music's favor; the "opposite sense to what one would suppose." "Even if we agitate and enliven the figure in the most visible manner . . . it still remains merely a phenomenon from which no bridge leads us to true reality, into the heart of the world. But music speaks out of this heart" (1967, 129).

As Dahlhaus never tired of reminding us, the belief that music drama works as music alone, even when it is as symphonic as *Tristan und Isolde*'s third act, is a Wagnerian myth (Carolyn Abbate calls "opera as symphony" a "Wagnerian myth" [1989]). The myth seriously understates music drama's physical presence as a theatrical event. As concrete drama, Wagner's conception fulfills the prognosis for art projected not by Schopenhauer (music), nor by Hegel (philosophy), but by Schelling, as in the climactic paragraph of *Die Philosophie der Kunst:*

> Music, song, dance, as well as all the various types of drama, live only in public life, and form an alliance in such life. Wherever public life disappears, instead of that real, external drama in which, in all its forms, an entire people participates as a political or moral totality, only an *inward*, ideal drama can unite the people. This ideal drama is the worship service, the only kind of *truly* public action that has remained for the contemporary age, and even so only in an extremely diminished and reduced form. (1989, 280)

Schelling ranks the arts as a succession from the "real" to the "ideal": music, painting, the plastic arts (architecture and sculpture), poetry, and drama. Music seems to be left far behind, yet the last chapter ("Reverse Inclination of Verbal Art toward Formative Art in Music") circles back to the starting point, when drama assimilates song and dance into a putative *Gesamtkunstwerk*. Within drama, music becomes properly human, concluding the trajectory of Schelling's aesthetic toward

personification. I will show in the next section that personification describes how the romantics thought not only of music and melody, but of metaphor itself.

Nietzsche's startling observation that "music compels us to see more and more profoundly than usual' (1967, 128) cuts two ways. It suggests the nonvisual, intellectual sense of *lumen* dramatized by Tristan and Isolde's flight from the light of day: "erlösche das Lebenslicht!" (let the light of life be extinguished!). Wagner does not demonize rhythm or the mechanical, as might be expected, but light and the visual (Tristan's "Accursed day, with your glare!"). Isolde's quarrel is not with time, as is the Hermit's, but with light. A more radical interpretation is that music itself becomes visible. A visible music is scandalous because it breaches the boundary between the frame and the picture, like the paintings of the romantic artist Otto Philipp Runge. In Runge's works, ornamental arabesques spill over into the canvas, so that the border invades the interior (see Daverio 1993, 27). Friedrich Schlegel borrows the term "arabesque" to denote the aesthetic technique of parabasis, whereby incidental or extraneous materials are introduced into the main body of a work, interrupting its course and commenting on the surrounding whole (Daverio 1993, 19–48). The *Märchen* of "The Naked Saint" is an arabesque within Wackenroder's novel, and Novalis's card game is an arabesque within an arabesque. The extrusion of an orchestral melody onto the stage at the end of *Tristan* is a musical arabesque made good as authentically visual (see also the "alte Weise" at the beginning of act 3). One could even say, with Novalis, that the arabesques of painting originate in music: "Die eigentliche sichtbare Musik sind die Arabesken, Muster, Ornamente" (Novalis 1981, 523). Perhaps, though, the visual is not the exception but the rule, since to conceptualize evanescent melody is necessarily to image it. For the formalist Hanslick, melody and arabesque were one and the same: he compares melodic process to "a branch of ornamentation in the visual arts, namely arabesque. We follow sweeping lines, here dipping gently, there boldly soaring, approaching and separating, corresponding curves large and small." Admittedly, he adjures us to "think of an arabesque as not dead and static, but coming into being in continuous self-formation before our eyes" (1986, 29). But music theory—indeed music notation too—is always a quasi-graphic snapshot of the musical dynamic. This, of course, is no bad thing; heuristically, the visual lines of Schenker's graphic analysis are infinitely more powerful than Kurth's iconophobic hyperbole about "energy" and "waves." "But we must guard against seeing all this too much with eye," warns Kurth (Rothfarb 1991, 155). Why? The visual, the static, the determinate: these are necessary, if only as a model, as a base from which to make our metaphorical projections. That is the essence of music pedagogy, to which I now turn.

## *Romantic Poetics*

> Der Mensch—Metapher
> Novalis, in Arctander O'Brien, *Novalis: Signs of Revolution*

The word *Sinnbild*, meaning symbol (*Bild* image), is cognate with that for culture, *Bildung*, as well as *bildende Kraft*, the mind's formative power (see Lacoue-Labarthe and Nancy 1988, 32). In romantic metaphor, the formation of mind is reciprocally related to the creation and cognition of the organic artwork. I thus divide this section into two parts, paralleling the division in chapter 4 between "model" and "metaphor." Theories of *Bildung* and *Sinnbild* both originate in Kant. Under *Bildung*, I discuss the post-Kantian philosophers' contention that what Kant called *Anschauung* (intuitive perception) can be shaped by experience, and that sense perception influences thought. This argument runs counter to Kant's belief that the categories of perception are "hardwired" a priori in the mind. Reaction to Kant, especially in the work of Goethe, Pestalozzi, and Herbart, leads to theories of analogical thinking and psychological orientations in pedagogy. Herbart's notion of apperception anticipates cognitive theories of pedagogical metaphor. I show how the Pestalozzian method and Herbartian apperception is applied to music pedagogy in the work of Nägeli and A. B. Marx.

*Sinnbild* is a Germanic rendering of Kant's "symbol," which itself derives from Kant's division of *Darstellung* (presentation of a concept) into direct (schema) and analogical (symbol). Kant's use of schema in *The Critique of Judgement* matches his earlier use in his first critique, which I discussed in chapters 2 and 3—namely, as a rational category. His designation of symbol as an instrument of analogical presentation amounts to a definition of metaphor:

> Schemata contain direct, symbols indirect, presentations [*Darstellung*] of the concept. Schemata effect this presentation demonstratively, symbols by the aid of an analogy . . . in which judgement performs a double function: first in applying the concept to the object of a sensible intuition, and then, secondly, in applying the mere rule of its reflection upon that intuition to quite another object, of which the former is but the symbol. In this way a monarchical state is represented as a living body when it is governed by constitutional laws, but as a mere machine (like a handmill) when it is governed by an individual absolute will. (1989, 222–23)

Kant's definition appropriately turns on the opposition of organic to mechanical. He then gives his famous examples of the metaphorical traces buried in philosophical concepts: "the words *ground* (support, basis), *to depend* (to be held up from above), *to flow* from (instead of to follow), *substance* (as Locke puts it, the support of accidents), and numberless others, are not schematic, but rather symbolic hypotyposes" (223).

With hypotyposis, we meet an old friend from baroque rhetoric. Until now, Kant has used hypotyposis in its German form of *Darstellung* (Latin *exhibitiones*). We realize that, in *Darstellung*, the *Bildlichkeit* of rhetoric has been suppressed within the abstract concepts of philosophical discourse. In the romantic *Sinnbild* (symbol, metaphor), the sensuous element of hypotyposis is both recuperated and put center stage, so that the symbol emerges from under the shadow of the schema. Alternatively, one could say that romantic metaphor is the assimilation of the schema into the domain of art. Either way, it now becomes possible to write theories of the symbol. Theories of the symbol are initiated by Goethe and Schelling, who situate the term, respectively, in the symbol-allegory dyad and the schema-allegory-symbol triad. These distinctions are then elaborated by a host of writers, including the Schlegel brothers, Creuzer, and Solger. I show, finally, how the various strands feed into the metaphorical thought of Richard Wagner.

## Bildung: *Delicate Empiricism*

Goethe believed that, rather than his poetry, scientific tracts such as *The Metamorphosis of Plants* and *The Theory of Color* were his most important and lasting achievements. As with Fludd's hermetic cosmology two centuries earlier, Goethe's scientific work enjoyed a split reception: rejected by mainstream science but embraced by aesthetics. Again, as with Fludd, the disputes center on the nature of analogy and on the affinities that supposedly underlie all of Nature, including science and art (see Weisäcker 1987). As I argued in chapter 4, these issues are germane to the peculiarly hybrid status of music theory.

Goethe's most famous analogy flows from science to art: his novel, *Elective Affinities*, uses chemistry as a metaphor for human relations and the psychological principles that animate them (see Adler 1990, 265). The French chemist E. F. Geoffroy's law of "double affinity" (AB + CD → AC + BD) is played out between two sets of characters in Goethe's novel: an exchange of partners between a married couple, Eduard and Charlotte, and their two friends, the Captain and Ottilie. Chemical affinity becomes living metaphor: "Let us look on this formula," says Eduard, "as a metaphor from which we may extract a lesson we can apply immediately to ourselves" (1809; 1971, 56). Goethe's analogies also flow the other way, since he imports into his scientific work the essentially *spiritual* concept of Nature of his poetry. An "Archetypal Phenomenon" (*Urphänomen*), such as the *Urpflanze*, is an ideal that can never be reduced to an empirical fact. Nature is far too vital, dynamic, and multisided to be captured by a static theorem. Goethe's morphology is thus directed toward formative principles—*Bildung*—rather than "forms" themselves. The problem, however, is that theory is necessarily distanced from experience; how does Goethe reconcile this "gap" with the unity between Man and Nature, his rather modern belief that an observer is very much a part of the data that is observed? Goethe is of course not throwing out the "picturing" essential to model-building.

His critique of science (and of scientists such as Newton, in his *Zur Farbenlehre*) proposes two reasonable points. The first is that there is no division between perception and theory: "Everything in the realm of fact is already theory" (in Naydler 1996, 91). Goethe's central concept of *Anschauung* blends observation and reflection into a single intuitive act. The second point is that models of nature should partake of its dynamic and multisided quality, so as to "give living expression to living thought" (40). Although mechanistic models are superficially easier to grasp, the time will come, Goethe believes, when these will be discarded "in favor of viewing all phenomena in terms of dynamic and chemical processes" (51). These ideas lie behind what Goethe calls his *Zarte-empirie:* "There is a *delicate empiricism* which makes itself utterly identical with the object, thereby becoming true theory" (72). Delicate empiricism is driven neither by the inductive nor the deductive methods—the standard discovery procedures of mainstream science—but by *Analogiedenken:*

> Thinking with analogies is not to be decried. Analogies have the advantage that they do not foreclose anything, and actually never drive at an ending [*nichts Letztes will*]. By contrast, induction is pernicious, since it keeps in eye a previously projected goal. (in Wilkinson and Willoughby 1962, 212)

Both inductivism (proceeding from particular sense experiences to universal explanatory principles or laws) and deductivism (provisional hypotheses from which various phenomena are deduced) presuppose an artificial division between the act of observation and the creation of an explanatory principle. Yet if, as Goethe contends, *contra* modern science, the human mind does not operate in a separate sphere from nature, then there can be no such thing as a theory-free observation; all perception is theory-laden: "every act of looking turns into observation, every act of observation into reflection, every act of reflection into the making of associations; thus it is evident that we theorize every time we look carefully at the world" (in Naydler 1996, 90). Analogical thinking is distinctly romantic in two ways. Analogies are predicated on identity, as with the "identity philosophy" of such of Goethe's contemporaries as Schelling. In addition, analogies are systemic and have no status apart from the whole chain, just as an isolated experiment is meaningless outside the context of the ongoing investigation. Hence "even the most isolated event always presents itself as an image and metaphor for the most universal" (52). The analogical chain is a process of gradual attunement between the perceptual and reflective sides of *Anschauung*. Its open-endedness has the same quality of striving characteristic of poetic works such as *Faust*. In technical terms, aesthetic striving is manifest in the plasticity of our perceptual faculties: they are constantly changed by experience, as we learn how to see or hear. The other side of plasticity is embodiment: our senses are shaped not just by experience, but by the body's physical and spiritual well-being. Science overlooks the fact that "insofar as we make use of our healthy senses, the human being is the most powerful and exact scientific instrument possible" (29). As well as being healthy, our "bodily instrument" must be deployed with wisdom and responsibility; cultural questions ineluctably enter science through the back door, connecting even the most abstract science with broad issues of spiritual and moral education covered by the key German preoccupation of *Erziehung*. Pedagogy thus emerges as the practical foundation for scientific thought, just as pedagogical progression is revealed as the pragmatic correlative of the analogical chain. Goethe wrote comparatively little on education theory, and even less on music. It is striking, however, that he looked to music as an ideal solution to the problem of how scientific method might reconcile the temporality of experience with the simultaneity of concepts. Since "the intellect cannot picture united what the senses present to it separately," Goethe takes flight into "an old song":

> Regard with silent wonder
> The Eternal Weaver's masterpiece.
> A single movement sends the shuttle
> Over, under, till the myriad threads
> Meet and interlace, creating
> Countless unions with one stroke! (99)

In the Pestalozzian tradition, song was pedagogy's natural partner.

## *ANALOGIEDENKEN* AS PROGRESSION

Progression is fundamental to musical teaching in every century. Bernhard and Koch arrange their chapters in a sequence progressing from easy to difficult, from small-scale to expanded. In each case, progression took on the color of the cultural metaphor. Bernhard's *Tractatus* is a cosmological "ladder to heaven," a *gradus ad Parnassum*; Koch's *Versuch* reflects the generative and genealogical models of the origin-of-language debate. Romantic progression was the first to confront the biological realities of human development—the fact that there are certain things people simply cannot do at certain ages. Romantic progression is organic, therefore, because it takes into itself an aspect of human growth. Nevertheless, the progression we find in the chapter plans of so many nineteenth-century compositional treatises and singing primers is no more than the trace of a living pedagogical tradition, sustained by numerous so-called Pestalozzian institutions scattered throughout Europe (see Spitzer 1998b).

The educational reforms of Johann Pestalozzi (1746–1827) are seminally important: they introduced the modern notion of child-centered learning, according to which children are treated as people with their own special needs and abilities rather than as miniature adults. Pestalozzi's firsthand experience as a schoolteacher in the villages of Switzerland endowed him with a sensitivity to what children could reasonably be expected to understand at various levels of their development. He accordingly devised curricula and teaching methods appropriate to each stage of the education process, from primary school to college. Whereas primary education was usually based on mechanical rote learning, Pestalozzi developed a method that encouraged children to cultivate their powers of observation and judgment. Emphasis was placed on concrete or immediate experience rather than on words or abstractions. He argued that a child's interaction with his or her physical environment through "self-activity" (*Selbstätigkeit*) was supported by, and in turn reinforces, powers of observation and reflection (*Anschauung*). Like Goethe, Pestalozzi understood *Anschauung* as a blend of perception and reflection. Pestalozzi strengthened the developmental aspects of *Anschauung* by appealing to the Leibnizian progression from obscurity to clarity, "the gradual process by which sensuous impressions become clear conceptions" (Pestalozzi 1938, 201). What Pestalozzi added to Goethe and Leibniz was the argument that knowledge was acquired best through self-activity, that ultimately *Anschauung* and *Selbstätigkeit* were part of the same process. Furthermore, Pestalozzi went beyond philosophizing to actually instituting his ideas in concrete teaching regimes in so-called alphabets of the key skills. Pestalozzi discovered that the most practical way, in Leibnizian terms, of turning percepts into knowledge was to reduce knowledge to elemental "primary forms," forms that can be sensuously grasped by the child. The "A B C of *Anschauung*" thus reduces the art of drawing —and hence the art of seeing—to the first principles of lines, angles, and curves.

Pestalozzi thought of himself as a psychologist ("I am trying to psychologise the instruction of mankind"; 1938, 199), and his method bears out a truism in the history of this subject: that the psychology of perception takes its cues from the psychology of vision (see Hatfield 1990). Yet the visual bias of the method contradicts Pestalozzi's conflation of *Anschauung* with *Selbstätigkeit*, of "seeing through doing." The latter denotes a mode of vision that penetrates the outer surface of things into their inner qualities—a more dynamic kind of observation Goethe had associated with "listening" to nature.[6] The static side of *Anschauung* conflicts with its dynamic aspects and afflicts Pestalozzi's method with a fatal sclerosis. This mechanical quality is most pronounced in his teaching of language, which he bases on a series of sound exercises composed of vowels and consonants (*ab, ad, af; bab, gab, stab*, etc.). But every good teacher knows that language is learnt contextually through real-life situations, not as a combinatorial system. Pestalozzi's obsession with perceptual clarity completely defeats the holistic ideals of his system. Nevertheless, Pestalozzi's problem was inherited by his musical followers. The problem would seem to be intractable: given that pedagogy requires progression, and that progression departs from a primary form, what are the primary forms of language? One learns about apples by grasping and tasting them; what kind of musical percept can be grasped in this way? The answer seemed to lie in song, and Pestalozzi's

vague encomiums to melody echo the nostrums of his compatriot Rousseau: "it is the simple and untaught grace of melody which speaks to the heart of every human being" (in Holman 1908, 162). It was left to Hans Georg Nägeli and Michael Pfeiffer, Pestalozzi's more technically knowledgeable disciples, to import his method into music.

The first direct application of Pestalozzi's principles to music was in the form of a singing course book. Nägeli (a writer and critic) and Pfeiffer (a composer) published a *Gesangbildungslehre nach Pestalozzischen Grundlagen* in 1810. The forty-eight chapters of this singing course are Pestalozzian in their systematic progression from the concrete to the abstract, the general to the particular, and the simple to the complex—from clear understanding of single parameters (rhythm, pitch, etc.) to their combination as wholes. Most striking, nevertheless, is the omission of real *music* from the course materials; the authors deliberately restrict themselves to mechanical exercises. *Kunstanschauung* would seem to be better served by concentrating students' attention on pure and simple intervals and rhythms, rather than messy art music.

Impeccably sequential as it is, the *Gesangbildungslehre* was vitiated by a wrongheaded notion of primary forms as static and mechanical; its starting point is abstract rhythmic or pitch patterns. The future lay in combining Pestalozzian progression with a richer concept of musical fundamentals, one that could accommodate artistry as well as technique. Nägeli's philosophical *Vorlesungen über Musik* (1826), a work that is cited with approval in A. B. Marx's *Die alte Musiklehre im Streit mit unserer Zeit* (1841), goes a long way toward Marx's solution of positing two holistic *Grundformen* at the root of art music. Nägeli adapts Pestalozzi's primary forms for music on the mathematical basis of "fundamental numbers" which he terms a *Grundzahlgesetz* (42). Nägeli proposes that all artistic activity is driven by the interaction between qualities of the numbers 3 and 4, or *Dreyzahl* and *Vierzahl*. He associated "thirdness" with the dynamic and creative drive of "becoming, "fourthness" with static or formal qualities of existence. The kinetic impulse, typified by the intensity curve of a melodic line, interacts with the impulse for symmetry, such as four-measure phrasing: "Just as 'thirdness' unfolds throughout the rhythmic course of individual progressions, 'fourthness' regulates these progressions into units within a metrical structure, thereby fashioning a balance of proportions" (42). According to Nägeli, "fourthness" dominates all wellcrafted compositions. The link with Marx, for whom music arises from the interaction of principles of *Bewegung* and *Ruhe*, embodied by his prime forms of *Gang* and *Satz*, is striking. Marx can thus be said to complete the project Nägeli and Pfeiffer had begun: the translation of Pestalozzi's "A B C of *Anschauung*" from vision to sound. Marx admits as much in a footnote to his *Die alte Musiklehre*, which praises the *Vorlesungen* for its ideas while also criticizing Nägeli for not working them out in a systematic way (1841, 57). Marx's main debt to Nägeli was a dynamic model for music. "Motion," according to Nägeli, "is the fundamental element of music," and the perception of notes in motion constitutes our earliest musical experience (38): "what does our simplest perception of tones consist in?—motion [*Bewegung*]—a series of tones?—repeated motion—ordered groups of tones?—their connection into an artwork via multiple motion. Motion is thus the basic element [*Grundelement*] of art music" (38). Nägeli never managed to square the idea of motion with his combinatorial approach to progression. He also failed to project his dynamic model onto rhythmic and melodic relationships. Notes, he argued, are subject to "extensive" oppositions of short and long rhythms, as well as "intensive" oppositions of high and low pitch. But that is where he left it. Marx rode the metaphor of motion all the way, integrating the various musical parameters—pitch, rhythm, harmony and form—into holistic *Grundformen*, and mediating the pupil's journey from simple melodies to full-scale sonatas.

## *ANALOGIEDENKEN* AS APPERCEPTION

The Goethe/Pestalozzi tradition, with its ideas of the embodiment of reason and the sequentiality of knowledge acquisition, is astonishingly modern, and never more so than in the work of its first professional exponent: Johann Friedrich Herbart. Herbart, a forgotten figure today, was one of the founders of modern psychology and an influential education theorist. His model of pedagogical

progression gave us the key to understanding how romantic *Formenlehre* may be deemed "metaphorical."

Herbart's first published work was entitled *Pestalozzis Idee eines A B C der Anschauung* (1802), and his project as a whole sought to put Pestalozzian pedagogy on a firmer psychological footing. Herbartian psychology is a theory of mental statics that anticipates Freud's hydraulic model of the mind as a system of drives. His central concept of apperception is what distinguishes his theory most radically from rival psychological schools—the "faculty psychologists," the "sensationalists," and the "associationists" (see Dunkel 1970, 147–50). According to an early commentator, "apperception may be generally defined as the power of understanding new ideas by means of related old ideas already in the mind" (Dodd 1898, 127). Herbart views thought as a circular system by which sense impressions are absorbed into an "apperceptive mass," from which they process the entry of new impressions, and so on. Because his circle of thought regulates itself, Herbart has no need to invoke mysterious faculties in the mind, nor, like the sensationalists, to regard the mind as a tabula rasa, passively inscribed by incoming presentations. Furthermore, unlike the associationists, who regard ideas as linked together mechanically, Herbart's apperception depicts a dynamic interplay between mutually permeable units.

Apperception, then, is a more sophisticated version of Goethe's and Pestalozzi's *Anschauung:* both terms denote a fusion of observation and reflection and a plastic concept of perception as shaped by experience. Herbart's theory is far more specific as to how perception grows, and he details precisely how this process can be taught and learnt. Whereas *Anschauung* is a unitary act, apperception comprises the dual processes of concentration (*Vertiefung*) and reflection (*Besinnung*), which alternate as "mental respiration." *Vertiefung* takes place when presentations are successively brought into consciousness in sufficient strength and purity, as far as possible without obstructions. *Besinnung* is the collecting and binding together of these presentations. Even more than Goethe, Herbart emphasizes the contingency of learning upon bodily health and cultural guidance. Concentration can only happen if the student is receptive; reflection needs guidance from a teacher. He accordingly devises a method that would become his most famous legacy to nineteenth-century pedagogy: "The Five Formal Steps of Education."[7]

The teacher begins (Herbart's "clarity") by reviewing the student's current state of knowledge as clearly as possible. By focusing clearly on a single object, the student is practicing *Vertiefung*. The analytical part of "clarity" (i.e., Ziller and Rein's "analysis") involves the picking out of distinctive features; the synthetic part (Ziller and Rein's "synthesis") leads the student to recognize these features when a new object is brought into view. On the basis of the new facts uncovered in the second step, the teacher's third step, "association," is "to discuss them with the children, and to compare and contrast them with known facts in order to lead the pupils to form the general truth for themselves" (Herbart 1897, 131). In other words, the comparison of objects with shared qualities leads the children to form abstract categories. This step thus involves the exercise of *Besinnung*. The fourth step, "system," reviews the progress so far, generalizes conclusions from the lesson, and arranges these conclusions in a systematic order. With the fifth and final step, "method," the teacher leads the students to the practical application of what they have learnt. This can take the form of utilizing a grammatical construction, solving a mathematical problem, or even drawing a picture.

This interplay of apperception may well suggest music, and indeed Herbart resorts to a musical metaphor to explain the workings of will: "we can transfer to the relationships of will an approval or disapproval like those existing for the relationships of notes" (Herbart 1897, 65). Strikingly, when Marx applies Herbart's ideas to music, he does so using the Herbartian argument that musical learning is internalist; that is, one learns music from *music*. Marx's *Die alte Musiklehre* (1841, 10) cites a passage from Herbart's *Encyclopädie der Philosophie* that discusses the cognition of poetry and of the plastic arts. According to Herbart, cognition in these domains relies on the learning of concepts and images through experience and their internalization as mental models, or *Vorbildungen*. For example, we would not be in a position to understand paintings without experience of human

faces or gestures. Marx argues that musical learning is altogether different. Whereas an appreciation of painting or poetry requires only an experience of life, the precondition of musical understanding is experience of music. For Marx, then, composition is learnt as a Herbartian circle of thought, music apperceived through music at ever higher levels. Marx's educational philosophy is encapsulated in a precept he borrows from the Herbartian pedagogue Adolph Diesterweg: "Proceed from impressions [*Anschaulichen*] to concepts, from the particular to the general, from the concrete to the abstract, not the reverse. This principle serves the entire task of teaching, as well as upbringing [*Erziehung*]" (1841, 55).

Although the introduction of the *Lehre* never invokes Herbart by name, it nonetheless adopts his method. Step one, "clarity" (separated into "analysis" and "synthesis" by Ziller and Rein) is described as follows: "first, the construction and meaning of every artistic form is clearly explained, and then the information thus obtained is at once applied to practical purposes" (2d ed., 1:12). We can see this in action in Marx's opening chapter. He begins by discussing the principles of pitch formation. In very general terms, Marx states that pitches can be arranged in rising or falling, mixed or repeating patterns (17) Marx then instantiates a specific scale (18–20). He does the same for rhythm, first dividing rhythmic patterns into equal and unequal and then illustrating this with a normative 2/4 metrical pattern (21–23). His procedure here, therefore, is to focus the students' minds on what they already know—that is, general principles of pitch and rhythm (analysis)—and then to introduce something new—that is, a concrete example of a scale or rhythmic pattern (synthesis). As the next step, "association" is described in the introduction, "In examining a new form, we first inquire into its relation to previous forms, and then . . . consider its character as a stepping-stone to further progress" (12). Accordingly, chapter 1 then brings together all the previous requirements in a summary example, listing and interrelating four principles of pitch and rhythm (23). Marx's example is another rising octave scale, illustrating the principles of tonal closure (starting and ending on the tonic) as well as strong metrical grounding (the first and final tonics are both strong beats). Further association follows when Marx juxtaposes, for the first time, his three fundamental forms: the *Satz*, the *Gang*, and the *Periode* (24). In the words of the introduction, the fourth step (system) "provides a number of facilitating maxims, intended to guide the student" (12). System takes the form, in the body of the chapter, of a *Rückblick*, or overview: a list of ten points all nicely arranged (24–25). The fifth step, that of application as method, spills over into the *Zweiter Abschnitt*, which begins: "after these preliminary observations, the student's own activity begins, becoming gradually freer" (25). This second section puts principles into practice.

Apperception, the learning of new ideas via existing frames of reference, guides the students at all stages of their journey through the *Lehre*. As in Herbart's method, the last step, method, is not an ending but a new beginning at a higher level. Marx's method, cumulative yet circular, takes on the appearance of a spiral: in musical terms, a process of developing variation. The overture or exposition of this process is described in the *Lehre*'s introduction, where Marx derives the principles of modulation from chord progressions and melodic contours (4–6). According to Marx's narrative, the opposition in a melody between tonic (the boundary notes) and scale (departure and return) is expressed at a higher level in terms of the harmonic polarity of tonic and dominant chords. At the highest level, the same opposition appears when we modulate from the tonic to another key (4). It is important to stress that Marx is not making any claims about the evolution of tonality here. His story merely seeks to explain to the student the concept of modulation on the basis of what he or she already knows: melody. Marx emphasizes the importance of sequentiality in learning: "The student who . . . slips over the simpler or more familiar opening stages . . . in order to arrive sooner at subjects which appear to him more interesting, novel or striking, will never come into full possession of his art." When Marx refers to "the development of one form out of another, none of which can be obtained and understood without the preceding ones," he is talking as a teacher (10).

Later on, the *Lehre* represents the analogy between the three levels of tonal shape (melody, harmonic progression, form) in a couple of diagrams (fig. 6.2).

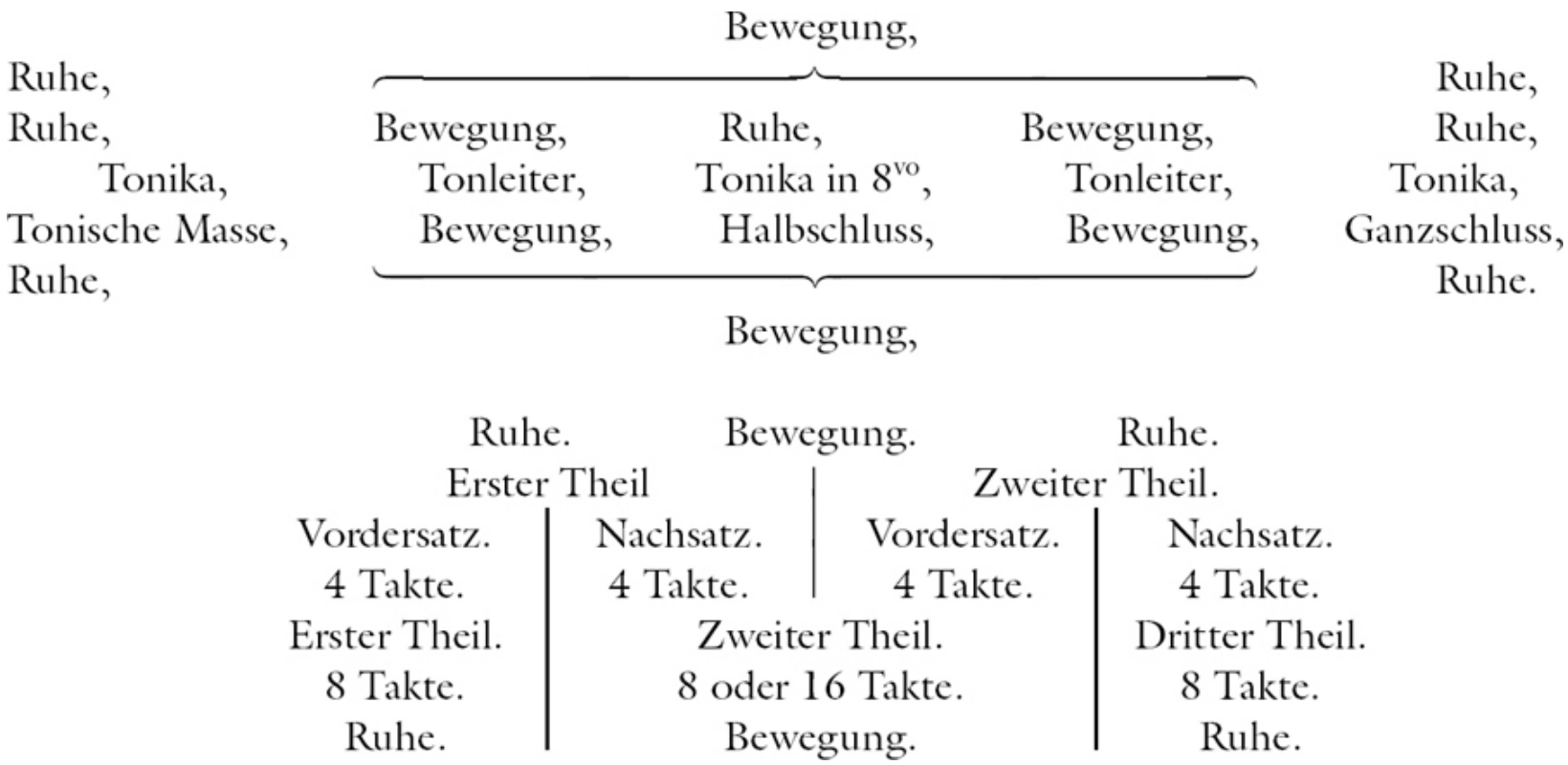



Figure 6.2. Tonal shape analogies, *Die Lehre*, 1:59–60

## Sinnbild

"Metaphor appears as . . . abridged personification," according to Jean Paul in his *Vorschule der Aesthetik* (1973, 131): "if a writer goes walking through a field of ripe grain, the upright and empty ears of grain easily suggest the simile of an empty head raised that way" (132). Metaphor as personification is to romantic organicism what *Bildlichkeit* is to baroque painting and poetic *Stammwörter* to classical language. With regard to nomenclature, romantic critics are less likely to talk of *Metapher* than they are of *Symbol*, or its Germanic synonym, *Sinnbild* ("the German language renders the word *Symbol* excellently with the term *Sinnbild*" [Schelling 1989, 49]). Its new name reflects the shriveling of metaphor's linguistic roots and its new orientation toward the organicist body and mind. Metaphor's "body" is akin to an object of nature, such as a plant; its "mind" is a general theory of imagination, which subsumes the trope into a concept of artistic activity as a whole. The two sides comprise, respectively, the objectified and dynamic phases of the same process, a dialectic between the concrete artwork and the creative drive that gives rise to it. This dialectic occupies German discourse about metaphor from Schelling to Nietzsche and beyond, but it was formulated most influentially for Anglo-American criticism by Samuel Taylor Coleridge and by his twentieth-century exponent, I. A. Richards. Richards cites the famous account of "imaginative growth" given in appendix C of Coleridge's *Statesman's Manual* (Richards 1965, 109). "But what the plant is," writes Coleridge, "by an act not its own and unconsciously—that must thou make thyself to become!" This comparison is "more than an arbitrary illustration, more than a mere simile"; rather, it is a "symbol established in the truth of things" (in Richards, 111). According to Richards, "as the plant here is a symbol, in his sense, of all growth, so the passage too is itself a symbol, a translucent instance, of imagination" (109). Coleridge and Richards are the stepping-stones between German organicist metaphor and the modern hermeneutic theory associated with Paul Ricoeur.[8]

In this section, I will show how the metaphor of personification blossoms in the music drama of Richard Wagner, in what Nietzsche calls "the identity between the melody and the living figure" (Nietzsche 1967, 129). Whereas much of Wagner criticism is arguably a series of footnotes to Nietzsche, I will come at Wagner from behind—from the perspective of romantic theories of the symbol. Schelling sees the apotheosis of the symbol in myth. A series of writers—Goethe, Creuzer, the Schlegel brothers, and Solger—debates the relationship between symbol (or metaphor) and its antithesis, allegory. We recognize in this dispute the dialogue between the organic and mechanical,

between melody and rhythm, between the Dionysiac and the Apollonian. Eventually, symbol and allegory are assimilated as equal-ranking moments of a single artistic process (just as melody and rhythm were subsumed into metaphorical melody). Surprisingly, this process becomes identified not with symbol per se, but with what Friedrich Schlegel terms "higher" allegory, a sign of self-reflection. Allegorical self-reflection is epitomized in the self-quotations that permeate the *Ring der Nibelungen* cycle, most overtly in its numerous "question-dialogues" (dialogues in which the respondent recapitulates swathes of past material). In the Norns scene, at the opening of *Götterdämmerung*, the vehicle of self-reflection is melody itself, passed between the interlocutors in its embodied form as the rope of fate.

## HEGEL OR SCHELLING?

To view nineteenth-century metaphor as personification is to side with Schelling *contra* Hegel. Hegel sees metaphor as *idealization*, as a move from the sensuous to the ideal—a position diametrically opposed to the one I take in this chapter. To bypass Hegel is also to cut out the ground beneath Derrida's *White Mythology*, which adopts Platonic and Hegelian idealization as the model for how metaphor works in general. My own position, then, is to side with Ricoeur, Schelling, and Aristotle against Derrida, Hegel, and Plato.

Hegel's *Aesthetics* presents three separate definitions of metaphor, all of which, both individually and as a series, project a drift toward idealization. Hegel first defines metaphor in terms of a linguistic trope, as "implicitly already a simile" (1998, 403). Reversing Jean Paul's "abridged personification," Hegel calls metaphor "an entirely compressed and abbreviated comparison" (403). Hegel's second definition is of metaphor as a concept that bears the trace of its physical source. Metaphors "arise from the fact that a word which originally signifies only something sensuous is carried over into the spiritual sphere," as in *fassen, begreifen*, and so on (404). Philosophical concepts are hence sensible meanings that have been "carried over" (*übertragen*) to an abstract plane. Hegel's third definition is made much later in the *Aesthetics*, in the third and final section, which deals with the romantic arts. Here, metaphor becomes generalized as an aspect of the romantic imagination: "The romantic imagination . . . gladly expresses itself metaphorically, because in it what is external for the subjective life withdrawn into itself counts only as an accessory and not as adequate reality itself" (1003). Metaphor's sensuous quality is of value only as an impetus to thought. To be sure, metaphors, together with images and similes, are devices in which the "inner life discloses itself, almost to the point of emerging into visibility" (1149). But, crucially, Hegel denies their ontological reality as personifications; metaphor's identity is entirely parasitic on that of the human subject, as "an expression purely subjectively manufactured by the poet" (1149).

As I argued earlier, whether one favors Schelling or Hegel depends on whether one reads the genetics of consciousness "forward" from nature or "backward" from consciousness. From his vantage point of *Geist*, Hegel is relatively uninterested in metaphor and symbol in their concrete, flesh-and-blood manifestations. Schelling's *Philosophie der Kunst* takes the opposite line: art evolves toward the symbol as the perfect representation of the infinite within the finite. The highest form of symbol for Schelling is the personification of gods in Homeric mythology, a Christianized semiotics whereby the divine is incarnated in human flesh. The essence of Schelling's theory of metaphor and symbol is the collapse of signification into ontology. The god Eris does not *mean* strife, he is strife, in the same way that the signification of an artwork cannot be separated from its corporeal existence (Schelling 1989, 48). Schelling works toward the perfection of the symbol starting from Kant's schema/symbol dualism, and he interposes a third term, allegory. Schema, allegory, and symbol constitute three modes of representation, a conceptual triad that flows in the contrary direction to Hegel's three definitions of metaphor:

> That representation in which the universal means the particular or in which the particular is intuited through the universal is *schematism*.
>
> That representation, however, in which the particular means the universal or in which the universal is intuited through the particular is *allegory*.

> The synthesis of these two, where neither the universal means the particular nor the particular the universal, but rather where both are absolutely one, is the *symbolic*. (46)

The paradigm of schematization is language: words are general, yet they signify the particular. The paradigm of allegory is the iconicity of painting, where objects resemble their referents. Thus a *particular* figure in the plastic arts can signify a *general* concept. The paradigm of the symbolic is mythology: "Meaning here is simultaneously being itself, passed over into the object itself and one with it." With a mythical god or an artwork, "the universal is completely the particular . . . and does not merely mean or signify it" (49). Hence Schelling's schema-allegory-symbol progression outlines in semiotic form the evolution of the natural toward the human. Schelling also reverses the semiotic back onto his nature philosophy, arguing that "nature schematizes" in light, "allegorizes" in corporeal matter, and "is symbolic in the realm of the organic." Similarly, "thinking is simple schematization; all action, in contrast, is allegorical; art is symbolic" (48).

The alignment of the symbol with mythology meant that it could share in the enormous prestige of the so-called new mythology. Texts such as Friedrich Schlegel's 1800 *Discourse on Mythology* looked to art as a kind of "new mythology" that would play the same socially unifying role fulfilled by the myths of ancient Greece. Schlegel's vision of myth is much more dynamic than Schelling's—ironically, more in tune with Schelling's dynamic concept of nature than the older philosopher's rather static synthesis of the universal in the particular. "Mythology is," for Schlegel, "a work of art of nature. . . . Everything is relation and transformation, formed and reformed" (Bowie 1990, 55). The new mythology, then, is both more plural and dynamic than before, its paradigms being, respectively, the "swarm" and the god Dionysus. According to Schlegel, myth plunges us into "the beautiful confusion of fantasy, into the original chaos of human nature, for which I know of no better symbol until now than the colorful swarm of the ancient Gods" (Bowie 1990, 54). The notion of mythology as a collective, as a network of symbols—a swarm—better expresses a sense of nature as endless formation and reformation. Such a view of mythology takes musical shape in Wagner's tapestry of symbolic leitmotivs. Against such a view, the concept of the *individual* god becomes problematic, which is why the paradigmatic individual—Dionysus—symbolizes, paradoxically, the spirit of dissolution.[9]

The problem for the philosophers of metaphor is that a concept of symbol as systemic is difficult to square with a concept of symbol as opposed to allegory. If metaphor is a process, then any specific moment in this process can only point beyond itself to a point of future completion; in itself, it is as incomplete as allegory was supposed to be. Mythology turns the symbol/allegory opposition on its head.

## ALLEGORY OR SYMBOL?

The story of romantic metaphor is a story of how allegory displaces symbol from its privileged position—of how Dionysus overthrows Apollo. The opposition's original formulation is usually credited to Goethe, but Todorov's magisterial study (1982) shows that its prehistory involves Kant, Schiller, Meyer, Moritz, and many others. Yet Goethe's formulation stands: allegory represents "the general through the particular," symbol "the general in the particular" (in Todorov 1982, 204). Todorov unpacks the differences as follows. The symbol is productive, intransitive, motivated; it is and signifies at the same time; it expresses the inexpressible, the infinite in the finite. Allegory reverses all these aspects, being transitive, arbitrary, rational, and so on (206). Symbol and metaphor are used interchangeably in the period; Jean Paul's allegory/metaphor opposition maps precisely onto Goethe's allegory/symbol. For August Schlegel, metaphor reveals "the great truth that each is all and all is each" (in Wellek 1955, 41). In fact, metaphor is recruited into his aesthetic of organic unity, of the interdependence of the parts in the whole. The main reason why August Schlegel's mantra of "unity" sounds so jejune today is that it is static: it excludes the element of time. Time is on allegory's side, entering in the very space between the universal and the particular, a gap that keeps allegory moving forward.

Time is brought into play in Friedrich Creuzer's 1810 *Symbolik und Mythologie der alten Völker* (see Todorov 1982, 216–18). A symbol is instantaneous, while allegory unfolds through time: "An idea is exposed in the symbol in an instant. . . . Allegory leads us to respect and follow the steps taken by the thought hidden in the image. In the one, there is instantaneous totality; in the other, progression in a series of moments." Like thought, allegory proceeds "in a series of moments" (217). Crucially, allegory's temporal character allows Creuzer to wrest myth away from the domain of symbol (where Schelling had placed it): "That is why allegory, but not symbol, includes myth, to which the epic in progression is most perfectly suited" (217–18).

The resurgence of allegory marks the ascendancy of Friedrich Schlegel's ideas over those of his elder brother, August. "All beauty is allegory," writes Friedrich Schlegel, by which he means the "continuous self-improving and self-reflecting work of the artist" (in Starr 1964, 61). Allegory as imaginative dynamic is part and parcel of Friedrich Schlegel's conception of art as "progressive, universal poetry," announced in the famous fragment No. 116 from the *Athenäums Fragmente* (in Simpson 1988, 192). Romantic poetry "should forever be becoming and never be perfected," and it moves forward through its ability to reflect on itself at increasing levels: poetry can hover "on the wings of poetic reflection, and can raise that reflection again and again to a higher power, can multiply it in an endless succession of mirrors" (193). The philosophical correlative of allegorical poetry is romantic irony. If allegory avows the impossibility of grasping the unity of universal and particular in reflective judgment, then irony presents "truth" as the determinate negation of any given proposition. Allegory, then, always points beyond itself, like music, a connection made by Novalis: "True poetry can at the most have an allegorical meaning as a whole and an indirect effect, like music" (in Bowie 1997, 68).

Friedrich Schlegel characterizes the old (Goethian) and the new, ironic faces of allegory as *nieder* and *hoher Allegorie* respectively (Starr 1964, 59). But what has happened to the symbol? At first, it would seem that *hoher* allegory and symbol are interchangeable, since for every *alle Schönheit ist Allegorie* there is an *alle Kunst ist symbolisch* (Starr 1964, 61). Actually, Schlegel has reconstituted the allegory/symbol opposition as a dialectic between two complementary parts of the same process. Higher allegory is the artistic or creative drive, the imagination. Symbol is the individuation of this drive into concrete forms. In Starr's words, "Friedrich Schlegel's allegory refers more to the ideal side of representation; symbol more to the concrete side" (62).

The allegory/symbol dialectic was developed most cogently by Karl Solger, nowadays an obscure figure but hailed by both Hegel and Kierkegaard (the latter named Solger the "metaphysical knight of Negation" in his *Concept of Irony* [see Simpson 1988, 319]). Solger is particularly suggestive for the turn metaphor takes in Wagner because he forges links between allegory, self-reflection, the Hegelian dialectic, and, most important, the idiom of dialogue. Dialogue is the privileged mode of ironic philosophizing, since it is by nature performative and agonistic. Schlegel's *Athenäum* fragment No. 77 had called dialogue "a chain or garland of fragments" and had looked to the future for a genre of dialogue that would fuse form and content: "But as yet no genre exists that is fragmentary both in form and content" (Simpson 1988, 192). Solger's *Erwin: Vier Gespräche über das Schöne und die Kunst* (1816) is remarkable not so much because it is couched as a dialogue, but because the concept of allegory emerges *through* this dialogue. In other words, the dialogue begins by favoring symbol over allegory in the Goethian spirit, and finishes by allegorically turning this opposition on its head.

In Solger's dialogue "On the Symbol" (in Simpson 1988, 321–28), the dialectic pivots on a reinterpretation of the inner/outer boundary. Solger begins by defining symbol in terms of a "transition from centre to surface"; when the "soul's activity emerges from the perfect light of our innermost being, this light also is already clothed in form and matter" (321). But the dialogue soon counters this claim with an opposite view of externality, prioritizing imagination over form: "But now let us also summon forth imagination into the light of day and of real existence. . . . Will it not emanate out into reality as a divine energy, bursting forth from the light of the Holy of Holies" (324)? The respondent argues that the formation of a symbol is necessarily a creative, hence

allegorical, act: "if the essence of the Godhead clothes itself in form, it can do so only by actively lowering itself into existence." Erwin concludes that "allegory would be a relationship comprehending the entire realm of art" (326). The author responds with yet another dialectical twist, now recuperating this higher form of allegory into a yet higher concept of symbol. Symbol is now presented as analogous to "living, fully rounded persons" and, moreover, to the Greek gods as "impersonated, dynamic, beings" (327).

In one sense, we seem to have returned, dialectically, to Schelling's notion of symbol as impersonated myth. But the detour through allegory has opened up a new possibility that a theory of metaphor can *enact* what it signifies. The fifth sentence of Schlegel's fragment No. 116 had hinted that romantic poetry can "lose itself in what it describes" (Simpson 1988, 193): namely, that signification can turn into ontology. Solger shows us that metaphor (allegory) can be performed as a dramatic dialogue. Wagnerian music drama performs metaphorical dialogue in tones.

## WAGNER

Wagner's *Gesamtkunstwerk* is often taken to be the summit of metaphorical thinking in music, because it so plainly connects text, action, and tones into a web of associations. In his essay "Metaphor in Music" (1987), the philosopher Steven Krantz cites Wagner's treatment of the "sword motive" (*Notung*) as an example of metaphorical substitution:

> The metaphorical sense is not that the sword motive substitutes for the "sword," but rather that the playing of the sword motive substitutes for some literal statement, such as "the sword is present," that is not actually uttered by any character. The focus of the metaphor would be on the level of a complete statement, while the frame would be the libretto or dramatic action on the level of an entire scene. (353)

Krantz's fixation on the leitmotiv as a static label typifies the superficiality of most nonspecialist readings of Wagner's techniques. At best, this kind of approach is stuck in August Schlegel's view of systemic metaphor as a network of correspondences: "All things are related to all things; all things therefore signify all things; each part of the universe mirrors the whole" (in Wellek 1955, 41). Yet Wagner's metaphors arise through a dynamic and productive process of self-reflection—through *allegory*.

John Daverio calls the *Ring* "an encyclopedia of reflective devices" (1993, 164). Despite Wagner's habit of kicking over his tracks, Daverio traces these reflective devices to Friedrich Schlegel's account of "universal-progressive poetry" from *Athenäum* fragment No. 116 (Daverio 1993, 161). Daverio sees self-reflection most clearly in what he terms Wagner's "duplicative embeddings," recapitulations inserted into the drama in which "the internal sequence of events is similar to that of the enclosing work" (164). The dialogue between the Wanderer and Mime from act 1 of *Siegfried* provides a good example. The dialogue is a riddle contest, in which the person who fails to answer the questions correctly forfeits his head. Since the questions turn on the background events to the confrontation, the respective answers cycle through quotations from the *Ring*'s first three dramas. Thus the Wanderer's three answers bring back material from *Das Rheingold*, scenes 2, 3, and 4, associated with the Nibelungs, the ring, the giants, and Valhalla. Mime's responses take the audience through acts 1 and 3 of *Die Walküre* and the first scene of *Siegfried*. Wotan outsmarts Mime with his third question: "Who will weld the sturdy splinters of the sword Notung?" It is at this instant that the past catches up with the present, since the orchestra underscores the question with the sword motive. The sword, reforged by Siegfried, will be the very instrument of Mime's forfeit. The leitmotiv is thus heard, *pace* Krantz, not as a static symbol, but as the point where past cuts into present, quotation into discourse, narration into action. We experience the same kind of allegorical reversal that Solger unfolds in the *Erwin* dialogues. Music is initially subordinated to the dialogue, as illustration; it then rises up to master it as music drama. It is a role exchange of ornament and structure that we have encountered before in baroque and classical metaphor, but rendered here by Wagner in terms of the metaphor of personification and the "new mythology."

This reversal is actually woven into the fabric of Wagner's language, given the leitmotiv's dual role as quotation (romantic-opera reminiscence motive) and argument (Beethovenian development). But it is also intrinsic to the large-scale design of the *Ring*. The bulk of the epic was originally conceived as no more than a backdrop to the main event, Siegfried's death. Wagner had envisaged its prehistory being reported in a prologue by the Norns and then abandoned this plan when he grasped that these events would have to be fully realized in order to be dramatically effective. It would seem, therefore, that the composition of the first three dramas was motivated by the need to eliminate epic recitations. And yet Dahlhaus (1970) has shown that these recitations actually *increased* as the *Ring* developed, not least in the final version of the Norn scene in *Götterdämmerung*. Wagner's project begins, then, with narration being firmly subordinated to action, in line with the ideals of dramatic (symbolic) unity. He ends, however, by instating allegorical acts of storytelling as the engine of his drama. Drama happens in the allegorical gap between recitation and personification; the *Ring* is propelled by the repeated collapse of signification into being, as narration rebounds on the speaker and the past surges up to swallow the present.

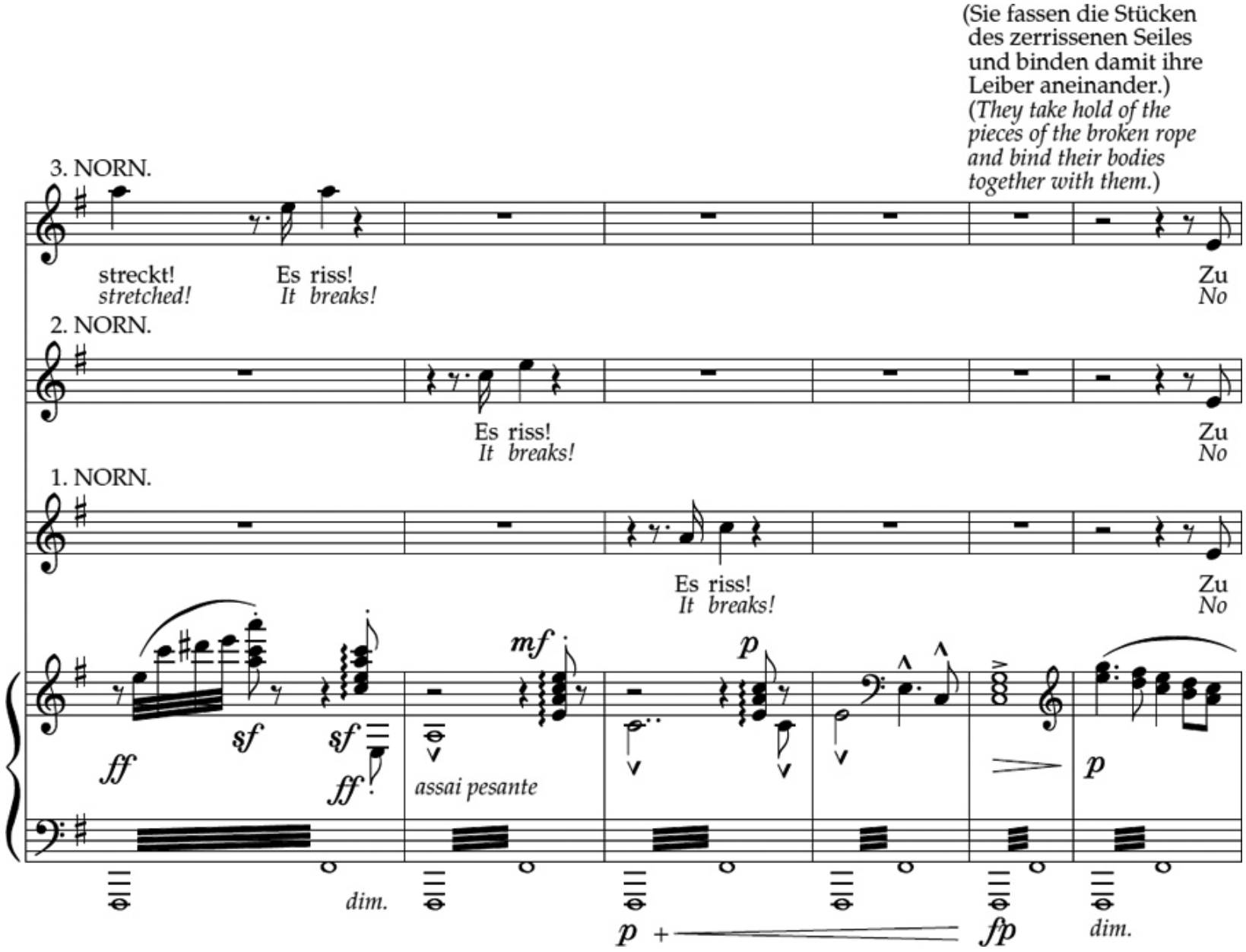
The salient instance of this technique is the severing of the rope of fate in the Norns' prologue to *Götterdämmerung*, a catastrophe that unravels the whole plot. The rope of fate is nothing less than metaphorical melody rendered concrete as myth, as stage prop. The Norns hand the rope/melody to each other as they take turns to sing. Remarkably, the motivic refrain that symbolizes the rope is none other than the Tristan chord, a half-diminished seventh (F–A♭–C♭–E♭), rendered as a sinuous arpeggio (in *Tristan*, it is spelled F–G♯–B–D♯). We are no longer invited, with Isolde, to imagine melody; we see it for real (ex. 6.5):

Example 6.5. Wagner, *Götterdämmerung*, rope motive



At the climactic moment, when the rope breaks, the chord is shunted up a semitone to F♯–A–C–E, and the orchestra's F♯ pedal tips the music out of its E♭ minor orbit into the new "evil" key of B minor (ex. 6.6):

Example 6.6. Wagner, *Götterdämmerung*; the rope breaks




(Sie fassen die Stücken des zerrissenen Seiles und binden damit ihre Leiber aneinander.) (*They take hold of the pieces of the broken rope and bind their bodies together with them*.)

The center fails to hold. The rupture is a breakdown in tonal coherence.

Thomas Grey (1999) has revealed the full richness of Wagner's thread metaphor. Wagner reception is saturated with references to leitmotiv, *Leitfaden*, and, most suggestively, *rother Faden*—the "red thread." The "metaphorical thread" (196) may represent a coherent progression of melodic tones, a progression of ideas, images and feelings, the syntactic continuity of a musical process, the continuity of dramatic narrative, and even, at the most abstract level, "a 'red thread' in the listener's mind" (201) to make sense of the disintegration of surface discourse. There are also the threads that Wagner spins into the fabric (*Gewebe*) of leitmotivs that spreads across the entire surface of the drama, as in his famous description in *A Communication to my Friends (ein jerderzeit charakteristisches Gewebe der Hauptthemen, das sich nicht über eine Szene . . . sondern über das ganze Drama ausbreitete* [in Grey 1995, 360]).

In a remarkable analysis of this scene, Patrick McCreless (1989) shows that the *Leidfaden* metaphor, in the concrete form of the Norns' rope (*Seil*), comes to stand for two kinds of tonal process. At the beginning of the prologue, when the rope is tied to the branch of the fir tree or the rock, the harmony is firmly anchored to a tonal center, E♭ minor. The first "round" of the Norns' dialogue thus begins and ends in this key; it is tonally closed. The rope's detachment at the end of round 3, which sends the music into the malevolent key of B minor (Hagen's key), reflects melody's emancipation from tonal center. The music of the third round is much more chromatic, dynamic, and "advanced" than before. In short, it attains the processive, "progressive" quality of allegory. The shift from closed to open syntax across the scene effects a displacement of symbol by allegory.

As with the Wanderer-Mime riddle contests, the Norns' move from symbol to allegory emerges both from the dynamics of the dialogue, and the steady flow of time from past to present tense. The first Norn begins with the distant prehistory of the *Ring*, recounting how she used to twine her rope around the world ash tree until the *Weltesche* was adulterated by Wotan's snapping off a branch to make his spear. The second Norn carries this tale of rupture forward, telling how the spear was in turn shattered by Siegfried, and how the ash tree was hacked to pieces by Wotan's heroes. It is the third Norn who brings the narrative to its present state, reporting that Wotan has piled logs from the tree around Valhalla and predicting the coming conflagration. The progression from first to third Norn is thus a progression in time. The pattern is repeated twice more, with increasing urgency, in rounds 2 and 3. Round 2 appropriately focuses on Loge's fire, since it is the fire god's chromatic harmony that loosens the tonal center. Round 3 turns on Alberich's curse and enforces a deadly marriage between the rope chord and the ring motive. The resurgence of the past on the wings of Alberich's curse is played out by a role reversal: in rounds 1 and 2, the third Norn sings last and least, and it is significant that the rope chord is confined to her part; in round 3, she infects her sisters with both her present tense and her rope harmony, which is now pervasive. The first and second Norns tie the rope, respectively, to a tree and a rock, but the third Norn merely tosses it behind her.

The rope breaks in the red light of dawn, which Wagner has metaphorically identified with Loge's fire glimpsed at the opening ("Loge's legions ring the rock with fire. It is still night"). Just as the rope had once been tied to the world ash tree, fire from the now burning tree courses down the rope like a spark along a fuse. It is the rope *as metonymic chain* that snaps. We are struck that, like the sanguine melody pouring from Tristan's heart-blood, the burning melody in *Götterdämmerung* is *red*. Grey tells us that the metaphor of the red thread derives from the realm of rope manufacturing, where it is used as an orientational device to guide the weaving process. Being red, "it stands out against some more neutral background . . . and provides—like Ariadne's thread—a visual means of orientation within a complex fabric" (1999, 199). But the *rother Faden* is no metaphor. Melody really is red, because red is the color of blood, fire, and life.

A scribbling in Benjamin's posthumous *Arcades Project*, the work that lay uncompleted at his suicide, notes that "the *Gesasmtkunstwerk* is a premature synthesis, which bears the seeds of death within it" (1999, 897). Benjamin's theory of allegory proposes that art becomes most concrete when unity breaks down and the seams start to show. When the rope breaks, the total artwork, which pretends to be nature, reveals its artificiality, the human labor that went into it. For this reason, Benjamin, following his instinct that romantic art has an "elective affinity" with baroque allegorical drama (1998, 213), actually ascribes the first *Gesamtkunstwerk* to Harsdörffer, whose theory "declares that even an action lasting four to five days is permissible" (1998, 61). Benjamin holds up "the *Gesamtkunstwerk* as the summit of the aesthetic hierarchy of the [baroque] age and the ideal of the *Trauerspiel* itself" (1998, 181). And, indeed, Wagner's allegorical dialogues do remind us of the Harsdörffer *Gesprächspiele*. Allegory exposes the archaic in the modern and points to the future and back to the past.

## 2. ROMANTIC PEDAGOGY AND NARRATIVES OF FORM

The move from symbol to allegory shifts the focus from artistic production to reception. As Creuzer put it, "an idea is exposed in the symbol in an instant," whereas "allegory leads us to respect and follow the steps taken by the thought hidden in the image," which is a "progression in a series of moments" (in Todorov 1982, 217). Allegory assumes that understanding takes place in time, and this is true of music not only in the trivial sense that music needs to be performed, but also because new music is often greeted with initial incomprehension. The course from incomprehension to eventual acceptance is epitomized in the nineteenth century (and arguably for all time) by Beethoven. I do not wish to belabor here the familiar struggle-to-triumph narrative of Beethoven reception, encapsulated within the two-year interval between two reviews of the *Eroica* in the Leipzig *Allgemeine*

*musikalische Zeitung*. A correspondent writing on February 13, 1805, complains that "in this composition [the reviewer] finds too much that is glaring and bizarre, which hinders one's grasp of the whole" (in Sipe 1998, 55). Yet Friedrich Rochlitz's lengthy analytical review, appearing on February 18, 1807, praises the work's unity, and, crucially, puts the onus on the audience to accommodate themselves to it: "this symphony must have an audience that is capable of giving and sustaining serious attention to it" (Sipe, 57–58). In due course, a composer of disunity became mythologized as a hero of organic coherence, as in Schenker's famous dedication of his monograph on *Eroica*, "To Beethoven the hero." Turning a living composer into a myth brings the metaphor of personification to appropriate fruition. But Beethoven is a myth in the allegorical, dynamic manner of Friedrich Schlegel, rather than in the static sense of Schelling's symbol. This is a Homeric god who, to revert to Marx's favored image of the pedagogical pathway, always stays several steps ahead of us. Although the urge to understand is posited as an ethical imperative, a Gadamerian fusion of horizons can never take place. We are led, then, to a paradox of reception history. In one respect, true understanding is indefinitely postponed, as we remain forever behind the work. On the other hand, we are in some respects actually in advance of the composer. Schelling's idea that the intuitive, quasi-natural activity of the artist culminates in the rational, self-conscious insights of the philosopher finds expression in the central dictum of hermeneutics: that we can know the author better than he knows himself, or as Schleiermacher puts it, "We must try to become aware of many things of which he himself [the author] may have been unconscious, except insofar as he reflects in his own work and became his own reader. . . . So formulated, the task is infinite" (in Thiselton 1992, 228). One of the offshoots of this task is music analysis, whose roots both in Beethoven reception and in Schleiermacher's development of a general hermeneutics are being increasingly recognized.[10] To understand what the composer and the philosopher might have to say to one another takes us back to the dialogue of language and life.

The immediate question is why understanding Beethoven should be a problem at all, given that he keeps to the syntax, forms, and genres of Haydn and Mozart to an astonishing degree. Beethoven by and large speaks through language models that Sulzer and Koch would have accepted. But Beethoven's language loses the transparency and normativity quintessential to classical discourse, reflecting the romantic assumption that language is grounded in individual being and culture. Romantic language is closer, in Saussure's terms, to *la parole* than *la langue*—less a system of inherited and shared conventions than an amalgam of individual speech acts. Even the simplest and most conventionalized utterance takes on unique meaning depending on the person who speaks it, embodying his or her creative imagination and (in Wittgenstein's phrase) "form of life." Hence predicating language on individuality throws up a problematic of difference: how is it that individuals can ever come to understand each other? This is why hermeneutics is premised on misunderstanding; understanding is what one works toward.

The interdependence of language and life means that neither can be understood without the other. Discourse can only be grasped by divining the authorial intention behind it—Schleiermacher terms this the "psychological" axis (see Thiselton 1992, 216–21). Conversely, all thought ("psychology") is mediated through the differential system of language—the grammatical axis. Communication is achieved via a shuttling between these two inseparable yet distinct axes, through which initial disagreement is transformed into consensus. Shuttling unfolds Schleiermacher's "hermeneutic circle," by which the whole is understood via its parts, and the parts via the whole. Crucially, the circle rotates both within the separate axes (the parts and whole of discourse; the parts and whole of thought) and between them (grammar and psychology as parts of a whole communication).

The hermeneutic circle is usually associated with texts, and, in its musical guise, with representations of works.[11] I want here, however, to draw out the aspect of Schleiermacher's theory that deals not with texts but with linguistic usage, with language as practical activity. Notwithstanding its links with music analysis, hermeneutics also embraces the romantic tenet that musical understanding is learned most directly through composition. Marxian *Formenlehre* is

dedicated to the explication of Beethovenian form, and its students achieve enlightenment by passing through the compositional regime for themselves. *Anschauung* is reached through *Selbsttätigkeit*, analysis through composition. Although Marx's method follows in the Pestalozzian pedagogical tradition, it also bears out Schleiermacher's notion that reception is itself an artistic act, that reception is continuous with production. The creativity of reception is exemplified by how children acquire language, by what Schleiermacher calls their "inner mobility toward creation on their own part" (in Bowie 1990, 164). In Bowie's words, "children create new forms of language in their attempt to produce communication with others" (165). We do hermeneutics all the time at the basic level of working out, via divination and comparison, what other people are saying. Divination, then, is not some mysterious, psychologistic act of mind reading, as in the practice of late-romantic musical hermeneuticists such as Arnold Schering of divining the secret programs supposedly behind Beethoven's works (see Burnham 1995, 148). It is, rather, the activity by which we come to agree upon the meaning of our common concepts, such as the color red or the experience of fire.

Marx believed that creativity was a universal gift, that every child was a potential Beethoven. Pestalozzian educationalists such as Karl Gottlob Horstig had often noted the creativity intrinsic to children's song-singing and play, and, in a famous article printed in the *Allgemeine musikalische Zeitung* (1801), he comments on his own children's natural facility to improvise melodies. Georg Sowa (1973) emphasized the importance of child-centered or *kindgemässer* teaching methods for early-nineteenth-century institutional reform at all levels of German music education. The essence of Marx's achievement is that he was the first to project a holistic (or "integrationist," in the modern parlance) method associated with *kindgemässer* regimes onto the teaching of advanced composition. The path from the creativity of a child to the composition of a Beethoven is paved not with genius but with sheer productivity. The "example of the great masters" is that "they arrived at their eminence only by the extraordinarily great number of their works; and if some of their earliest productions bore already the stamp of genius, it is nevertheless easily proved what an amount of labor it required to raise them from those crude beginnings to ultimate perfection" (1854, 9).

We come to understand a Beethoven symphony, therefore, by discovering the child and the hero within ourselves, by learning how to be a Beethoven through our own compositional activity.

## *Form as Melody*

Marxian hermeneutics teaches us to imagine form as melody. The simplest rondo structure ("rondo 1") maps the *Ruhe–Bewegung–Ruhe* melodic schema onto an alternation of the two fundamental formal types: *Hauptsatz–Gang–Hauptsatz*. In sonata form, the rest-motion-rest pattern is writ big as exposition-development-recapitulation (or "first part"–"second part"–"third part"), comprising *Hauptsatz–Seitensatz–Gang–Schlusssatz–Durchführung–Hauptsatz–Seitensatz–Gang–Schlusssatz*.
In addition to actual melody and the metaphorical melody of form, there is a third kind of melody that mediates between forms, the melody that leads the student up the compositional ladder (*Stufengang*). Marx terms this the "urge to advance" (*Trieb des Fortschritts*; Burnham 1997, 78), "the rational spirit striving upward toward reason in art" (62). The sequence of forms is generated by the melodic *Gang* striving dialectically both for closure and continuity, alternately seeking a "determinate object," such as a cadence, and shaking off external (formal) "fetters for the spirit" (77). Flowing both within and between forms, melody is analogous to an evolving consciousness, a human subject in growth. This higher melody is nothing less than the student himself, embodying his compositional progress from "rondo 1" to sonata. In other words, not so much a hermeneutic circle as a melodic cycle, what Marx terms a *Kreislauf*. It is possible to graph the evolution of Marx's rondo family as a hermeneutic *Kreislauf*, shuttling between processes of expansion and compression along a time line from miniature to expanded form (fig. 6.3).

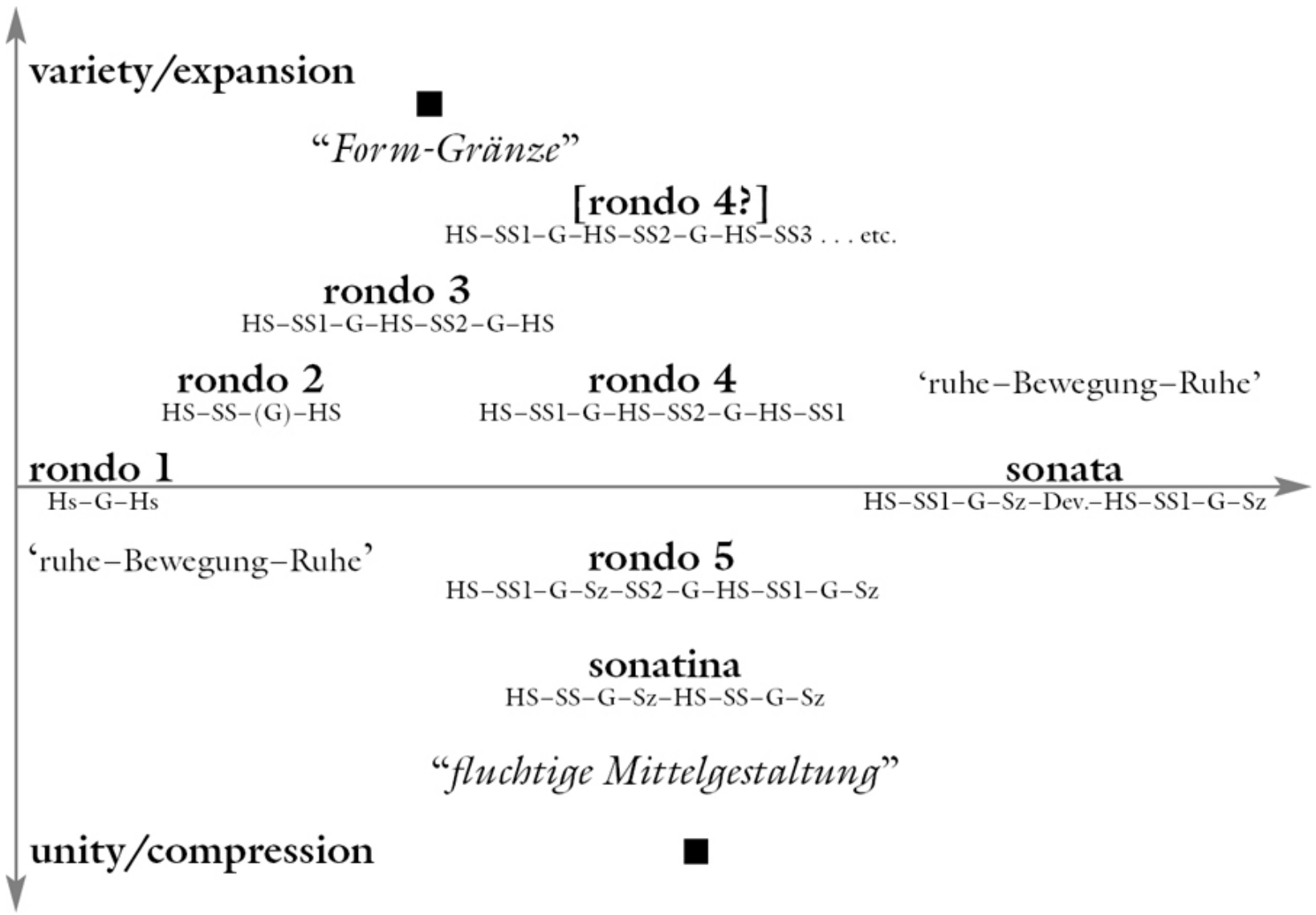



Figure 6.3. The rondo family

The *Kreislauf*'s melodic contour is of course only a figment of my representation—Marx never did schematize his order of derivations graphically in this way. Nevertheless, the notion of contour is implicit in the language he uses to portray the *Kreislauf* rising and falling between extreme types, the *Form-Gränze* of rondo 4, and the *fluchtige Mittelgestaltung* of the sonatina, pivoting on a baseline denoting an optimum balance of unity and variety (rondo 1 and sonata). The first wave of the *Kreislauf* strives toward expansion: "When we look back upon the formation of the rondos, so we see the development as quantitative, as an increase in size. We began with a simple melody [*Lied*], added a *Gang*, and then a subsidiary theme, and then two subsidiary themes together with a *Gang* and coda" (2d ed., 3:169). Marx's rondos acquire variety in proportion to the proliferation of subsidiary themes. He wonders whether one could multiply the number of subsidiary themes indefinitely, yielding forms such as *HS–SS1–HS–SS2–HS–SS3–HS*. But Marx concludes that too many themes would destroy the form's unity. "We therefore find ourselves at a form-boundary [*Form-Gränze*]," he declares (2d ed., 3:170), and so reverses the direction of his progression from expansion toward compression and unification. Rondo 4, rather than adding a third subsidiary theme, repeats the first one: "The recognition of this results in the striving to knit the individual parts into an inner unity, and leads us to the remaining rondo forms and the sonata" (171). The loose concatenation of *Sätze* and *Gänge* becomes progressively tightened by removing redundant ritornelli of the main theme (rondo 5) and reducing the number of subsidiary subjects to just one (sonatina). The drive toward unity bottoms out with the sonatina, which Marx calls a "provisional middle-formation," on account of its impoverished content. The sonatina is impoverished because it buys its unity "by sacrificing a section of the content of those earlier forms—the second subsidiary *Satz*—with a consequent lessening of significance" (213). Marx advises that "its manner of origin (through subtraction) already indicates lightness and ephemerality" (Burnham 1997, 82). Marx's progression therefore reverses direction once again, restoring a little of the lost variety by placing a development section at the heart of the

form (where *SS2* had sat in the fourth and fifth rondos). "Sonata form completes what the fourth and fifth rondo forms began" (2d ed., 3:195): if rondo 3 and the sonatina had marked the outer boundaries of Marx's formal *Kreislauf*, then sonata form returns the curve to a point of equilibrium. Sonata, then, is both culmination and return, reminding us of Goethe's circular morphology of the flower that both begins and ends with a seed: the seed in the ground climbing (through *Steigerung*) to the seed in the blossom.

Pictures are useful, but my two-dimensional model misrepresents the complexity of the hermeneutic shuttle, which, by Thiselton's reckoning, oscillates on at least six separate axes.[12] Marx's *Kreislauf* alternates between many perspectives on melody: melody as grammatical construct and as psychological idea; as natural process and as artistic invention; as motivic sequence and as integrated whole; as abstract process and as programmatic narrative. The *Lehre* constantly switches between points of view. Chapter one's *Erster Abschnitt* presents the *Gang* as an integrated form, while the *Zweiter Abschnitt* reformulates *Gang* from "the bottom up" as a chain of motivic segments. The *Kreislauf* confronts the student with an ever-changing definition of formal closure. First a *Gang* is closed by a tonic, which is sufficient to turn a *Gang* into a *Satz*. Next, tonic as keynote is consolidated into full cadential articulation. Then a mere cadence is not enough to close a *Satz*, which now requires closure by means of an internal theme, which would satisfy the melody's urge for "a determinate object" (Burnham 1997, 78). What began as a keynote thus becomes a theme, the subsidiary subject of a rondo or sonata. Presently, the theme becomes defined no longer positively, in itself, but *contextually* (negatively), as the "Other" to the primary subject ("it wants to be an Other to the main *Satz*," [Burnham, 79]). The subsidiary theme's tonal orientation (e.g. dominant) becomes less important, and the student is led to focus on the ways it can "resolve" or "fulfill" aspects of the first subject. In a sonata-form exposition, "the subsidiary *Satz* must complete (for the First Part) what the main *Satz* has begun"; the two themes "face each other as antitheses that are intimately joined within a comprehensive whole, forming a higher unity" (Burnham, 132–33). In section three of his chapter on sonata form, Marx gives many examples of the various ways the subsidiary themes of Beethoven's sonatas prosecute the main theme's unfinished business. Whereas the first group of Op. 31 No. 3 in E♭ comprises a rather disconnected chain of *Sätze*, "the subsidiary *Satz* sounds more intimately cohesive and flowing . . . in order to bring the whole more firmness and flow after the fragmented main *Sätze*" (in Burnham, 134). A similar relationship obtains in Op. 2 No. 1 in F minor, and in Op. 31 No. 1 in G major. The main *Satz* in the F minor sonata is built from two-measure sections; although the subsidiary *Satz* is based on similar material, the important thing is that it "flows on, by means of a coherent and uniform accompaniment (which the main *Satz* did not have), and is repeated three times" (135). The first group of the G major sonata is particularly unstable, since it is constituted from two sharply opposed ideas: a *Gang*-like sixteenth-note run, and a *Satz*-like main motive. The subsidiary *Satz* is "firmer and more continuously formed" (136). Indeed, its vacillations between B major, B minor, and D major echo the tonal jolts of the first group, but in a more integrated fashion.

The broad drift of these definitions is from the normative to the contextual: everything, in the end, becomes an aspect of discourse (grammar) animated by idea (psychology). Marx is ultimately grappling with the paradox that, though Beethoven gives the impression of being sui generis, he utilizes highly conventionalized (linguistic) classical forms. Simply put, Marxian hermeneutics seeks to understand how Beethoven's grammatical axis meshes with his psychological axis, as in the old chestnut beloved of historians and examination candidates: "Is Beethoven classical or romantic?"

## *Form as Life*

Marxian hermeneutics crosses from music to life most frankly in his programmatic criticism, especially in his works-and-life study *Ludwig van Beethoven: Leben und Schaffen* (1884). Marx's account of the *Eroica* as "a military drama in four acts" (Sipe 1992, 251) captured the imagination of the critical community and, as Burnham (1995) so forcefully argues, helped structure our sense of the

musical canon. According to Marx, some Beethoven symphonies portray "soul states" (Nos. 1, 2, 4 and 8); others paint actual physical events or objects (No. 6 and *Wellington's Victory*). The *Eroica*'s "ideal" battle narrative combines these two extremes in a dialectical synthesis: "In [Beethoven's] heroic symphony," claims Marx, "we have before the eyes the ideal picture—not of a general and common state of soul, but rather of a lofty and unusual and entirely certain record of life" (Sipe 1992, 301). The first movement's narrative comprises three basic episodes, in keeping with Marx's ternary model of sonata form. First (exposition), the hero accepts the call to arms, mounts his battle steed, and rallies his troops. Second (development), the hero enters the fray and does battle with the enemy. Third (recapitulation), the hero emerges victorious. Marx's scenario syncretizes a host of French and German *Eroica* interpretations by the likes of Oulibicheff, Berlioz, Lenz, Wagner, Griepenkerl, and others. *Eroica* reception is never ending and naturally draws even its own historians (most recently Peter Schleuning, Sipe, and Burnham) into the same circle. As a living tradition, Beethoven reception thus reminds us of baroque *Figurenlehre*, where critics also react to each other in a seemingly infinite relay. Again, as with the baroque figure, we may wonder whether the Beethoven program is anything more than a hermeneutic fiction, whether it has any grounding in musical reality. Sipe terms this kind of criticism "metaphorical" (1992, 134), but are Marx's metaphors motivated?

The easy answer to this question is that Beethoven's heroic plots are motivated by the very nature of sonata form. A theme—the *actant*—is defined in the exposition, journeys forth in the development, meeting adventures and experiencing a crisis, and is reaffirmed in the recapitulation, possibly with a jubilant coda tagged on. But there are two chief problems with this answer: first, the *actant* is never properly individuated (is the "hero" a theme or a motive, a key area or a mood, a single instrument or the entire orchestra?); second, parts of the story are repeated, by virtue of the reprise, suggesting that Wagner was right when he called a symphony not a drama so much as "a harmonized dance" (1993–95, 1:120) *à la* Koch. In this regard, it is revealing that E. T. A. Hoffmann —after Marx, the most influential of all Beethoven critics—does not mention the word "hero" once in his seminal review of the Fifth Symphony (in Charlton 1989). Hoffmann analyzes the work in (for its time) unprecedented technical detail, but he reserves his programmatic language not for the music's narrative, but for its general effect of sublimity. "Beethoven's instrumental music," Hoffmann famously claims, "unveils before us the realm of the mighty and the immeasurable," inducing a "pain" in the listener "in which love, hope, and joy are consumed without being destroyed" (in Charlton 1989, 238).

Although Hoffmann's sublime is rooted partially in the eighteenth-century world of rhetoric, echoing Sulzer's comparison between the grand symphonic style and the "apparent disorder" of the Pindaric ode (in Dahlhaus 1991, 70), its obvious source is Kant's "analytic of the sublime" from his Third Critique (1989). By "sublime" Kant means our feeling of intellectual and physical limitation when confronted by the immensity of nature, that which is "absolutely great" (94). Our understanding (*Verstand*) is ill equipped to grasp the magnitude of "shapeless mountain masses towering one above the other in wild disorder" or "the dark tempestuous ocean" (104). Nature's infinity can only be thought intellectually, through reason (*Vernunft*), when we employ our imagination so as to comprehend magnitude mathematically. Kant's so-called mathematical sublime represents "our imagination in all its boundlessness" (105). Experiencing the sublime intellectually (i.e., "mathematically") rather than directly gives us enough distance from which to view the "might" of nature with safety and pleasure. In front of the abyss, we discover our "power of resistance" (110) and "faculty of estimating ourselves as independent of nature" (111).

Nature's sublimity, then, induces a crisis of human identity: a fear of losing ourselves rapidly followed by the joy of discovering ourselves safe and free. Kant compares this dynamic with "a vibration, i.e., with a rapidly alternating repulsion and attraction produced by one and the same Object" (107). Such a "vibration" is found in Hoffmann's analysis exactly where one might expect it

—at the heart of the development section, when the thematic line is liquidated into sublime chords (measure 168) and then pulled back into the light of day:

> They [the chords] are sounds that depict the breast, constricted and affrighted by presentiment of enormity, struggling for air. But like a friendly figure moving through the clouds and shining through the darkness of night, a theme now enters that was touched on by the horns in E flat major in the fifty-eighth measure of the first half. (in Charlton 1989, 242)

The "presentiment of enormity" is immediately rescued by the "friendly figure"; the integrity of thematicism is threatened, then reaffirmed. The rapid switch from emotive to technical vocabulary ("E flat major in the fifty-eighth measure of the first half") might make us queasy, but Hoffmann's shift beautifully enacts the need for the *Verstand*, helpless before "enormity," to take shelter in the "mathematical sublime" of *Vernunft*. Technical analysis, it would seem, is music's mathematical sublime, symbolizing the "nature" of programmatic criticism in terms that can be grasped by reason. Analysis rescues criticism.

Kant believed that the sublime is evinced also in war, when the soldier "does not give way to danger, but sets manfully to work with full deliberation" (1989, 112). The issue of individuation is wired into the sonata-form plot. Texturally, the *Eroica* projects a sense of the hero merging with his army: by the end of the exposition, according to Marx, "they all join together, man to man, troop to troop, the whole inspired with high courage, like one body with one mighty will" (in Burnham 1997, 161). The stepped swell from solo to tutti fosters such an identification. Formally, the hero's encounter with the sublime climaxes in the development with a harrowing set of diminished seventh chords (measures 266–73) and then withdraws into the mysterious new theme in E minor (measure 284). Romain Rolland's water metaphor is appropriate: "The flood mounts wave on wave; but here and there islets appear like clumps of trees in the middle of the torrent" (in Sipe 1992, 267). Schleuning characterizes the E minor theme as "this precipitously placed, calm, self-contained, simple air" (in Sipe 1992, 268). "Islets" and "precipitously placed . . . air" recall Schopenhauer's and Nietzsche's notion of the *principium individuationis* as a "tossing bark, amid the waves" (Nietzsche 1967, 46). Like Hoffmann's "friendly figure," the "simple air" is an armchair by a volcano. The Napoleonic wars were not only fought; they were also observed by the fashionable elite from a safe distance—the kind of distance at which one could compose a symphony.

The sonata-form plot thus unfolds a sublime rhythm ("vibration") of formation and dissolution. But what of repetition or recapitulation, the perennial Achilles' heel of musical narratology? After the hero returns home with the reprise, is he then obliged to begin his journey all over again? The usual escape hatch is to consider the recapitulation a scene of remembrance of previous events, relegating the triumph to the coda. Thus Arnold Schering (1933, 160) concedes that "the form of the sonata movement demands a repetition of the beginning, . . . a return to an earlier stage of experience." From this standpoint, he hears the reprise as either a "memory" (*Erinnerung*) or a "dream image (*Traumbildes*) of the [hero's] wife staying at home." Marx's *Eroica* discussion leaves out the recapitulation altogether, leaping from page 266 to a new chapter titled "Die Sinfonia eroica und die Idealmusik" (1884, 271–88), then to another chapter called "Die Zukunft vor dem Richterstuhl der Vergangenheit" (288–96). He rejoins the discussion with, respectively, the preparation of the E minor theme in the development (292) and the pedal points in the coda, where the celebrations start in earnest (294). Schenker's decision to cut short the graph of his own analysis of this movement (1997) at the point of reprise must be considered a reflex within the same interpretive tradition.

Wagner's criticism of Beethoven's *Leonora* overture cuts to the heart of the matter, since the genre mediates between symphony and drama. In his "On Liszt's Symphonic Poems," with a long-distance echo of Koch, Wagner grasps that the symphony originates in the dance, such that "the symphony's formal germ survives till this day in its third movement, the Menuet or Scherzo, where it suddenly appears in its utmost naïvety, as though to tell the secret of the Form of all movements" (1993–95, 3:244). The symphony's dancelike obligation to repeat (recapitulate) militates against the dramatic idea's need for dramatic development. The *Leonora*'s reprise is thus redundant.[13] We are back with

the war between melody and rhythm, a war that catches Wagner in the middle. On one side, "with Beethoven," Wagner perceives, in *Opera and Drama*, "the natural thrust of Life, to breed Melody from out of music's inner Organism" (1993–95, 2:106). Yet on the opposite side, he could write with admiration, in "The Art-work of the Future," of "the rhythmic dancemelody" of Haydn's symphonies (1993–95, 1:120), and of Beethoven's Seventh as "the Apotheosis of Dance herself: it is Dance in her highest aspect, as it were the loftiest Deed of bodily motion incorporated in an ideal mould of tone" (124). Where does the metaphor of personification attain its apotheosis, in the "inner Organism" of melody, or in the dance's "loftiest deed of bodily motion"?

In both. The sonata narrative *begins* as melody and *becomes* rhythm. At the point of turning back, when the hero returns, narrative time is relegated to the timeless repetition characteristic of myth—specifically, of mythical retelling. We started this chapter with the romantic *Märchen*, and we can turn to it once more to help illuminate the curious nature of musical narrative. Hyazinth's journey to find the "Mother of All Things," in Novalis's "Hyazinth und Rosenblüte," typifies the circularity of romantic quests, in that the "Mother" turns out all along to have been the beloved he has left behind (Rosenblüte). His physical journey is thus also a spiritual journey, spiraling inward toward self-recognition. At his journey's end, when Hyazinth reaches the temple and is reunited with Rosenblüte, "all space in the sense of separation vanishes, and with it the experience of time as articulated by the process of change" (Birrell 1979, 68). According to Birrell, romantic fairy tales characteristically change gear at their dénouement from accelerating time to sudden timelessness: "the final apotheosis represents a boundless present, eternally and universally complete" (69–70). "Eros und Fabel," the tale with the card game from *Heinrich von Ofterdingen*, similarly ends with accelerating episodes, like the end of a sonata-form development. The cosmic unity with which it climaxes has the quality of space, rather than time, and the reader "is left suspended in a state of timeless abstraction" (Birrell 1979, 89). At this point, like the lyrical *Steigerung* at the end of Goethe's *Novelle*, Novalis's *Märchen* yields to the timelessness of lyric: "Gegründet ist das Reich der Ewigkeit, / In Lieb und Frieden endigt sich der Streit" (258). Like poetry, musical repetition turns time into form, melody into rhythm, narrative into myth. This is not the time or place to initiate a discussion of twentieth-century narratology. But it is salutary to be reminded that the development from Vladimir Propp's *Morphology of the Folktale* through Claude Lévi-Strauss's *Structural Anthropology* to Algirdas Greimas's *Du Sens II* rehearses exactly the same progression from the temporal to the structural. Propp's syntagmatic chains of narrative functions are transformed in Greimas's structural semantics into semiotic squares, distributing oppositions in the hero's journey between "behest" and "acceptance," "confrontation" and "success," "struggle" and "victory," and so on (see Schleifer 1987, 121–29). Ricoeur, in his polemical article "Narrative Time," is absolutely right to suspect that "both anti-narrativist epistemologists and structuralist literary critics have overlooked the temporal complexity of the narrative matrix constituted by the plot" (1980, 171). To adapt Ricoeur, one may similarly claim that a Beethoven plot "places us at the crossing point of temporality and narrativity," of time and structure. That is why it is so wrong to analyze the sonata plot as one-sidedly linear (a program) or structural (a dance). The linear *becomes* the structural, just as in Ricoeur's metaphorical perspective on Greek tragedy (1994, 35–43), where mimesis of human time is structured by the *muthos*, or narrative scheme, of the plot. Romantic metaphor melodic mimesis as rhythmic *muthos*.

## 3. ORGANIC DISCOURSE

> And yet they were waking a metaphor within us, the endlessly dead.
> Rainer Maria Rilke, *Duino Elegies*, No. 10[14]

Romantic music comes closest to Ricoeur's vision of discourse as metaphorically *alive* (although, being less visual and linguistic than baroque and classical music, it falls short on metaphor's other dimensions). The "density" of a Beethoven sonata creates the effect of being both corporeally embodied and cognitively self-reflective—a subject with physical extension as much as spiritual

depth. Technically, the metaphor of personification is intrinsic to many aspects of Beethoven's discourse: the motive's anthropomorphic drive to realize itself as a well-formed subject in the course of a thematic development; the arrival of this point of maturation in the second group of a sonata form, a point from which the subject can reflect on the path of its own constitution; the rhythm of individual dissolution and reformation traversed by the development and recapitulation; the heightened cyclical returns that bind multi-movement works into expressions of a single idea.

With music as "human" as Beethoven's, it is astonishing, then, that structuralist twentieth-century analytical methods have defined themselves largely by suppressing this hermeneutic element in favor of a positivist scientific protocol (see Snarrenberg 1994 and Burnham 1995). Fashions have changed; nevertheless, sympathy for metaphorical analysis remains at the level of close readings of historical texts. The rehabilitation of Schenker's metaphorical voice (Snarrenberg 1997; Blasius 1996) has yet to be matched by a development of a properly metaphorical method. Schenker's hermeneutic language became especially rich in the "middle period" writings of the 1920s (the Beethoven *Erläuterungsausgabe, Der Tonwille*, and *Das Meisterwerk in der Musik*), and fell back markedly before the abstraction of *Der freie Satz* (1935). There is no reason to suppose that, had he lived, Schenker would not have sought to reconcile his previous programmatic approach with the mature theory. I will close my book with an experiment in historical analysis. Playing one Schenker against the other, I will combine a Schenkerian reduction of parts of Beethoven's Sonata in A♭ Major, Op. 110, with programmatic ideas taken from his *Erläuterungsausgabe* to this work.

## Steigerung *as* Steigen: *Beethoven's Op. 110*

Like many of Beethoven's late works, the Piano Sonata in A♭ Major, Op. 110 (1821), is formally experimental. Its unusual proportions become apparent, however, only midway through the work, after movements 1 and 2 (a sonataform movement and a scherzo). Beethoven intercuts an Adagio ma non troppo lament (*Klagender Gesang*) twice with an allegro Fuga, creating a hybrid slow-fast finale: lament-fugue-lament-fugue. The complex begins with a recitative whose directness and urgency of expression look forward to the Cavatina from the late Quartet in B♭ Major, Op. 130 (ex. 6.7):

Example 6.7. Beethoven, Piano Sonata in A♭ Major, Op. 110, third movement, mm. 1–4



It is as if Beethoven himself were stepping forward and displaying his own pain to the listener. Such is Schenker's interpretation in his *Erläuterungsausgabe*, and it is striking that this juncture marks a turning point not only in Beethoven's sonata, but also in Schenker's interpretive method within his monograph. Until now, Schenker keeps his critical distance, narrating a fairly workaday (i.e., nonreductive), empirical analysis. With the third movement, however, Schenker suddenly changes register and plunges into a much more figurative and personal account of Beethoven's lament as an "image of true exhaustion" (*Bild einer wirklichen Ohnmacht*) (1972, 72). In other words, the metaphor of personification inscribed in Beethoven's discourse is the occasion also for the analytical intervention of the theorist's voice, enacted through a code switch from technical to figurative exegesis. Not only Beethoven but Schenker himself steps forward. Schenker's discourse repays scrutiny for the way it blends the two processes of personification.

On the compositional side, Schenker's account of the finale is full of references to "embodiment" and "thickening." Like "mist," the recitative "thickens" (*Die Rezitativ-Nebel haben sich verdichtet*; 1972, 72). But "thick" discourse requires "greater formal definition" (*bestimmtere Form*) to be properly "embodied" (*verkörpert*). Schenker views embodiment as both state and goal: when the mist solidifies into, respectively, the well-formed *Gesang* and the more assertive fugue, the discourse preceding these staging posts is retrospectively clarified and given meaning. The two halves of the finale express a Goethian "drive toward the organic" (*Drang nach Organischem*; 59), such that "a unity must emerge out of the binary" (*Aus der Zweiheit sollte eine Einheit werden*; 59). Only in the fugue does the "yearned-for unity become, so to speak, embodied" (*in ihr die angestrebte Einheit gleichsam verkörpert*; 59). This dialectical notion of embodiment splits the lament into a physical and spiritual dimension. Physically, Beethoven's "image of true exhaustion" is nourished (*genähert*) by the broken and syncopated figures of the *Klagender Gesang*. Spiritually, however, it is animated by "the workings of health" (*Aktivität der Gesundheit*), "a healthy impulse toward ever-more distantly projected goals" (72), which Schenker associates with the music's harmonic mobility—its *Wille zur Modulation (von As moll nach Ces dur*) (72). Thus, even in the depths of the sonata's despair, Schenker detects a "symptom of the first overcoming of exhaustion" (*symptom einer ersten Überwindung der Ohnmacht*; 72). Schenker's trope of sickness to recovery is probably influenced by the more explicit program of the Quartet in A Minor, Op. 132 (with its *Heiliger Dankgesang*). The novelty of his present reading is that Schenker views the two extremes not as a succession so much as a tense coexistence; as a precarious balance between the physical and spiritual sides of Beethoven's "state of health" (*körperliche Verfassung):* a "state of suspense between the notes' physical fragmentation, and their drive toward a still so modest and obvious form." Schenker links this "state of suspense" (*schwebezustand*) with the finale's formal dualism (*Zweiteilung*; 72).

On the analytical side, Schenker broaches the subject of Beethoven's "body" in order to inveigh against musical dilettantism, a diatribe that projects nothing if not Schenker's own persona. Schenker elaborates a luridly culinary metaphor of Beethoven as a god who offers up his own body as food for his listeners' enjoyment: "Thus do we savor [*geniessen*] in the Arioso Beethoven's sorrows. What a God, who offers up his own sorrows merely for the pleasure [*Genusse*] of others!" (72). Schenker's complaint turns on a pun between *Genuss* (consumption, pleasure) and *Genie* (genius). To imagine that one can partake of Beethoven's spirit by contemplating the suffering of his "body" assumes a vulgar materialism, reducing ideal art into an "object of consumption" (*sie will im Genie (als wüsste sie wirklich zu geniessen!) einfach nur das* Genussobjekt; 73). For nearly a page, Schenker rails against the hypocrisy of a musical public that "constantly longs for genius" (73), and yet that, when confronted by an actual suffering artist, walks by the other side without helping. Beethoven, Schenker reminds us, was no picture-book martyr, but a flesh-and-blood man who struggled in real life. To "consume" his sorrows in the facile way beloved of the culture industry is thus to petrify flesh into "marble" (*marmorn*; 73). Schenker is actually making a serious point about the limits of hermeneutics. Superficially, the emotionalism of passages such as the Arioso may suggest the possibility of easy access to a Schleiermacherian "psychological axis." But Schenker rejects the

possibility that "the bridge of taste/pleasure [*Genusses*] can connect genius [*Genie*] with the gourmandizing rabble [*geniessenden Menge*]" (72). Such a bridge would be not a hermeneutic circle but a *circulus vitiosus* (73). The only way to divine Beethoven's genius is analytically—in Schleiermacher's terms, to engage with the grammatical axis. The only struggle we should concern ourselves with, contends Schenker, is "Beethoven's struggle with his motives" (73).

Example 6.8. Beethoven, Piano Sonata in A♭ Major, Op. 110, fugue, mm. 205–13




At this point, Schenker lays metaphor aside and resumes his painstaking analytical commentary. But his figurative language blossoms one last time toward the very end of his monograph in a florid *Steigerung*, whose overblown rhetoric emulates the lyrical apotheosis that it describes (the finale, measures 200–213). "But *see*," begins Schenker, as if echoing Isolde's *Steigerung*,

> the tremendous passion which the last tones generate, in the course of merely fulfilling their designated role, intensifying [*steigert sich*], as if nourished by their own being [*wie durch sich selbst genährt*], toward exuberance, so that they first surpass [*überflügeln*] their actual goal, which would seem to be a♭$^3$, and then, as if they could rein-in their mounting passion not suddenly but as required, proceed at measure 209, rather than to the note we expect, a♭$^3$, to the note a third higher, c$^4$! (113; see ex. 6.8)

Beethoven's closing gesture—the overleaping of the expected goal by a third to a top C—is also a circular return to the very opening of the sonata: "a passionately affirmative answer to the primal question [*Urfrage*] . . . asked by the first measure of the first movement" (114) (ex. 6.9):

Example 6.9. Beethoven, Piano Sonata in A♭ Major, Op. 110, first movement, mm. 1–4




The object of Schenker's discourse has changed from Beethoven's body to the individual tones. Organicist analysis of the notes takes over from the earlier hermeneutic reading. In typical romantic fashion, psychology gives way to botany, which can access deeper, preconscious impulses. Like so many of Schubert's travelers, Schenker journeys toward a flower. He thus invokes Goethe's biological concept of *Steigerung* to describe the tones "intensifying, as if nourished by their own being, toward exuberance." *Steigerung* certainly does justice to the process of gradual intensification and ascent that unfolds across the second fugue from measure 137 and the overwhelming sense of climax and arrival at measures 209–13. One could hardly imagine a more triumphant recovery from the lament's malaise. Yet how can a culmination also be a return, a "passionately affirmative answer" to measure 1? To be sure, the C–A♭ staked out by the arpeggios in measures 209–13 is the same motive as the sonata's incipit. But the top C at measure 209 ($c^4$) is registrally marked as the highest note of Beethoven's Broadwood piano.

Beethoven is in fact exploiting what one might call the "gestural paradox" intrinsic to tonal contour, a paradox that had troubled A. B. Marx in the opening chapter of his *Lehre*. As we saw earlier, Marx thought of rising-and-falling melodic contour as an analog of physiological tension and release. Paradoxically, he illustrates this principle with an octave C major scale, where the rise to the tonic an octave higher than the opening is defined as a return to "rest" (*Ruhe*). Hence a rise in registral tension is simultaneously a tonal resolution; the octave C is both apex and base. Marx ties himself up in knots: "Elevation from rest and intensification [*Steigerung*] in melody and rhythm up to a natural peak; return, likewise with intensified [*gesteigerter*] motion (but with melody leading to rest), to the true rest-note" (1841, 28). Perhaps it was in order to avoid such conceptual difficulties that Hugo Riemann (1887–90), when he revised the *Lehre*, replaced Marx's scale with a proper arch (ex. 6.10):

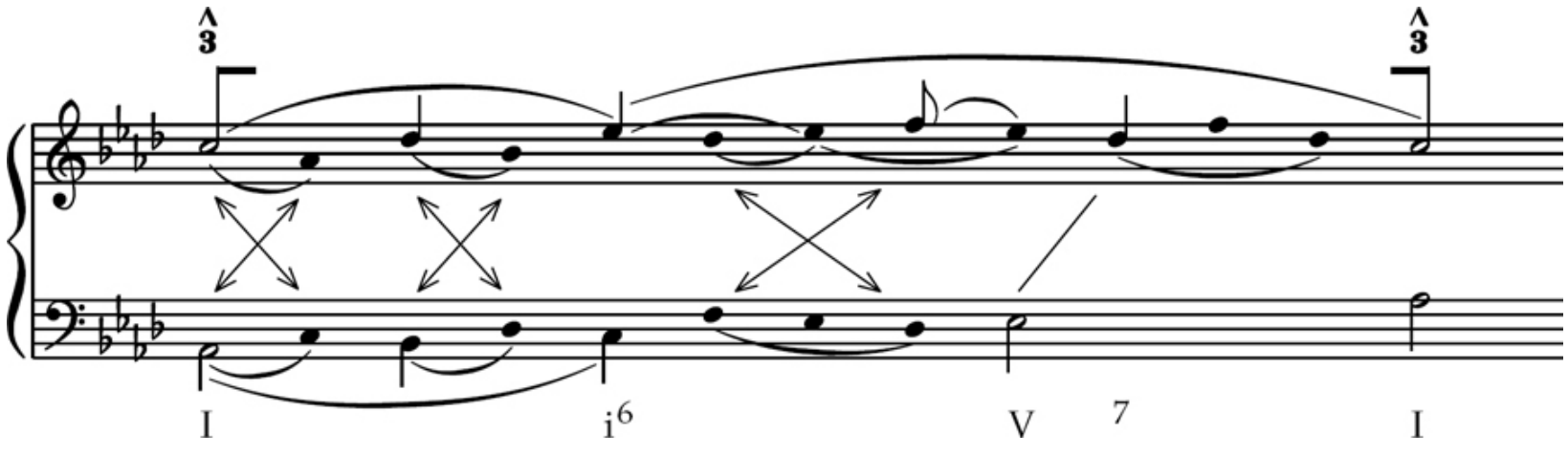
Example 6.10. Riemann's arch (1887, 22)



Fortuitously, Beethoven's scale in Op. 110 is also, like Marx's, between two Cs ($c^2$–$c^4$), notwithstanding the key's being A♭ (C is the Schenkerian primary note). There is a good Goethian reason that *Steigerung* can also be a return. Goethe sees biological development as an ascent from seed to reproduction—in flowers, from the seed in the ground to the seed in the blossom. In a later essay on this sonata, a polemic against the Viennese critic Walter Engelsmann (published as *Anhang* to Schenker 1972, 118–25), Schenker uses the plant metaphor to criticize the category mistakes committed by clumsy motive spotters. Engelsmann draws facile motivic connections between measures 3–4 and 20–28 of the first movement, to which Schenker responds with a (foreground) voice-leading graph of measures 1–12. Schenker condemns analytical readings that "heap motives together," like the "roots, stem, leaf, blossom, filament, pistil, and fruit" of the living plant (1972, 125). But there is a great difference between the conflations committed by motivic analysts and the "good circularity" intrinsic to *Steigerung* itself. An example of such circularity is Oswald Jonas's graph of the melody in measures 1–4 of the first movement (his footnote to page 18 of the *Erläuterungsausgabe*). Jonas spots that the cadenzalike ornament at measure 4 encapsulates the pitches of the entire theme: "The ornament is a repetition 'in nuce' of the melodic content of measures 1–4" (in Schenker 1972, 18). The cadenza is literally the flower with which the theme climaxes, a flower that also bears the theme's seeds. We recall that Goethe had used the plant's *Steigerung* from root to flower as an analogy for the efflorescence of prose into poetry at the end of his *Novelle* (see above). In Beethoven's "flower" at measure 4, the biological and figurative traditions of metaphor come together beautifully with the principle of melodic diminution.

There are probably many complex reasons that Schenker's late theory abandons metaphors of personification, but there is also a rather obvious one. *Steigerung* ascends, while the fundamental line (*Urlinie*) falls. The Schenkerian graph enshrines the venerable gravitational metaphor that associates musical resolution and closure with melodic descent. When, as so often happens, Schenker's primary note is approached via an initial ascent, his graphs echo the arch model that Marx had conceived as a dynamic alternation of rest and motion. A couple of A♭ melodies in earlier piano sonatas (Op. 10 no. 1, second movement; Op. 26, first movement) begin with initial ascents from Î to $\hat{3}$. A "Schenkerian" graph of measures 1–4 of Op. 110 (Schenker himself never actually produced one) finds no such ascent, since the piece *begins* with the primary note $\hat{3}$ (C). A voice-leading reduction does, however, reveal an arch contour, rising from the C to the E♭ at measure 3 and falling back to D♭ passing note of measure 4 (ex. 6.11):

Example 6.11. Graph of mm. 1–4




Nevertheless, my graph is a bad representation of the striking *Steigerung* from C to F, from steps $\hat{3}$ to $\hat{6}$. The piece begins sedately and rises in intensity to the Fs of measures 3 and 4, which Beethoven draws out with a caesura. The goal and climax of the phrase is thus the apex at measure 4, not the resolution to the C in measure 5. Technically, to be sure, the voice leading does indeed take the music back down to the primary note of measure 5. But voiceleading analysis often deceives: the expressive sense of the music is that the dominant ninth sonority of measure 4 is marked for

consciousness as a culmination. Indeed, the "theme" proper is just measures 1–4; measure 5 initiates a variant on the theme. There is no symmetry in measures 1–4: it is not an arch, but a continuous ascent. So can *Steigerung* be reconciled with Schenker's mature theory? I believe so, and the following analysis shows how.

Goethe's concept of *Steigerung*, with its entailments of intensification, ascent, variegation, polarization, and spiraling return, is so all-embracing that Wilkinson and Willoughby view its status as "an illuminating analogy" rather than a scientific concept proper. But they mean "analogy" in the sense of cognitive metaphor, "a mental aid in the coordination of experience" (1962, 206). Such an interpretation can be supported by many of Goethe's own pronouncements; for example, "The [biological]*Formel* [schema] *Steigerung* can also be used in aesthetics and ethics" (in Wilkinson and Willoughby 1962, 197). Thinking of *Steigerung* as a *Formel* brings together perspectives on the sonata's production and reception. It is a moot point, in other words, whether the mental aid is Beethoven's or ours. In any case, there is much evidence from Beethoven's sketches that he conceived his late music in terms of "tonal contour."[15]

Measures 1–4 of Op. 110 are a perfect *Steigerung*, rising in register and intensity (harmony, rhythmic, textural, and dynamic), oscillating between intervallic poles (zigzagging thirds and fourths), circling back, *in nuce*, with the "flower" of bar 4. It is also a perfect *Formel* of the entire sonata, with its oscillation between sickness and recovery. Just as the theme compresses the oscillations into a trill, the conceptual trill of the physiological *Schwebezustand*, which Schenker identifies at the start of the finale, is gradually polarized into lament and fugue ("state of suspense" does not quite capture the German word *Schwebung*'s connotation of vacillation, or the affinity between *Schwebung* and *Schwingung* [oscillation]).

The *Steigerung Formel* can also be interpreted technically. The *Polarität* of the theme, measures 1–4, the contour oscillation within the prevailing rise, is composed out across the entire exposition and development. *Polarität* intensifies in the bridge into expansive waves of arpeggios, climaxing with the top C ($c^4$) of measure 20. After this apex, the oscillations broadly descend in two stages: to the cadence in the new key, E♭ at measure 35; and from the $c^3$ at the start of the development (measure 40) to the primary note an octave lower ($c^2$) at the reprise (measure 56). The *Steigerung* is tonal as well as registral: the harmony intensifies from tonic key to dominant, and then to the submediant (F minor) at the start of the development. Beethoven deploys contour with great transparency so as to foster an identification between tonal intensification with registral ascent: *Steigerung* as *steigen*. Simply put, the modulation from first to second group is "heard as" the melodic contour of measures 1–4. It is fairly straightforward to analyze this metaphorical relationship in terms of Schenkerian middleground motifs (ex. 6.12):

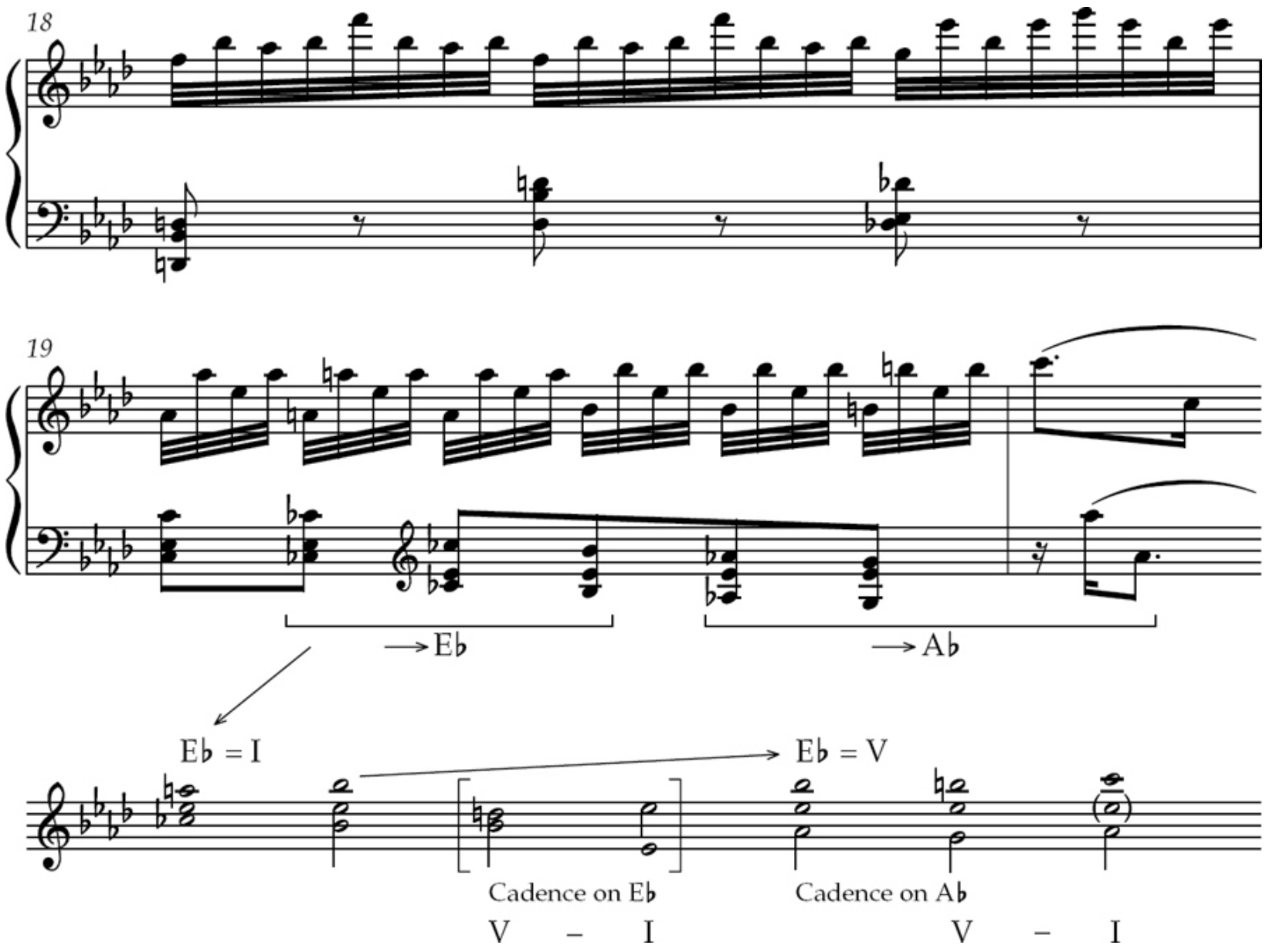
Example 6.12. Graph of exposition




Thus the primary note $\hat{3}$ of measure 1 is registrally transferred an octave to $c^3$ at measure 9, and a further octave to $c^4$ at measure 20, so that it is "heard as" the melodic apex of measures 3–4 (the F). This apex is then prolonged throughout the second group, which elaborates the $\hat{6}$–$\hat{5}$ oscillations of measures 3–4 (F/E♭) in the new key (see Spitzer 1996a, 352).

Building on this graph, it now becomes possible to understand how the second group criticizes and reflects upon the first; namely, how it submits the tonic group to metaphorical *epochē*. Beethoven's core metaphorical act is to take away the primary note C's primary reference as mediant and redescribe it as an apex submediant: in E♭ C becomes a $\hat{6}$. And Beethoven contours the modulation to promote a stereoscopic split reference, so that the C's new reference is perceived against the background of its original meaning. In other words, the harmony at measure 19 creates the effect both of modulation and of resolution to the home key, A♭ (ex. 6.13):

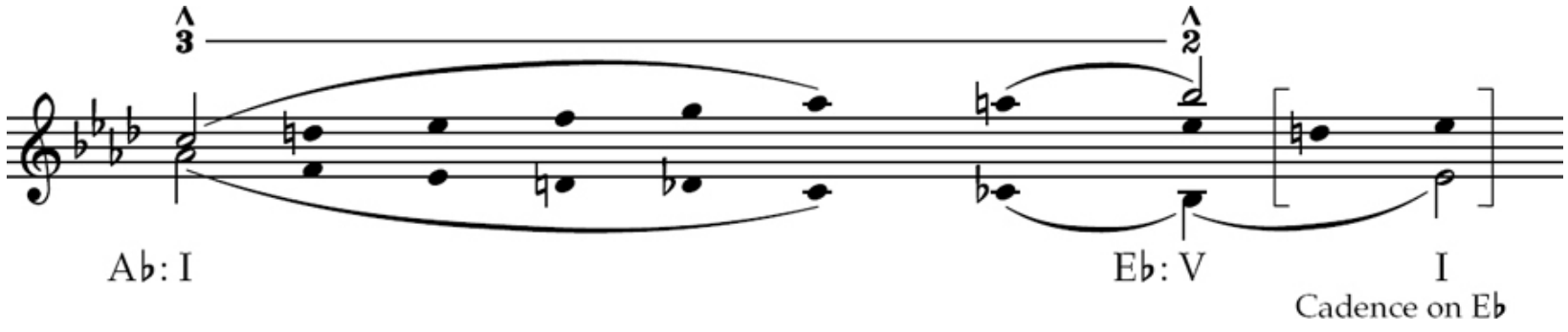
Example 6.13. Beethoven, Piano Sonata in A♭ Major, Op. 110, first movement, mm. 18–20




In measure 19, the final measure of the transition, an augmented sixth on C♭ supporting an E♭ 6/4 chord. Yet before this chord can resolve conventionally to its dominant, the bass falls a further step to A♭. This A♭ is now tonicized within a new cadential progression, while the E♭ is reinterpreted as an inverted dominant pedal. Beethoven thereby creates the aural illusion that the modulation resolves back to its starting point, the tonic A♭. Beethoven's trick is analogous to that famous lithograph by M. C. Escher in which people climb stairs in an endless loop.

Beethoven's Escheresque illusion can be explicated with a pair of voice-leading graphs (ex. 6.14):

Example 6.14a




Example 6.14b




The transition unfolds a voice exchange between the primary note, C, and the supporting A♭ (graph a), an elaboration of the voice exchange of measure 1. The contrary motion climaxes on the augmented sixth chord and converges on the B♭ the structural 2̂. Nevertheless, the B♭s in the outer voices are displaced onto resolutions on C and A♭ (graph b). The C/A♭ apex at measure 20 can thus be heard as a registral transfer of the C and A♭ of measure 16; the tonic prolongation cuts across the modulation

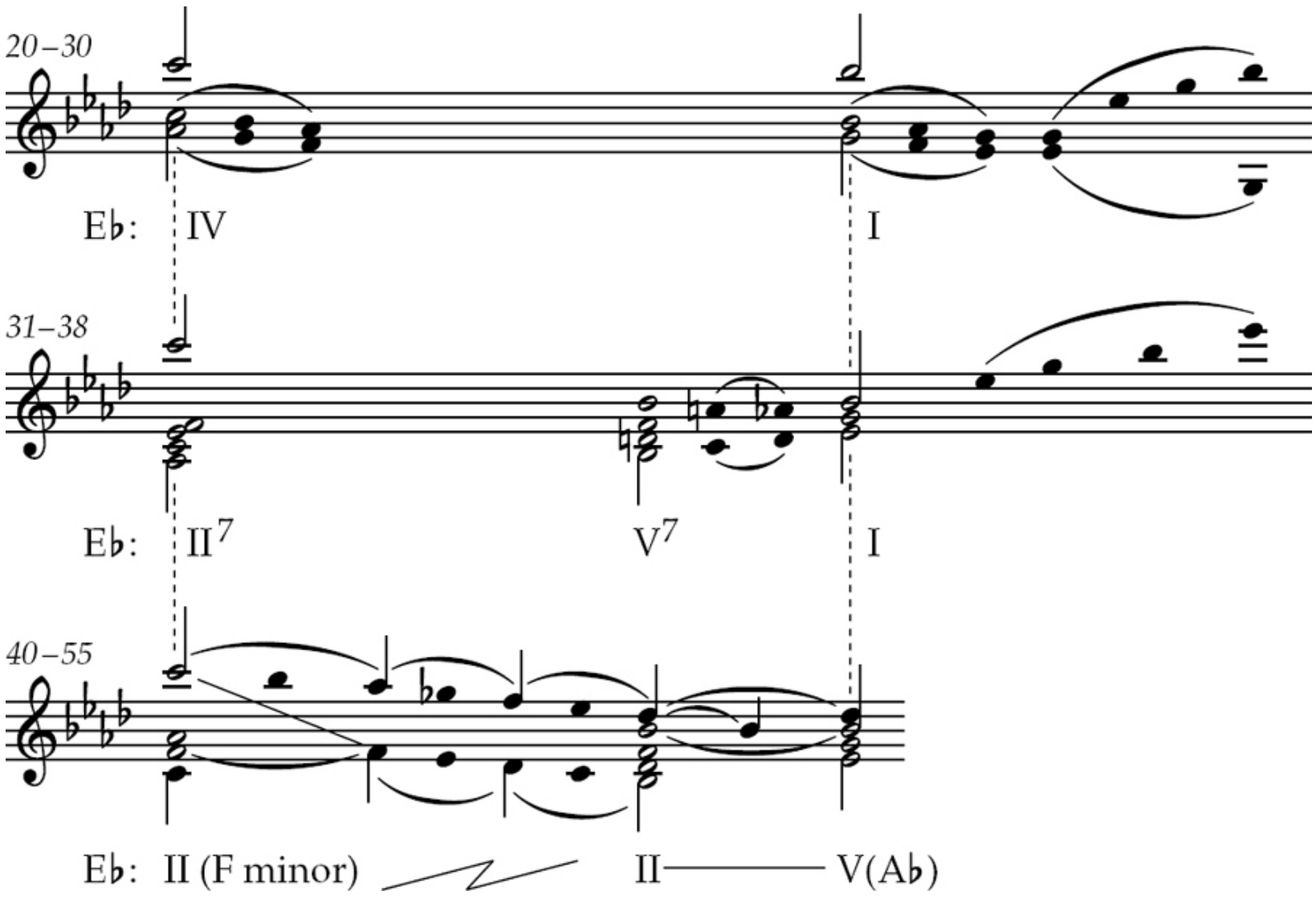
This cross-cutting of structure and tonality is pervasive in the second group and fundamental to its critical abstraction. Beethoven abstracts the pitches of the theme in measures 1–4 from their tonal function. The progression from the I chord to the V chord is performed "against the grain." In other words, the pitch content of I and V (A♭/C/E♭ and E♭/G/B♭) is reinterpreted major. At the climax of the second group, the cadence of measures 31–32, the "double perspective" is deep and vivid (ex. 6.15):

Example 6.15




In the depths of this cadence, we recognize the same chord progression as measures 1–4, a link underscored by aspects of rhythm and melody (the dotted rhythms; the B♭–A♮–A♭ chromatic slide, echoing the E♭–D♮–D♭ slide of measure 4). Yet the A♭ chord's pitch and "shape" is given a new identity as chord $II^7$ in E♭, with the addition of an F. In fact, F infiltrates the chord in mounting stages (ex. 6.16):

Example 6.16




The second-group-*cum*-development constitutes three elaborations of the A♭–E♭ chord progression, across which F is progressively tonicized. Initially, F is tucked, as a skip, into a relatively unadulterated A♭ subdominant harmony at measure 20. At measure 31, F becomes the harmony note of a supertonic chord. At measure 40, F becomes a key, F minor (the development elaborates a VI–II–V–I return to the tonic via a descending third progression, filling in the octave between $c^3$ and $c^2$, the primary note of measure 56). The intensification of F—from a note to a chord to a key—is *Steigerung* inverted: F had been the apex; it now deepens into a base/bass.

Beethoven's self-critique is profoundest on the level of gesture and concerns the dramatic contour of the theme. Yes, measures 1–4 are a *Steigerung* toward an F, but a submediant is not a home. How can the sonata convert an apex into a home? As Schenker sensed in his *Erläuterungsausgabe*, the closing measures of the finale provide the answer to the first movement's primal question, only he failed to show how. The mature Schenker would have jumped on the remarkable registral breach at measure 31, between the $c^4$ and the cadence. This pitch is not met again (the passing B♯s and Cs of measures 75 and 97ff. notwithstanding) until measure 209 of the finale; the implicit voice-leading connection between these two apexes arches over the entire sonata like a vast dome. But these apexes are approached in opposite ways. The $c^4$ of measure 20 is a VI, approached from a tonic. The $c^4$ of measure 209 is a triumphant tonic, the climax of a *Steigerung* that begins with the F minor and B♭ minor tonalities of the middle movements.

The apotheosis of the primary note at the end of Op. 110 turns the descending contour, so firmly embedded in Western musical thought, on its head. It is a metaphorical *epochē* on *Steigerung* itself. Up is down, and down is up. Robert Hatten (1994, 281–86) has linked such instances of gestural abnegation to elements of spiritual sacrifice in Beethoven's life, but also to the trope of renunciation in Goethe's great *Bildungsroman, Wilhelm Meister*. Wilhelm's spiritual *Steigerung* is achieved by renouncing the world. With a single swooping, scooping gesture at the end of his sonata, Beethoven shows us how resignation can be literally uplifting. Those great rivals of Western metaphorical

thought, the Platonic sun and the Heideggerian home, are folded into each other. Given that music has always spoken to us from the other side of metaphorical thought, if you wish to savor the full force of Beethoven's abnegation, try grasping Rilke's *esprit* in reverse:

> Look, [the endlessly dead] would be pointing, perhaps, to the catkins, hanging
> from empty hazels, or else
> to the rain downfalling on dark soil-bed in early Spring.—
> And we, who think of *ascending*
> Happiness, then would feel
> the emotion that almost startles
> when happiness *falls*.[16]

# *Notes*

## PART ONE

1. For a discussion of Tesauro's frontispiece in relation to the baroque culture of visual and verbal wit, see Gilman 1978, 84–88; Praz 1966, 206–8.

## CHAPTER ONE

1. "I need not know that the word 'bedlam' was originally motivated by indexical association with St. Mary of Bethlehem Hospital, where the insane were housed in London, in order to understand its conventionalized meaning" (Hatten 1994, 259).
2. The semiotician Thomas Daddesio elegantly summarizes these points: "As a semantic theory, Objectivism holds that language is made up of meaningless tokens that come to possess meaning due to their correspondence with the objective structure of the world. To understand the meaning of a given utterance, it suffices to know the truth conditions that would satisfy it, a formulation which assumes that we have at our disposal an understanding of reality that is independent of both language and cognition and that can be called upon to adjudicate claims of meaning. As a view of rationality, Objectivism is committed to the idea that formal logic provides an adequate understanding of human reason. The rule-governed manipulation of tokens which is codified by formal logic is construed as an objective set of mind-independent logical relations" (1995, 58–59).
3. The literature is vast. For a representative sample, see Kerman 1980, 1985; Street 1989; Subotnik 1991; Kramer 1995; Cook 1999.
4. Despite Lerdahl and Jackendoff's (1985) attempt to turn Schenkerism into a properly generative theory, psychologists (see Sloboda 1990, 14–17) have questioned its analogy with Chomskian transformational grammar. Scholars of the compositional process in music, especially in the music of Beethoven, have found Schenker's concept of structural level helpful, but only in an oblique way (see Marston 1995). The sketches indicate that Beethoven's works by no means "grow" in a direct progression from simplicity to complexity.
5. See Burnham and Kramer 1992.
6. See Sloboda 1992: "Implicit in the work of Cook and Rosner and Meyer is the notion that there are processing limits on human cognitive capacity that limit what can be extracted from music, at least on early hearings. Their findings do not show that people cannot hear large-scale structure. They simply show that they do not usually do so in early listening *given the experimental tasks required of them*. . . . With longer exposure and/or different tasks, it is still quite possible that we may find evidence of large-scale psychological representations" (833).

## CHAPTER TWO

1. A schema is not quite the same as an image per se. An image can be traced back to direct sensory experience, such as that of a triangle or a human face, whereas a schema is more abstract; it enables us to recognize these images as instantiating the concepts of a triangle or face. Conversely, we can imagine or draw (reproduce) a general image of a triangle or face that does not correspond to any specific object in the world.
2. "Schemas" and "schemata" tend to be used interchangeably; however, I prefer the correct Greek plural.
3. Mary Morrow's otherwise insightful study of German music theory (1997) uses "paradigm" wrongly: "Central to [Kuhn's] theory is the concept of the *paradigm*, a set of values and intellectual assumptions that structure the mode of thought in a particular community" (12). Morrow thus likens the "revolution" in music aesthetics circa 1800 to a shift from a mimetic to a metaphysical "paradigm" (13).
4. Figurative knowledge, or "thinking with the body," functions on a sensorimotor level in terms of perceiving and imitating sounds or actions. Operative knowledge, or "conceptual intelligence," evolves by internally representing sounds and actions as mental schemata, recognizing relationships between them, and transforming them into a system or signs, such as language. An example of the sensorimotor stage is when a child "strums with his thumb across the open strings" of his teacher's guitar, or when he sings "snatches of songs he knows" to a given accompaniment (Swanwick 1988, 52). The operative knowledge required for musical mastery develops in the context of formal musical education. It is evinced in activities such as discussing and reflecting upon performance away from one's instrument, analysis of music enshrined in scores, and composing through the manipulation of musical symbols.
5. The journey from C minor to C major in Beethoven's Fifth Symphony seems to have been the paradigm for Schumann's Second, and "any ass could see," as Brahms intemperately put it, that the finale of his First Symphony refers to the "Ode to Joy" from Beethoven's Ninth.
6. Very occasionally, sonata-form movements *are* elaborations of minuets, as Charles Rosen (1972) and Elaine Sisman (1982) have both shown of Haydn's G Minor Piano Trio (Hob. XV: 19/i).
7. Tarasti (1990, 389–422) has similarly explored narrative arches in structural semantics, using the semiotician A. J. Greimas's categories of *débrayage* and *embrayage*.

## CHAPTER THREE

1. As with my tension theory, a "trope" for Hatten represents a higher and more original level of meaning emergent from "an interaction between two already established meanings" (1995, 379).

## PART TWO

1. Goehr's narrative is entirely typical. Dahlhaus (1989) identifies literalization with the concept of absolute music circa 1800. Morrow's excellent study (1997, 13) recognizes that aesthetics' romantic orientation ("For musical aesthetics, the 'revolution' occurred in the years immediately surrounding 1800") is prejudicial toward early-eighteenth-century German instrumental music. Nevertheless, the aesthetic theory she constructs on the basis of 1,300 German-language music reviews remains "absolute," albeit *avant la lettre*. Morrow still assumes that the "paradigm of mimesis" is fundamentally incapable of accounting for instrumental music. David Gramit's pioneering book (2002) is also centered around the late eighteenth century, but is a work primarily of social history, rather than aesthetics.

## CHAPTER FOUR

1. First, as No. 6 (SWV 27) of his *Psalmen Davids* (Dresden, 1619); second, as a separate work (SWV 449) circa 1625; third, as No. 3 (SWV 343) of his *Symphoniae Sacrae II* (Dresden, 1647).
2. The arcs cut off by these polygons (the circle's diameter, a triangle, a square, and a pentagon) allow Kepler to compare the arc subtended by one side with the whole circumference, and the arc subtended by the remaining sides with the whole.
3. Burmeister, in his *Hypomnematum*, defines it as "an explication of the text through which lifeless things are clarified and appear to come alive before the eyes" (in Bartel 1997, 310).
4. For example, Kepler explains the motive force that causes the planets to orbit the sun by analogy to light and magnetism, which are "better known emanations." Yet Kepler admits that this is merely "a comparison" used to "render the force of my argument all the more obvious" (in Vickers 1984, 150). Unlike magnetic force, light is stopped by a screen. Similarly, drawing on William Gilbert's proof that the earth is a large magnet, Kepler can argue that "the Sun, too, is a magnetic body," since it moves the planets in a similar manner that the Earth moves the moon. "Every planetary body must be regarded as being magnetic, or *quasi*-magnetic; in fact, I suggest a similarity, and do not declare an identity" (151).
5. Fludd employs a mechanical analogy, ironically, to counter Copernicus's theory of heliocentric motion. He contends that "the force necessary to move a wheel from the circumference is much less than the force required to move it from the center" (Westman 1977, 61). Kepler also uses the analogy of the lever, "but for the opposite purpose of demonstrating the inverse-force rule for the central sun acting on the planets" (64).
6. Playing with the metaphor of mist and sunlight, Mersenne had claimed that "gay songs trouble the humors, and resemble the winter sun which raises fog without the ability to disperse it; it eclipses our light, just as gaiety eclipses the light of our reason" (1636, 176). Only slow, simple, melancholy music is conducive to divine contemplation.
7. Chapter 3 of Book V of the *Musurgia*, dedicated to *Magicus*, is titled "Of the Way Music Moves the Affections" and reports an *experimentum musicum* showing how "one string moves the other when it is separated from it" (1662, 167): "It so happened that the author was occupied with some business in Mainz on a great feast-day, and that he was sitting sequestered in the music-room of the church when he heard with his own ears the great bass-viol, without anybody bowing or plucking it, resound and resonate all by itself. Astonished, the author approached in order to investigate this extraordinary sound. He discovered that when the church organist played the pipes with which the viol had been tuned, its strings responded just as if they were plucked or bowed" (1662, 167–68).
8. By *Feuerspiegel*, Harsdörffer may be referring to a legend recorded by Kircher on page 764 of his *Ars Magna Lucis* recounting how Archimedes devised a parabolic mirror so powerful that it could focus the sun's rays on distant ships and burn them (in Godwin 1979, 83). Kepler describes a similar phenomenon in *propositio* 61 of his *Dioptrice*, in the context of the physiology of vision: "In the same way that a strong light, concentrated by a convex lens, will ignite combustible material placed at the focus, the much weaker light in the eye has a similar effect on the subtle retina and the spirits contained in it" (see Kepler 1997, 317n. 35).
9. Another important influence on Harsdörffer was the classical "memory theater," a mnemonic system in which images were utilized in order to organize the understanding and recall of concepts (see Yates 1966). Memory theaters were standard tools of the Hermetic, Jesuit, and Rosicrucian movements; a famous musical example is Robert Fludd's engraving "De Templo Musicae" (The Temple of Music), in his *Utriusque* (in Godwin 1979, 79).
10. Similarly, Praetorius condemns singers who add ornamentation indiscriminately, so that "neither the text nor the notes (as the composer has set them giving the song the best elegance and grace) can be perceived" (in Butt 1994, 124).
11. Lippius had expressed this stricture more than a century earlier with admirable succinctness: "Like an artful orator, the musician uses these ornaments to polish his harmonic oration in keeping with the nature of the text. . . . The bass may proceed slowly, while the other voices may employ apt colorations and a moderate flourish of running passages. In this style ordinary musicians often embellish compositions when appropriate, using pleasant elegance like an elaborate scriptural flourish" (in Rivera 1980, 49).
12. See Eggebrecht 1992, 29: Bach is "der unzeitgemässe (isolierte, absteitige)."
13. Vossius adopts the usual tripartite scheme: *inventio* (books 1 and 2), *dispositio* (book 3), and *elocutio* (books 4 and 5).
14. Mattheson's attempt to map the six-part rhetorical scheme of *exordium, narratio, propositio, confirmatio, confutatio*, and *peroratio* onto baroque ritornello structure (in an aria by Marcello) says more about the rising tide of Enlightenment formalism than it does about the true spirit of rhetoric.
15. "In one kind of anachronistic model, analysts will favour form [*dispositio*] over invention, which is to say that the nominal order of events will be judged more important than the logical hierarchy of ideas" (Dreyfus 1996, 28).
16. See Irwin 1993, 127–53, for the complexities underlying these issues, and the irony that Bach was attacked by the Pietists for his very emotionalism.
17. Caspar Printz advises that "when an emotion is to be expressed, the composer should attend to it more than to the individual words" (1676–96, 22).
18. This polarity enters Lutheran church music from Italian opera, through the Neumeister reforms.

# CHAPTER FIVE

1. According to Allanbrook's "metrical spectrum" of dance types, the gavotte lies midway between the extremes of the ecclesiastical exalted march and *galant* dances such as the passepied and contredanse, i.e., between what she terms "exalted passions" and "terrestrial passions" (1983, 67).

2. "In opera, the characters pacing the stage often suffer from deafness; they do not *hear* the music that is the ambient fluid of their music-drowned world" (1991, 119).

3. Lamy thinks that a period must ideally have two or four parts, and he relates this symmetry to the breathing of the voice. The rise and fall of the voice generates the antecedent and consequent of the period, and the conclusion is marked with a pause: "The voice rises, and falls in each part: the two sections where these inflections occurs should be equal, so that the degrees of elevation and descent correspond with each other" (200).

4. Historically, the concept of passing harmony emerged from a separation between harmony as cadence and harmony as process. For Zarlino (1968), tension and resolution existed on an intervallic continuum. Rameau polarized tension and resolution into the opposite chord types of $V^7$ and I (see Lester 1992, 100). Nevertheless, his theory preserves the continuity between a chord's harmonic and cadential functions.

5. Kirnberger distinguishes between incidental (*zufällig*) dissonances, where the suspended interval can resolve onto the same chord root, and essential (*wesentlich*) dissonances, where the resolution must be supported by a new chord (Lester 1992, 242–43). Kirnberger's treatment of passing harmony is much more conservative in his discussion of the strict style than in his exposition of the *galant*.

6. "He is to music what Mr. Lohenstein was to poetry. Bombast has led both from the natural to the artificial, and from the elevated to the obscure" (Scheibe 1737–40, 62).

7. "In music, as in speech, it is always better to write longer rather than shorter periods and to divide them, depending upon their length, into phrases and segments by way of weaker half and interrupted cadences. This results in the true periodic style in music as well as in speech" (Beach 1982, 118).

8. In the words of Lessing's contemporary, the literary critic Breitinger: "where the painting leaves the viewer total freedom to attend to the objects as he pleases and thereby runs the risk of communicating only an obscure and undifferentiated idea of the object, poetry controls the reception of the individual features by presenting them one at a time to the reader, in the order and with the emphasis that is proper to them" (in Wellbery 1984, 204).

9. An "obscure" representation is one that is unnoticed; a "clear" representation simply discriminates and isolates an object from its background. As yet, the object remains a confused jumble of impressions and becomes clear only when "we are capable of enumerating for someone else the properties by virtue of which we recognise the object, or at least of representing these features to ourselves individually and in sequence" (Wellbery 1984, 14).

10. Having been brought together, the children, neither of whom have any previous knowledge of sign use, develop a language by connecting the cries of passion with the perceptions they naturally signify, and then supplementing these cries with instinctual bodily gestures (i.e., pointing toward objects). The children's gestures evolve into the first language—"the language of action"—which is then replaced by differences of intonation and accent. The logic of this development is essentially associative and combinatorial. Joining cries to objects or situations via gesture is tantamount to connecting ideas with signs. Association allows the mind to recognize recurring circumstances and to manipulate and multiply signs into more complex discourse. It enables reflection. Reflection is subsequent to signification, just as arbitrary (or "instituted") signs comprise natural signs that have been rendered familiar and conventional through habit.

11. Herder couches his exposition of this process in typically Wolffian language: "Man manifests reflection when the force of his soul acts in such freedom that, in the vast ocean of sensations which permeate it through all channels of the senses, it can, if I may say so, single out one wave, arrest it, concentrate its attention on it, and be conscious of being attentive. He manifests reflection when, confronted with the vast hovering dream of images which pass by his senses, he can collect himself into a moment of wakefulness and dwell at will on one image, can observe it clearly and more calmly, and can select in it distinguishing marks for himself so that he will know that this object is this and not another" (115–16).

12. "Discourse always has as its goal either the portrayal of a situation, or the formation of judgement. In the first case, it constitutes a real picture, in which everything is brought together within a single ruling idea, where everything must be outlined, colored, and ordered as is required for the Whole to make its most vital impression. In the second case, discourse constitutes a logical syllogism, in which every part aims at the certainty and irrefutable truth of a single proposition" (Sulzer 1777, 2:405. "Periode").

13. In Condillac's words: "If all the ideas that compose a thought are simultaneous in the mind, they are successive in discourse: it is languages that provide us with the means of analyzing our thoughts" (in Aarsleff 1982, 159). Diderot, in his *Lettre sur les sourds et muets*, writes: "our mind is a moving picture from which we paint ceaselessly. . . . The mind does in the process of time what the painter's eye embraces in a flash" (in Aarsleff 1982, 159).

14. According to Saussure: "When we presecind from its expression through language, our thinking is nothing but an amorphous and indistinct mass . . . like a nebula. . . . There are no predetermined ideas, and nothing is distinct before the appearance of language" (in Scaglione 1981, 54).

15. Condillac borrowed this notion from William Warburton's *Divine Legation of Moses* (1737–41). Another important precursor is Louis Le Laboureur's *Avantages de la langue françoise sur la langue latine* of 1669, which argued that superior languages follow the order in which children learn (in Scaglione 1981, 41). Children observe first things (subjects), then their qualities (adjectives), and finally their actions or effects (verbs).

16. *Von der Wortfügung der lateinischen und deutschen Sprach, und den Grundsätzen der Uebersetzen der Uebersetzungskunst*.

17. See Bent 1984; Baker 1988; Baker and Christensen 1995.

18. *Abtheilung II, zweyter Abschnitt: Von der Natur des Tactes überhaupt und von den verschiedenen Arten und Gattungen desselben*.

19. "The precepts for joining individual notes and chords into individual phrases are part of musical grammar, just as the precepts for joining multiple individual phrases are a part of musical rhetoric" (in Bonds 1991, 72).

# CHAPTER SIX

1. Cited in Cohn 1999. Cohn traces the earliest use of the solar system as metaphor for tonal relations to Jérôme de Momigny's *Cours complet d'harmonie* (1806, 1:26).

2. Marx's *Lehre* went through six full or partial editions in Marx's lifetime alone, and its posthumous history included a radical revision by Riemann. The complex publication history is given in *Die Musik in Geschichte und Gegenwart* (Basel, 1960), 8:1734–38: vol. 1: 1837, 1841, 1846, 1852, 1858, 1863, 1868, 1875, 1887, 1903; vol. 2: 1838, 1842, 1847, 1856, 1864, 1873, 1890; vol. 3: 1845, 1848, 1857, 1868, 1879; vol. 4: 1847, 1851, 1860, 1871. For the most commonly available English translation (based on the fourth edition), see *The School of Musical Education* (London, 1854).

3. Hauptmann and Riemann also emancipate rhythm from prosody, turning it into a dynamic of pure spirit. Riemann's theory is anticipated by Jérôme-Joseph de Momigny's 1806 *Cours complet d'harmonie et de composition*, although his alternation of *proposition* and *cadence* is still linguistic and poetic in orientation (see Seidel 1975, 199).

4. Ian Biddle's essay (1999) is a fine *précis* of Schelling's aesthetic position, but misses the entire point of the historical novelty of Schelling's rhythmic theory: its simultaneous reliance on, and critique of, Sulzer.

5. Actually, Marx thought that the summit of artistic reason, when the composer is free to range over the entire gamut of artistic possibilities, was reached not in the sonata but in the fantasia. Perhaps this ambiguity between sonata and fantasy as joint "summits" is due to the epistemological bent of Marx's theories. Hence "fantasia" denoted the creative *principle* behind sonata *form*.

6. "Our full attention must be focused on the task of listening to Nature to overhear the secret of her process" (in Naydler 1996, 72).

7. The "five steps" originally numbered four: "clarity," "association," "system," and "method." The method became familiar through the interpretation of Herbart's disciples Tuiskon Ziller and Wilhelm Rein, who subdivided the first "step," "clarity," into "analysis" and "synthesis" (see Dunkel 1970, 209–39).

8. See Ricoeur 1994, 249–50; Schelling, Coleridge, and Richards are briefly brought into conjunction, but Ricoeur does not venture into the romantic hinterland of his theory.

9. It is a mistake to assume that Dionysus was invented by Nietzsche; Bowie reveals a prehistory extending at least as far back as Johann Hamann's 1762 *Aesthetica in nuce:* "Do not dare enter the metaphysics of the arts without being versed in the orgies and Eleusinian mysteries. But the senses are Ceres, and Bacchus the passions;—old foster parents of beautiful nature" (in Bowie 1990, 55).

10. See Bent 1994, 1–38; 1999, 105–24.

11. Ian Bent has convincingly revealed the multiaxis shuttling that structures E. T. A. Hoffmann's celebrated review of Beethoven's Fifth Symphony (1999, 105–24), A. B. Marx's essay on the Ninth (1994, 213–37), even Schenker's analytical method in his *Das Meisterwerk* volumes (1994, 12–13).

12. It oscillates "between thinking and speaking, between generality and particularity, between language-possibilities and language-use, between grammatical interpretation and psychological interpretation, between parts and whole, between divination and comparison" (1992, 225).

13. Wagner wrote in "On the Application of Music to the Drama": "Feeling impelled to introduce an actual stage-effect in the middle of his *Leonora*-overture, [Beethoven] still repeated the first section of the work, with the customary change of key, exactly as in a symphonic movement—heedless that the dramatic excitement of the middle section, reserved for thematic development, had already led us to expect the dénouement; a manifest drawback to the receptive listener" (1993–95, 4:179).

14. "Aber erweckten sie uns, die unendlich Toten, ein Gleichnis" (1981, 98). The line comes from the end of the final elegy.

15. For example (see Marston 1995; Spitzer 1996), sketches for the E Major Sonata, Op. 109, the A♭ Major Sonata's sister-work, map the piece as a rise, G♯–A♯–B (), followed by a descent, B–A♭–G♯ ().

16. Siehe, sie [die unendlich Toten] vielleicht auf die Kätzchen der leeren
    Hasel, die hängenden, oder
    meinten den Regen, der fällt auf dunkles Erdreich im
    Frühjahr.—
    Und wir, die an *steigendes* Glück
    denken, empfänden die Rührung,
    die uns beinah bestürzt,
    wenn ein Glückliches *fällt*. (Rilke 1981, 98)

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Hic autem monochordum mundanum cum ſuis proportionibus, conſonantiis & intervallis exactiùs compoſuimus, cujus motorem extra mundum eſſe hoc modo depinximus.

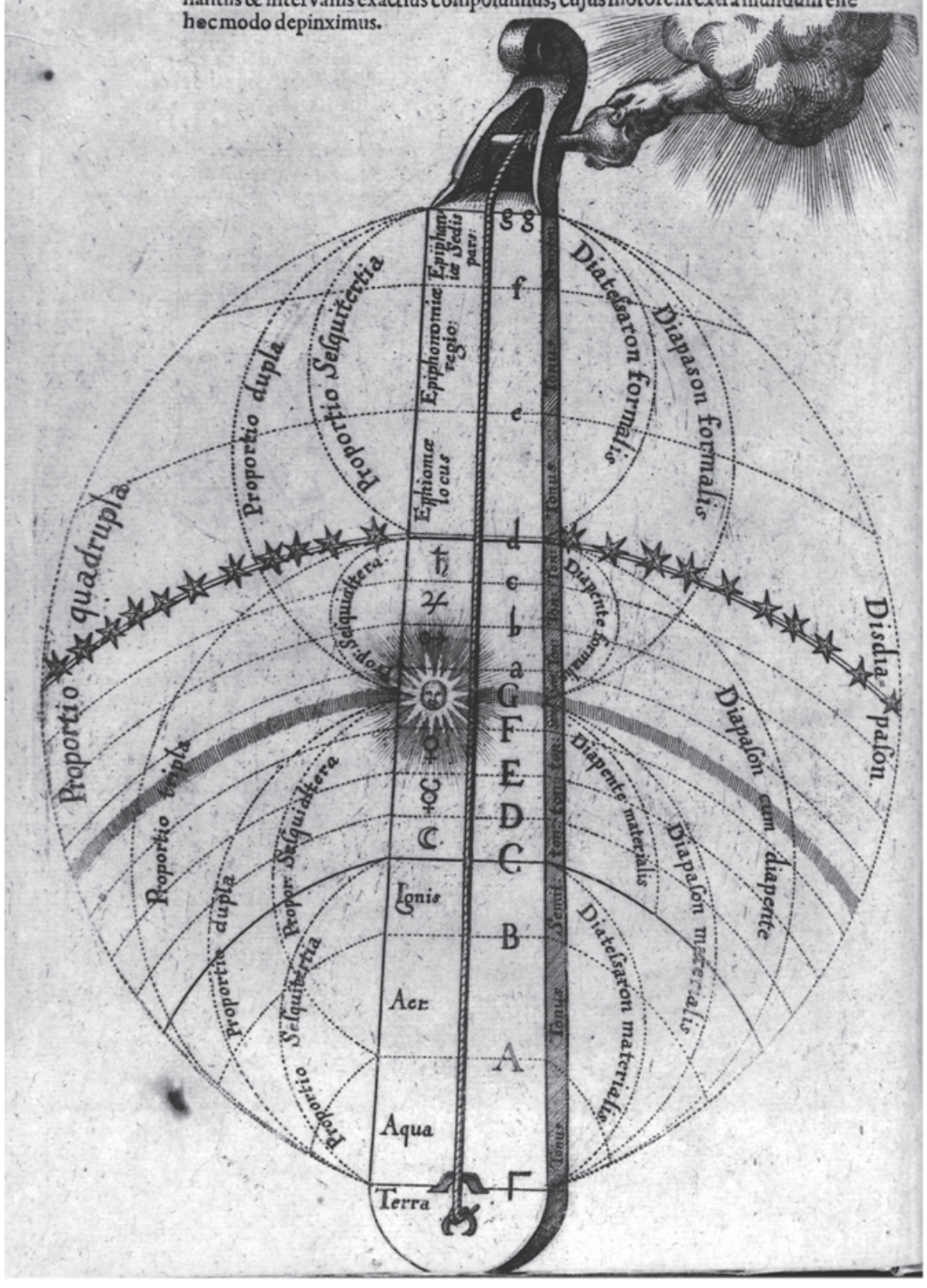



Plate 1. Engraving from Robert Fludd, *Utriusque Cosmi Maioris Scilicet et Minoris Metaphysica, Physica atqve Technica Historia* (Oppenheim, 1617–21). Fludd's image is the most celebrated exemplar of the center-periphery and scale schemata prevalent in baroque thought.




Plate 2. Frontispiece engraving from Athanasius Kircher, *Musurgia Universalis, sive Ars Magna Consoni et Dissoni in X. Libros Digesta* (Rome, 1650). Kircher fills out Fludd's scheme with the three-dimensional relief typical of baroque mannerist painting and thereby maps the coordinates of the musical universe. This three-tier model, with a second, central Earth displacing Fludd's sun, images the analytical middleground that became so fundamental for modern theory.




Plate 3. Frontispiece woodcut from John Parkinson, *Theatrum Botanicum* (1640). Parkinson imagines the world as a garden presided over by Adam and Soloman and represents each of the four known continents with its typical fauna and flora. The personification of America, in the bottom right-hand corner, is dressed in a skirt of feathers and rides a llama in a landscape filled with giant sunflowers.

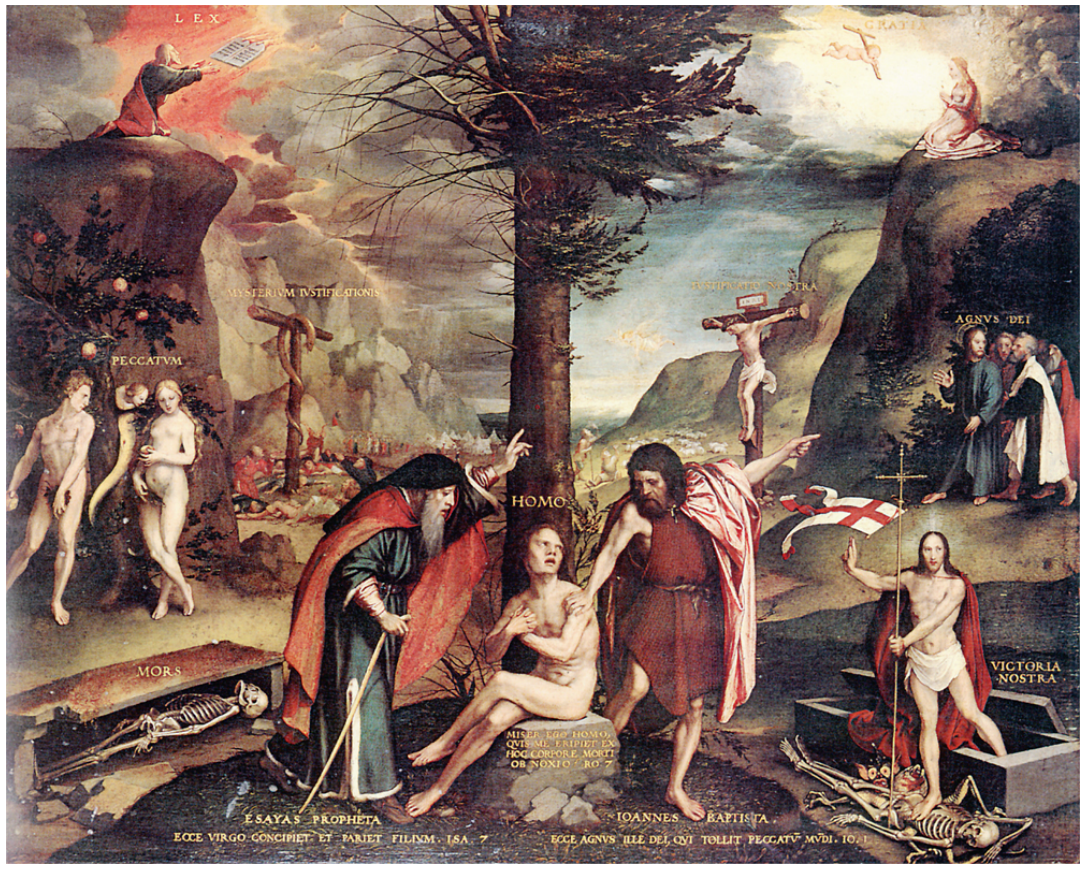



Plate 4. Hans Holbein, *The Old and the New Testament* (1535), oil painting. Holbein disposes Old Testament *figura* and New Testament *veritas* symmetrically around a tree that is blasted on one side, verdant on the other. The metaphor of "Christ as lamb" was popularized by Tertullian. St John the Baptist's indexical gesture, pointing out the Agnus Dei to Everyman, is a particularly striking case of "seeing as" in painting.