

Listening to Ekphrastic Musical Compositions

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Submitted in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy
in the Graduate School of Arts and Sciences

COLUMBIA UNIVERSITY

2017

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Abstract

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This dissertation offers an approach for analyzing ekphrastic musical works—compositions that take other artworks as their subject matter. It proposes two theoretical models for listener-observers' engagement with ekphrastic compositions. The first model, termed *descriptive representation*, refers to musical components that can be considered representational independently from the context provided by the other artwork. It involves a metaphor that the musical piece and the visual image or text have in common. The second model, termed *contextual representation*, refers to musical components considered representational only in the context of the other artwork. Rather than arising separately from each artwork, it is the product of multitextual listening, in which listener-observers form connections between the ekphrastic piece and the other artwork.

Four analytical chapters demonstrate the application of the models to different types of cross-media interaction. The first concentrates on music after painting, including a comparative study of three movements from orchestral compositions—Gunther Schuller's *Seven Studies on Themes of Paul Klee* (1959), Peter Maxwell Davies's *Five Klee Pictures* (1959/1976), and Tan Dun's *Death and Fire: A Dialogue with Paul Klee* (1993)—composed after Paul Klee's painting *Die Zwitschermaschine* (1922). Each of the pieces provides a singular interpretive outlook on the painting. Together, the analyses demonstrate the multiplicity of interpretations an artwork can receive through musical ekphrasis. The second analytical chapter concentrates on music and space, examining Morton Feldman's *Rothko Chapel*, composed after Rothko's chapel in

Houston. I propose that *Rothko Chapel* as musical ekphrasis provides a sonic identity for the chapel, allowing it to transcend its physical properties by bringing the space into presence in listeners' minds even when listening to a performance away from the chapel. The third analytical chapter examines the boundaries of ekphrasis through analysis of Luciano Berio's 1996 composition *Ekphrasis (Continuo II)*, composed after his *Continuo for Orchestra* (1989–1991). I argue that Berio's ekphrasis diverts listeners' attention from similarity to difference, from presence to absence, helping achieve a broader understanding of contextual representation. Lastly, an analysis of Arnold Schoenberg's *Begleitungsmusik zu einer Lichtspielszene*, Op. 34 (1929–1930) compares models of representation in programmatic music to musical ekphrasis.

The analyses demonstrate that music becomes representational by virtue of a listener's activity that treats ekphrastic musical works as multitextual. Moreover, this dissertation provides a framework for interpreting representation in post-tonal music.

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Acknowledgements

To Joseph Dubiel, who supported this project from its inception and always provided kind and insightful guidance and encouragement, I offer my deepest gratitude. I could not overstate Ellie Hisama's contribution not only as a guide to my research, but also as a mentor in music pedagogy and in everything related to being a scholar. I am forever thankful to her. My interest in the topic was sparked by Lydia Goehr. Her perceptive comments helped shape the early stages of the project, and for that I am deeply grateful.

Numerous people helped form this project and provided words of advice, encouragement, or helpful pieces of information. I would like to thank Ben Steege, David Gutkin, Mariusz Kozak, Jonathan Dunsby, Richard Beaudoin, and Benjamin Boretz, and my peers at Columbia University's Music Department Ben Hansberry, Will Mason, Galen DeGraf, Maeve Sterbenz, Mark Saccomano, Ralph Whyte, Russell O'Rourke, Eamonn Bell, and others who have given me feedback on various parts of this work. I am enormously indebted to Chris Stover not only for many hours of discussion that helped me find direction when I wasn't sure what I'm doing, but also for introducing me, as an undergraduate student, to the field of music theory. My thanks go to Elizabeth Davis and Nick Patterson for their help in library issues over the years. To Gabriela Kumar Sharma, Anne Gefell, and Johanna Lopez, who went above and beyond in assisting with all administrative matters.

I thank my family for their support. It would be impossible to list all the ways in which my partner in life, Ronen Hilewicz, helped me in working on this project. I can't imagine how it could have been completed without the inspiration you've given me, your encouragement, endless support in all forms, unyielding optimism, and your unparalleled patience.

Chapter 1

The Case for Musical Ekphrasis

This project expands the discourse on musical meaning and signification by bringing into music-theoretical discussion something that people do when listening to music of a certain kind. I am referring to pieces of music that state, for example in their titles or program notes, that they are inspired by, comment on, or re-present another work of art. Such compositions place a special demand upon listeners and performers: that we take into account, when listening and thinking about these pieces, those other artworks to which they direct our attention. Following Siglind Bruhn and Lydia Goehr, I refer to such pieces as musical ekphrasis.¹ In this project, I assert that ekphrastic compositions are an especially rich microcosm for issues of intertextual relationships between music and other artistic mediums, and argue that the objects of ekphrasis—meaning those other artworks that serve as the subjects of ekphrastic compositions—must play a part in analytical engagement with such pieces.

This chapter aims to supply a point of departure, explaining what musical ekphrasis can be, how ekphrasis has been treated in music studies, how ekphrastic music differs from programmatic music, and how the study of ekphrasis can relate to other music-theoretical discourses on signification, particularly in theories of music in multimedia works. Ekphrasis has a long history as a form of verbal expression—the term first appeared in Greek manuals of rhetoric from the Roman period—and this chapter starts with a brief survey of the various metamorphoses of the concept, which shaped its diverse applications in music studies.

¹ Bruhn 2000; Goehr 2010.

The following discussion frames the different approaches to ekphrasis as reflecting a variety of perspectives on the relationships between the “sister arts.” While ekphrasis is usually described as an arena in which agonistic relationships between visual and verbal arts are expressed, other approaches consider ekphrasis as the epitome of collaboration between the arts, or call to shift the point of view on ekphrasis away from differences of medium. Even though the topic has received little attention from music scholars, the following survey of references to ekphrasis in music studies presents definitions and approaches no less varied than the viewpoints on verbal ekphrasis, since each perspective in music is influenced by some of the approaches in literary studies.

Finally, this chapter will end with a “zoom out” to see the big picture. Ekphrasis may seem a special case, relevant to a relatively small body of compositions that cannot be considered a genre since they follow differing aesthetic and technical principles. However, ekphrastic compositions present a valuable case study for examining the relationships created between music and other mediums in a broad array of musical works. On one hand, we can compare a composition that takes (for example) a painting as its subject matter to music in a film, since both cases feature a reciprocal relationship in which signification flows in both directions between music and visuals. However, while theories of music in films regard music as secondary to the films’ visual and verbal components,² ekphrastic compositions viewed side by side with the artworks that are their objects demonstrate a relationship in which neither of the artworks is primary over the other. Therefore, this chapter includes a review of theories of music in multimedia works that became especially influential to my project.

² “Visual” refers broadly to the components on the film that one can see on screen: diegesis, cinematography, etc.

Theories of music in films make use of linguistic theories of metaphor to provide the necessary terms for interpreting intertextual relations between musical, narrative, and visual aspects in films. The chapter will end with a concise discussion of Gilles Fauconnier and Mark Turner's cognitive-linguistic theory of conceptual integration networks, and its importation into music studies by Lawrence Zbikowski.³ Conceptual integration networks will provide a way to visualize and frame the types of connections that listener-observers create when listening to an ekphrastic composition side by side with the artwork it expresses. Therefore, discussing relevant aspects of Fauconnier and Turner's theory will lead to the next chapter that proposes models for interpreting ekphrastic musical works.

1.1 Ekphrasis in Antiquity and its Modern Redefinition

The term *ekphrasis* originates in Greek schools of the Roman Empire. Ruth Webb's comprehensive study informs that the first available documentation of ekphrasis was found in a rhetoric handbook (*Progymnasmata*) dating to the first century CE, where it is defined "a speech that brings the subject matter vividly before the eyes."⁴ Literally meaning "to tell in full" (*ek*=fully, out; *phrazein*=tell, declare, pronounce),⁵ exercises in ekphrasis appeared in Greek manuals of rhetoric from the Roman period next to exercises in telling fables, expressing praise, declaring blame, introducing laws, confirming or refuting a story, and other techniques that Greek students of rhetoric were expected to master. In addition, contemporary commentaries on

³ Fauconnier and Turner 1998 and 2002; Zbikowski 2002.

⁴ Webb 2009, 14. It is assumed that Aelius Theon's version of the *Progymnasmata* from the first century CE is earliest source that mentions the term: "Ὁ δὲ καλούμενος τόπος καὶ ἡ **ἐκφράσις** προφανῆ τῆν ὠφέλειαν ἔχουσι, πανταχοῦ τῶν παλαιῶν τῶν μὲν ἱστορικῶν πάντων ἐπὶ πλεῖστου τῆ **ἐκφράσει**, τῶν δὲ ῥητορικῶν τῶ τῶν κεχρημένω." (Theon, 59–60, 19; the singular and plural forms of the term appear in bold letters).

⁵ Webb op. cit., 74; Heffernan 1993, 191.

classical texts (scholia) mention ekphrasis among other rhetorical techniques identified in the texts. For example, the scholia to Homer's *Iliad* points out different passages in the text as ekphrastic (containing ekphrasis).⁶ Although manuals of rhetoric did not explicitly engage in the rationale behind the study of ekphrasis, Webb finds justifications in Quintilian's *Institutio oratoria*. Quintilian had extensive knowledge of Greek rhetoric, and his treatise covers the entire range of the Greek rhetorical curriculum. Although the term ekphrasis does not explicitly appear in Quintilian's text, Webb identifies a related term *enargeia* (or *evidentia* in Latin)—“the quality of language that appeals to the audience's imagination.”⁷ *Enargeia* refers to the vividness of description that distinguishes ekphrasis, a lively description that brings an image before the eyes, from diegesis, an unembellished account of facts. Ekphrasis and *enargeia* are not the same, since ekphrasis refers to the description as an object, while *enargeia* refers to the quality of the description (*enargeia* is closer to “vividness” in meaning). Still, Webb emphatically states that these complementary concepts imply the presence of their objects in the imagination, on one hand, and their absence in the world perceived sensually, on the other.

In the second half of the twentieth century, scholars of literature resurrected the term, which had long been out of use, but altered its meaning—ekphrasis became a literary mode, referring to a poem or prose written about a visual artwork.⁸ Leo Spitzer was the first to write about ekphrasis in its modern transformation, defining it as “the poetic description of a pictorial

⁶ One of the identified passages is the description of the shield of Achilles made by Hephaestus, which became one of the primary exemplars of ekphrasis in modern times. (Webb op. cit., 40.)

⁷ Ibid., 88.

⁸ Murray Krieger provides a comprehensive overview of the conception of ekphrasis throughout history (Krieger 1992, 1–28). Goehr remarks that *Bildbeschreibung* [image description] has been the German substitute for the term in the meantime, used by eighteenth-century critics such as Diderot and Lessing (Goehr 2010, 401). Laura Sager expands the boundaries of ekphrasis in the verbal arts, arguing that films can also be ekphrastic (Sager 2008).

or sculptural art.”⁹ However, James Heffernan’s definition of ekphrasis—“the verbal representation of visual representation”¹⁰—is most commonly used in discussions of the topic, which became more prominent in literary studies toward the end of the twentieth century and into the twenty-first. The twentieth-century usage of the term is sometimes referred to as “modern ekphrasis,” although many of the literary works that exemplify the modern use were created much earlier. While the modern definition varies between scholars, to the extent that one might get an impression that there are as many ways to define ekphrasis as there are scholars theorizing it, Lydia Goehr most clearly articulates the qualities that distinguish the new approach from the ancient.¹¹

The first difference involves the medium of ekphrastic texts. Instead of a mode of speech adopted for part of a work, ekphrasis in its modern transfiguration refers to complete literary works such as poems or prose. Repeating exemplars in studies of ekphrasis include the description of Achilles’ Shield in Homer’s *Iliad* and Keats’ “Ode on a Grecian Urn.”¹² From a mode of speech ekphrasis came to denote an evocative literary device.¹³ Therefore, *literary ekphrasis* may also be an appropriate term for the “modern application,” in contrast to the

⁹ Spitzer 1962, 72. Later studies treated Spitzer’s definition as a basis for developing a broader view of ekphrasis (see for example Krieger op. cit., Scott 1994, Sager op. cit., Webb op. cit.).

¹⁰ Heffernan op. cit., 3.

¹¹ Goehr op. cit., 389–398.

¹² Discussions and interpretations of these texts are available in numerous sources, most notably in Spitzer op. cit., Krieger op. cit., Heffernan op. cit., and Scott op. cit..

¹³ Goehr emphasizes the relationship between complete works in this regard—from denoting a technique, ekphrasis became a name for relations between artworks. As discussed below, however, Mitchell, Krieger, Jurkevich, and others consider ekphrasis a literary device—a moment within a work that freezes the narrative, while at the same time commenting on it. Yet Goehr distinguishes such instances, which she terms “momentary ekphrasis,” from ekphrasis that occupies entire works.

ancient *rhetorical* or *aural ekphrasis*. Both modes of speech and literature, however, aim at illustrating an image in the mind's eye of a listener or reader correspondingly.

Secondly, unlike the ancient rhetorical technique, which entails bringing absent objects, past events, or fictional events to life in a listener's imagination, the objects of modern ekphrasis were, for the most part, existing works of visual art, such as sculptures and paintings.¹⁴ To bring absence into presence, a rhetor was required to involve as much detail in the description as possible. Moreover, rhetorical ekphrasis demanded a distinct skill from listeners when compared to literary ekphrasis; according to texts from the Roman Greek period, listeners to ekphrastic speech were required to be attentive and imaginative in order to successfully produce in their mind's eye the image illustrated by the speaker.¹⁵ A reader of literary ekphrasis, however, is presumed to already be familiar with the represented object. The challenge, therefore, lies in the writer's ability to induce readers to see the object of ekphrasis under the interpretive lens provided by the ekphrastic depiction.

Lastly, while rhetorical ekphrasis is evaluated by its vivid quality, which is established in rich description that stimulates one's imagination, literary ekphrasis can also manifest itself in the structure of the ekphrastic text. For example, Grant Scott's analysis of John Keats's "On Seeing the Elgin Marbles for the First Time" argues for an ekphrastic reading of the poem even though it contains no straightforward verbal depiction of the Elgin marbles (such as the details

¹⁴ Goehr points out, however, that before museums made artworks readily available to the public, visual artworks were often not available to the readers and even to the authors, who sometimes wrote their descriptions from memory or from sketches (Goehr op. cit., 402).

¹⁵ In ancient Greek textbooks, young readers were encouraged to imaginatively engage with texts rather than approach them as distant artefacts (Webb op. cit., 19). Such listening skill is implied in Quintilian's description of his experience reading a passage from Cicero's *Verrine Orations*, in which Quintilian found himself imagining details that were not even mentioned in the text, which he attributed to Cicero's outstanding *enargeia*. However, insinuated in Quintilian's text are the skills a reader must acquire in order to appropriately perceive and respond to Cicero's exquisite *enargeia* with an especially vivid imagination (Ibid., 21).

on the imaginary Greek urn in “Ode on a Grecian Urn”); the poem rather focuses on its speaker’s reactions when observing the marbles in the British Museum. Ekphrasis, Scott argues, exists in the realization of the sonnet, reflecting the marbles’ deteriorated state, thereby raising in readers the poet’s impression of the once-glorious cultural emblems, conquered and exhibited in remove from their original context.¹⁶ To summarize—while ancient ekphrasis is a rhetorical technique, in modern times it refers to a literary mode; the ancient technique was meant to bring absent objects or events into presence, however the modern literary mode concentrates on artworks; the ancient technique consisted of illustrative description, while the modern literary mode could also be established by means of literary structure.

Most accounts of both types of ekphrasis refer to two major aspects that distinguish ekphrasis from other literary modes, which are summarized in Gayana Jurkevich’s account.¹⁷ First, ekphrasis is considered the ultimate expression of the contested relationship between the “sister arts.” By attempting to verbally conjure a visual object or scene, words strive to become pictorial while at the same time providing verbal expression to images, thereby aiming to cross the boundaries between the arts as posited in Lessing’s *Laocoon*.¹⁸ Second, ekphrasis embedded within a larger text is considered a moment of repose in the text’s ongoing narrative, since the atemporality of the image dominates the temporality of the text. At the same time, by expressing images verbally, ekphrasis provides them with a temporal quality. This may seem like a paradox,

¹⁶ “The dashes in Keats’s sonnet function symbolically and *serve to mirror the fragmented marbles* and to indicate an exhaustion of inspiration—the poet’s inability to continue generating similes” (Scott op. cit., 62; italics added).

¹⁷ Jurkevich 1999, 20.

¹⁸ Lessing delineates the boundaries between the arts and warns against crossing them, for instance when he writes that “in decorating a figure with symbols, the artist elevates it to a higher state of existence; but, when the poet employs these pictorial garnishings, he degrades a superior being to the level of a puppet.” (Lessing 1836, 114).

and indeed it is often described as one, yet there is a simple explanation. While the diegetic narrative may halt for the ekphrastic moment, a second narrative emerges from the ekphrasis, framed by its relation to the visual object or scene, turning an image into a story.

The following is a review of the different ways in which verbal ekphrasis is delineated. The broad spectrum of opinions, qualifications, definitions, and limitations employed in the discussion of ekphrasis may seem discouraging if one is attempting to find an exact definition of the term. However, such discussions become especially interesting as arenas in which the relationships between the arts—a dominating topic in the history of aesthetics—are worked out.

1.2 Ekphrasis as Reflection of the Relationships between the “Sister Arts”

The critical discourse on ekphrasis has tended to assume that it will be verbal. The following provides an overview of the numerous issues raised on the assumption of verbal ekphrasis, which are either transformed or dissolve completely when the ekphrasis is musical. However, the understanding of ekphrasis as a mode of interpretation of one artwork by another crucially carries over from verbal arts into music. Whether an artwork can bring another from a different medium into presence has been an area of contention for aestheticians as well as music and art scholars since early written history.¹⁹ W. J. T. Mitchell categorizes the multifarious attitudes towards the possibility of ekphrasis as “ekphrastic hope,” “ekphrastic fear,” and “ekphrastic indifference.”²⁰ Ekphrastic indifference refers to the viewpoint that ekphrasis is not possible—a verbal description can never bring a visual object into presence like an image.²¹

¹⁹ The earliest example may be the saying attributed by Plutarch to Simonides of Ceos (c. 556–467 BC): “painting is mute poetry and poetry is speaking picture.” (Jurkevich op. cit., 19).

²⁰ Mitchell 1995, 152–156.

²¹ Michel Foucault, for example, expresses ekphrastic indifference when he writes that “the relation of language to painting is an infinite relation [...] neither can be reduced to the other’s

“Ekphrastic hope,” as implied by its name, refers to the conviction that there is a sense in which verbal depiction can make readers “see” visual objects. According to Mitchell, ekphrastic hope leads to a view of ekphrasis not as an exceptional and rare phenomenon, but as a model of the basic qualities of linguistic expression. Taking the path of ekphrastic hope, Mitchell claims, soon brings us to an expanded definition—the ekphrastic *principle*: “shaping of language into formal patterns that ‘still’ the movement of linguistic temporality into a spatial, formal array. Not just vision, but stasis, shape, closure, and silent presence [...] are the aims of this more general form of ekphrasis.”²²

The “stilling” of linguistic temporality brings us to the inevitable third stage—“ekphrastic fear” of the destruction of the differences between the arts and the essential characteristics of each art form, with the unique system of expectations and ways in which it coheres. Words that can paint, for example, would make paintings superfluous, while at the same time lose the sense of linguistic temporality for the dominating visual atemporal aesthetics.²³ Mitchell himself is

terms: it is in vain that we say what we see; what we see never resides in what we say. And it is in vain that we attempt to show, by the use of images, metaphors, or similes, what we are saying; the space where they achieve their splendor is not that deployed by our eyes but that defined by the sequential elements of syntax.” (Foucault 2002, 10; part of this quotation is also in Jurkevich op. cit.)

²² Ibid., 154.

²³ As an exemplar of ekphrastic fear, Mitchell refers to Lessing’s *Laocoon*. Theodor Adorno also exemplifies ekphrastic fear in claiming that “music that ‘paints,’ which nearly always suffers a loss of temporal organization, lets go of the synthesizing principle through which, alone, it assumes a form approaching space; and painting that behaves dynamically, as if it were capturing temporal events [...], exhausts itself, at best, in the illusion of time, while the latter is incomparably more present in a picture where it has disappeared among the relationships on the surface or the expression of what has been painted” (Adorno 1995, 67). Roland Barthes presents a sharp and concise edification of the semiotic fear from verbal representation in his discussion of realist depiction in literature. Even though it fulfills a rhetorical or aesthetic function, verbal representation creates what Barthes terms “the referential illusion”: the description attempts to denote the real (the artwork at the object of ekphrasis) directly—to omit the signified and create a direct link between the signifier and referent—yet by doing so descriptions create an ideal category of *the real*, which is then signified as connotation rather than denotation. Thus,

skeptic of the significance of ekphrasis, which he calls a “utopian fantasy,” since language can already be depictive without describing a painting, and painting can be communicative as language, since, Mitchell claims, “expressive acts, narration, argument, description, exposition, and other so-called ‘speech acts’ are not medium-specific.”²⁴ He finds the grounds for the fascination with ekphrasis, and the debate on the differences between art forms, in the “otherness” of the image as opposed to text, and equates such otherness to forms of exclusive social and racial dichotomies such as the view of women as sexual others—and people of color as racial others—whose otherness is first and foremost visible. Therefore, Mitchell portrays ekphrasis as superficial just like these other forms of otherness.

Mitchell’s viewpoint on ekphrasis as concentrated on differentiation and conflict between art forms reflects, and possibly has influence over existing trends in scholarship—studies of ekphrasis that followed elaborate on Mitchell’s implied assignment of femininity to “mute” images and masculinity to “expressive” language. For example, James Heffernan claims that “ekphrasis speaks not only *about* works of art but also *to* and *for* them.”²⁵ He conceives of ekphrasis as an act of appropriation—not of images by words, however, but the other way around—images employ words to revolt against designations such as Lessing’s instruction to pictures to be silent and beautiful (“like women,” writes Heffernan) and leave all expressive faculties to poetry.²⁶ As Heffernan puts it—“in talking back to and looking back at the male

ekphrastic descriptions cannot achieve what they aim to do—instead of an encounter of an object with its verbal expression, ekphrasis only signifies its own “realness.” (Barthes 1989.)

²⁴ Ibid., 160.

²⁵ Heffernan op. cit., 7.

²⁶ “Beauty was the supreme law of the arts of design [...]. Every other object in art must be sacrificed at once when incompatible with beauty, and in any case must be rendered subordinate to it [...]. Referring to the subject of expression [...], certain kinds and degrees of passion which exhibit themselves in the countenance by the most frightful contortions [...], that all those

viewer, the images envoiced by ekphrasis challenge at once the controlling authority of the male gaze and the power of the male word.”²⁷ Therefore, Heffernan presents ekphrasis as an act of dominance committed by images that stand in a conflicted relationship with words: “because it verbally represents visual art, ekphrasis stages a contest between rival modes of representation: between the driving force of the narrating word and the stubborn resistance of the fixed image.”²⁸

Viewing ekphrasis as a contest, however, reflects an approach that assigns fixed roles to words and images and emphasizes differences of medium, while the particularities of a visual artwork, and of the literary work that takes it as its subject, remain in the background. For example, an ekphrastic poem can comment on issues of style, form, structure, and other aspects inseparable from the painting as expressed in its visual medium; by doing so, the poem’s aim is not to replace the painting, or to outdo the painting—a futile endeavor which would demand that the poet decides what it is that the painting “does” and then do it better. Instead, the poem invites readers to read it side by side with the painting, understanding a new way in which to view the painting, while at the same time let the painting guide a reading of the poem.

While most accounts of ekphrasis are couched in terms of an agonistic relationship between images and words, some scholars offer a different approach. James Francis, for example, proclaims that considering ekphrasis as the expression of contention fails to convey the complexity of the interdependent relationship it creates between words and images.²⁹ Focusing on the rhetorical technique while expanding his conclusions to literary ekphrasis, he objects to

beautiful lines [...] become lost. These the ancient artists either altogether avoided, or they expressed them in such a modified degree as might not be unsusceptible of a certain proportion of beauty.” (Lessing *op. cit.*, 19–20).

²⁷ Heffernan *op. cit.*, 7.

²⁸ *Ibid.*, 6.

²⁹ Francis, 2009.

the mimetic view of ekphrasis as translation from one art form to another, contending that ekphrastic texts do much more than just bring a visual object to literary existence, and that the complex relationships between visual and verbal art as expressed in ekphrastic works are being simplified in theories of ekphrasis. Rather than a conflict, Francis suggests considering ekphrasis as a *combination* of words and images, in which the described act of viewing in an ekphrastic text opens the possibility for readers to engage in diverse ways. Thinking of rhetorical or literary ekphrasis as a combination of visual and verbal features allows a multitude of potential relationships between ekphrasis and its objects, opening possibilities for more sophisticated interpretations than those concentrated on contention between art forms.

Valentine Cunningham perhaps conveys the most sophisticated conception of ekphrasis as an attempt of verbal expression to reach what he calls “the absolute *thereness*” of visual artworks.³⁰ It is an attempt to abolish the doubt that, according to Cunningham, accompanies verbal expression like a shadow, and becomes especially apparent in moments such as the expression “*this* is the body of Christ” in the Eucharist, turning bread and wine into flesh and blood with the power of language. Ekphrasis, writes Cunningham, manifests the tension between the absence of the object and the reality of its representation by framing its text in the actuality of the artwork, while at the same time speaking out for the silent object. One might claim that Cunningham’s view of ekphrasis still preserves the contest between the arts in the attempt of words to do what visual arts can do—confront the problem of absence. However, in his conception of ekphrasis the description must always refer to an existing work, so that ekphrasis for Cunningham is more than just verbal; it is a combination of verbal and visual aspects in a literary-visual work, with the ekphrasis relying on the existence of the visual artwork. Instead of

³⁰ Cunningham 2007.

contention, ekphrasis entails cooperation of verbal and visual arts. Consequently, he views ekphrastic texts not as written texts alone, but as artworks that combine verbal as well as visual components.

Mitchell's discussion of ekphrasis summarized above, including his categorization of existing approaches into "indifference," "hope," and "fear," communicates a view of ekphrasis as founded on differences in mediums, or art forms, and such differences are also the source of his skepticism of the necessity of ekphrasis as an interpretive approach. However, if the significance of an ekphrastic act is not in its art form, but rather in the interpretation it provides to an artwork (in cases of literary ekphrasis) or in the illustrative quality of the rhetorical ekphrasis, then the act becomes a mode of creative interpretation, which results in the production of another artwork, rather than a competition between art forms. Such approach to ekphrasis as interpretation, which does not claim that music provides words to silent images, seems to guide the expansion of ekphrasis to musical pieces composed about other artworks.

1.3 Musical Ekphrasis

In a more recent turn of events, ekphrasis has been evoked in music studies to refer to pieces that are either depictive in some way or, more specifically, take other artworks as their subjects. The issues that have occupied studies of literary ekphrasis—the debate over ekphrasis as an expression of the (gendered) conflict or contest between the arts or, alternatively, of collaboration between art forms; the view of ekphrasis as "stilling" the temporality of the art; the way in which ekphrasis allows art to obtain greater faculties, endowing "thereness" onto language, and the "otherness" of the image imposed by the ekphrastic act—all occupy writings on musical ekphrasis. The problem of ekphrasis endowing art with greater faculties transformed,

in musical ekphrasis, into the issue of the representational faculties of music. If music, unlike language, is unable to articulate fixed connotations, how can music express anything but itself? The following overview contextualizes approaches to musical ekphrasis as interpretations of the different views on literary ekphrasis towards a definition that shifts the emphasis from ekphrasis as a mode of description that links different art forms to ekphrasis as a mode of interpretation.

The author who has written most extensively on musical ekphrasis is Siglind Bruhn, who called for the boundaries of ekphrasis to be expanded from verbal art so that it includes works of any art form that represent other artworks of any medium. By representation, Bruhn means “a transformation of a message—in content and form, imagery and suggested symbolic signification—from one medium into another.”³¹ Her definition of musical ekphrasis is based on three stages of depiction. In the first stage, there is a scene or a story. The second stage is a visual or verbal representation of that story. In the third stage, that representation is rendered in “musical language.”³² Indeed, one must treat music, as well as other art forms, as languages, if they articulate messages that can be transformed and conveyed in other artistic forms, and Bruhn’s justification for musical representation appropriately draws from musical applications of theories of semiotics and narrative. While treating music as a language allows to point out important means of musical representation—Bruhn mentions Baroque theories of “musical rhetoric,” theories of affect, cultural connotations of specific keys, intervals, etc., musical topics, visual metaphors of pitch, and letter-name representation (such as the B-A-C-H motive)³³—such an approach accounts only for fixed connotative musical elements.

³¹ Bruhn op. cit., xvi.

³² Ibid., 8.

³³ Ibid., 16–17.

However, as demonstrated by Bruhn’s countless interpretations of ekphrastic compositions, most musical representations are flexible and fluid rather than fixed—they deal with interpretation rather than with translation of “messages.” Without denying the central place of common “cultural codes,” Claudia Gorbman’s term for musical elements that have become evocative over time in certain cultural contexts,³⁴ a piece of music that takes another artwork as its subject is often depictive in a more complex way that may or may not include such codes, and therefore it is not uncommon for ekphrastic musical pieces to be interpreted in different ways by different listeners. Bruhn herself alludes to broader possibilities of musical representation when defining ekphrasis as a transformation of a message in “content and form.” Interpreting the content and form of an artwork is presumably part of the composer’s work when creating an ekphrastic musical piece, therefore the composer would be free to devise musical modes of representation that go beyond fixed connotative elements. Moreover, Bruhn admits that comparing the rhetorical abilities of music to language puts music in an inferior position while ignoring other forms of musical signification, including “vocal timbre and instrumentation, volume and rhythmic structuring, spatial and temporal placing.”³⁵ In addition, Bruhn’s interpretations of ekphrastic musical works, many of which are hermeneutic and subjective, manifest their fluid nature on several occasions by raising the possibility of alternative interpretations, while arguing for one interpretation as superior to the others.³⁶

While Bruhn’s conception of musical ekphrasis draws from the literary mode, Thomas Grey’s approach seems closer to the rhetorical technique. Grey contemplates the applicability of

³⁴ Gorbman 1987, 13.

³⁵ Bruhn op. cit., 19.

³⁶ For example, Bruhn’s analysis of the first movement of Respighi’s *Trittico Botticelliano* suggests two ekphrastic interpretations, while deeming one of them as less simplistic and therefore superior to the other (Bruhn *ibid.*, 237–239).

ekphrasis to describe works by Felix Mendelssohn, the depictive qualities of which Grey relates to the concurrent popularity of *tableaux vivant* (the recreation of paintings) among the educated European middle class. He acknowledges that Mendelssohn's "Italian" and "Scottish" symphonies are not based on specific paintings, and as such cannot be considered ekphrastic in the strict sense of the definition; however he points to qualities in the compositions that can be viewed as ekphrastic in a broader sense. Instead of referring to ekphrasis per se, Grey seems to evoke a sort of musical *enargeia*, the quality of ekphrastic depiction, as characterizing Mendelssohn's symphonic writing. For example, Grey links the Adagio movement of the "Scottish" symphony to Jacques-Louis David's painting "Oath of the Horatii" (1784), which contrasts the men-warriors' patriotic spirit with the women's feeling of grief through the musical succession, and later juxtaposition, of a gentle, lyric "feminine" theme and a heroic, military "masculine" theme. The vivid illustrations that Grey skillfully weaves in his interpretations of Mendelssohn's symphonies, and the evocative links he makes to specific paintings, draw a line from Mendelssohn to programmatic musical works of the late nineteenth century, which feature similar *enargeia*. Rimsky-Korsakov's *Scheherazade*, for instance, opens with the sultan's weighty and dignified theme, which is immediately succeeded by the fluttering solo violin theme meant to portray Scheherazade weaving a story, thereby contrasting "masculine" and "feminine" qualities.

By expanding the definition of ekphrasis to include music that is, in some sense, depictive, yet not composed after a particular artwork, Grey offers a view of musical ekphrasis closer to the ancient rhetorical technique, since it is defined by the quality of the description rather than the type of object described. In addition, Grey's approach reflects the contest between the arts expressed in the ekphrastic act. Referring to the notion of literary ekphrasis creating a

frozen moment within the narrative, Grey proposes that musical ekphrasis effectively releases the painting's image from its frozen state, endowing it with the temporal qualities of music.

Some comparative interpretations of music and art avoid using the term ekphrasis explicitly, yet evoke it nonetheless. Jeannie Guerrero's comparative study of Nono and Tintoretto is similar to Grey's interpretation of Mendelssohn, since Guerrero draws parallels between Tintoretto's unique designs of his pictorial planes and Nono's canonic structures without claiming that particular compositions by Nono aim to depict the structures of specific Tintoretto paintings.³⁷ However, contrasting Grey, Guerrero proposes that musical form is dominated by the structural principles of Tintoretto's paintings. Therefore, her approach reverses the direction of domination, suggesting that the image bestows its spatial organization upon musical temporality. Jonathan Bernard makes similar suggestions about Morton Feldman's compositional aesthetics, finding the inspiration for multiple aspects of Feldman's habits in the techniques and approaches of New York expressionist painters.³⁸

The term ekphrasis appears nowhere in David Code's interpretation of Debussy's *Prélude à l'après-midi d'un faune*, but his discussion of parallels between the musical form and the poetic form, especially his proposal that the "bifolio" structure of the second half of the poem is reflected in the musical form, is an example of his consideration of Debussy's music as corresponding with, and responding to, Mallarmé's poem.³⁹ Similarly, Steven Johnson's comprehensive analysis of Morton Feldman's *Rothko Chapel* does not mention ekphrasis, yet

³⁷ Guerrero 2010.

³⁸ Bernard 2002.

³⁹ Code 2001.

Johnson interprets his division of the piece into sections as parallel to the arrangement of Rothko's chapel paintings.⁴⁰

Lawrence Kramer prefers to use the term “paraphrase” instead of ekphrasis when it applies to verbal representation of musical works, referring to works of literature as well as hermeneutic discussions of music.⁴¹ However, hermeneutic texts about music differ from poems or prose composed after musical pieces, since the former demand being read side by side with the pieces they interpret in order to be understood, while the latter exist as self-standing works even if the reader is not familiar with the artworks they discuss (although the reading becomes richer and fuller when the artworks are available and accompany, mentally, the reading). While Kramer is highly supportive of such musical interpretations—rejecting the “*Ding-an-sich*” view of music as autonomous—he calls for a reflexive approach that acknowledges the cultural context in which a composition was created as well as the context in which the interpreter is writing, in order to avoid false implications of universality. Expanding Mitchell's notion of “imagetext,” Kramer terms such reciprocal relations between music, image, and text “music imagetext”: “The meaning emerges in the music on the basis of something in the imagetext, and at the same time emerges in the imagetext on the basis of something in the music. The temporality of the process is unclear; the meaning is everywhere at once.”⁴² Kramer does not distinguish musical ekphrasis per se, perhaps because it would detract from his argument that musical experience is never “pure,” but involves images and texts on different levels. It seems that he would conceive of ekphrasis similarly to more controlled musical-visual environments such as music in multimedia works, and less controlled situations such as a decision a listener

⁴⁰ Johnson 1987.

⁴¹ Kramer 2002.

⁴² *Ibid.*, 149.

might make to pair a painting, for example, with a piece of music and ponder their interactions. However, ekphrastic works provide a special case study for such interactions, since such pieces call to be heard as “music imagetexts” by virtue of their tangible relationship to visual or verbal artworks; at the same time, these pieces are not subjected to editing according to a sequence of visual events such as music in films—no “extra musical” considerations dictate their construction.

Like Kramer, Lydia Goehr challenges the “*Ding-an-sich*” perspective on music. She proposes the possibility of musical ekphrasis, claiming that music does not differ from other art forms when it comes to its capacity for ekphrasis.⁴³ Goehr delineates two ways in which ekphrasis can involve music. The first is similar to Kramer’s “paraphrase”; it happens in the realm of words when a text (either speech or writing) describes a piece of music in order to bring that piece before the reader’s or listener’s imagination. This perspective corresponds to the rhetorical ekphrasis, hence Goehr terms it “ancient.” The second way corresponds to the literary transformation of ekphrasis. Goehr points out that the focus of the “modern” use of the term is on artworks—works of literature that take visual artworks as their subject matter—hence she terms it “work-to-work relation.” Goehr argues for expanding the modern conception of ekphrasis to include musical compositions about other artworks, since pieces of music that take verbal or visual artworks as their subject take part in the conflict between the arts, and create similar effect to that of ekphrastic poems that re-present paintings or sculptures: “If music as an art of pitch and tone cannot be ekphrastic, this is taken, in the modern contest of the arts, to show a limitation of the musical art. However, this perceived limitation derives from a restricted view of music as medium, according to which ‘tonally moving forms’ are denied the descriptive powers

⁴³ Goehr op. cit.

of poetry and the representational powers of painting.”⁴⁴ The reason for the possibility of such an expansion, Goehr proposes, is that medium differentiation becomes secondary to the “work-to-work” relation, which primarily focuses on the question “can *any artwork* achieve what *another artwork* has already achieved?”⁴⁵ Taking the point of view of ekphrasis as expressing contest between the arts, Goehr explicates that “as much as a given art strives to be true to its own medium, this should not prevent it from aspiring also to the condition or medium-capability of another art [...]”⁴⁶ She suggests a solution to the perspectives that Mitchell termed “ekphrastic fear” and “ekphrastic hope,” encouraging a synthesis of the rhetorical and literary concepts of ekphrasis in a relationship that, on one hand, does away with medium differences, and on the other hand, is defined by the act of description. While Goehr’s conception of musical ekphrasis is similar to Bruhn’s in the focus on musical compositions that take other artworks as their subject, she criticizes the overt work-to-work aspect in Bruhn’s selection of examples, which is limited to musical compositions about existing artworks from other art forms, and suggests expanding the boundaries of musical ekphrasis using aspects of the ancient definition to include cases in which, for example, the object of ekphrasis is not an existing artwork (like some of the movements in Mussorgsky’s *Pictures at an Exhibition*).

1.4 Unidirectional versus Reciprocal: The Difference from Program Music

The question of the difference between musical ekphrasis and program music occupies Siglind Bruhn’s study. She contends that “‘program music’ narrates or paints, suggests or

⁴⁴ Ibid., 397.

⁴⁵ Ibid., 398 (emphasis in original text). Goehr’s use of the word “achievement” reflects her view of ekphrasis as expressing contest between the arts.

⁴⁶ Ibid., 399.

represents scenes or stories [...] that may or may not exist out there but enter the music *from the composer's own mind*. [...] Musical ekphrasis, by contrast, narrates or paints a fictional reality created by *an artist other than the composer* of the music: by a painter or a poet.”⁴⁷ While this distinction rings true in general, it means that a piece after a painting, for example, by a composer who is also a painter, would not be considered musical ekphrasis. In addition, in cases of existing scenes or stories, it is not clear when they enter the music “from the composer’s own mind,” and therefore should be considered program music, and when pieces depicting existing scenes could be considered ekphrasis. Consequently, one can conclude from Bruhn’s distinction that musical ekphrasis and program music are not all that different; there could be a gray area of compositions that adhere to the conditions of both types of pieces.

A more productive avenue, I propose, would be to forego issues of terminology and categorization, and instead consider musical ekphrasis from the point of view of a listener-observer, a performer, and an analyst, as a type of interpretive activity. We can choose to understand some pieces either as musical ekphrasis or as program music, and in each case we would interpret the music (and the text—the program or the other artwork) differently. The most significant difference in the interpretation is in the types of relationships created between the musical piece and the visual or verbal text. When approaching a piece of program music, one would examine how the program affects musical components (such as structure, instrumentation, and contour). For example, in his interpretation of the second movement of Beethoven’s Symphony No. 6 in F major, Op. 68 (“Pastorale”), Donald Tovey interprets the movement as program music depicting a scene by the brook. He shows that musical elements represent the brook’s murmur, the bird songs, and the “happiness of relaxation” in a development of the first

⁴⁷ Bruhn op. cit., 28–29. Italics appear in Bruhn’s text.

theme.⁴⁸ Treating the movement as musical ekphrasis, on the other hand, would entail asking not only how the text helps to interpret the music, but also how the music interprets the text. If it were suddenly revealed, for instance, that Beethoven's "Pastorale" was composed after a painting depicting a scene by a brook, one could approach the piece as musical ekphrasis and ask, in addition to the ways in which the music reflects such a scene, what perspective the music provides to the depiction of the brook in the painting—how the music provides a point of view on the painting. Therefore, a piece of program music differs from musical ekphrasis in two related ways—not only does musical ekphrasis entail the representation of an artwork, while programmatic music represents a narrative, but ekphrasis also calls for a two-directional interpretation, as the composition represents the artwork and vice versa, while program music is interpreted in a single direction, with the music representing the text, but not the other way around. Theories of multimedia, like those referenced in the following section, take a reciprocal approach to interpretation, examining the mutual influence between the different components of multimedia works. For this reason, I find theories of multimedia especially useful for considering musical ekphrasis.

1.5 A Different Take on Music and Images: Theories of Music in Multimedia

Some of the questions that Goehr raises about musical ekphrasis—such as whether ekphrastic compositions bring their objects into presence, and whether an ekphrastic work makes its object superfluous, echo issues raised by Kofi Agawu in his discussion of nineteenth-century songs. Agawu takes a multimedia approach to Lieder as a first step towards formulating a theory of song, examining the relationship between words and music, and their combination in the

⁴⁸ Tovey 1935, I: 51 on mm. 78–85, quoted in Zbikowski 2002, 90.

musical setting of a poem. He asks, “When the words of a poem are appropriated for musical use, do they retain their status as parts of an original work? Does Schubert’s ‘Erlkönig’ contain both Goethe’s ballad ‘Erlkönig’ and a super-structure which is Schubert’s song, or does the song ‘assimilate’ [...] Goethe’s poem?”⁴⁹ These questions lead his reflexive search, which contemplates four explanatory models of song that Agawu refines from the literature before proposing a method for song analysis and interpretation. Each of the models assigns different weight to the components of a song—the words (the poem, language, or text), and the music. A central difference between the four models concerns the extent and degree to which the words retain their identity when set to music; on one extreme, words lose their semantic meaning and become successions of phonemes, and on the other words not only retain their semantic meaning, but dominate the song to the extent that they limit the possible interpretations and understandings of the music. The model that Agawu eventually proposes interprets each component of the song individually, and then compares the interpretations to generate a list of correspondences between words and music consisting of agreement, contradiction, and indifference. All three relationships between words and music in a song, Agawu contends, should be featured in analysis; analysis should not focus only on moments in which the music and text agree.

Agawu raises two issues, which he considers problematic, that prevail in song analyses. First is the *ad hoc* nature of interpretive acts, which is clouded in “questionable analytical premises.”⁵⁰ The second is the unquestionable dominance of words, since most song analyses assume that the composer’s interpretation of the poem had special significance for the compositional decisions made while composing the song. While the first issue, Agawu remarks,

⁴⁹ Agawu 1992, 4.

⁵⁰ *Ibid.*, 9–10.

is not unique to the analysis of song, both issues seem to me no longer problematic when taking Marion A. Guck's suggestion and shifting the object of analysis from an account of the musical work as an object to the observations of listening and performing subjects (to use Agawu's language, it means a change of focus from musical relations to musico-poetic relations). If we take the goal of analysis to interpret a "hearing,"⁵¹ meaning one's experience of performing and listening, and at the same time broaden that experience, then *ad-hoc* interpretive acts couched in musical "evidence" become not only acceptable—they are celebrated. As for the second issue, while one cannot assume the importance of the poem for the compositional process, the poem is arguably crucial for listeners and performers of the song. Whether it was the composer's intention or not, the poem arguably affects the way listeners understand the song and performers play it. Although the poem should not automatically be given dominance over music, a song analysis falls short of serving its readers if it foregoes the poem to concentrate exclusively on the musical setting. Moreover, one may find, in the process of analyzing a song, that the meaning of the words is affected by the musical setting, so that the interpretation can go both ways. For example, Agawu assigns special significance to the note G, which sets the word *ihn* [him] in the line "*Seit ich ihn gesehen*" [since I saw him] in the first song of Schumann's *Frauenliebe und Leben*, contrasting its surrounding repeating Fs in the setting of the line as marking the poem's (and its speaker's) "other."⁵² The relationship, however, is reciprocal—that single G among repeating Fs highlights the word *ihn* in the poem, endowing it with special significance and raising expectation that the contrast of *ich* and *ihn* will play an important part in the unfolding of the poem. Indeed, Agawu includes a reading of the poem in the procedure he suggests as a model

⁵¹ As proposed by Marion A. Guck—analysis that is based on the analyst's musical observation or understanding of a piece rather than on an external musical object. The aim of analysis, from this perspective, is to "investigate how music and listeners interact." (Guck 2006, 194.)

⁵² Agawu op. cit., 9.

for song analysis. However, he proposes that the examination of the poem should follow, rather than precede, an analysis that focuses on the musical setting.

Theories of music in films tend to focus on the film observer's perspective and treat music not as an independent component to be studied separately, but as a component to be considered in context of its effect on the film as a whole. In her seminal book on music in films, Claudia Gorbman explains: "To judge film music as one judges 'pure' music is to ignore its status as a part of the collaboration that is the film. Ultimately it is the narrative context, the interrelations between music and the rest of the film's system, that determines the effectiveness of film music."⁵³ Gorbman's theory not only frames music as support for the cinematic narrative, but also considers music in film as a genre, in which established conventions serve as cues for observers, situating a scene, or an entire film, in a long tradition of scenes or films of similar type. Taking a semiotic approach, Gorbman demonstrates the effect of codes (musical, cultural, and cinematic) on viewers' understanding of films through commutation tests, in which she experiments with different musical styles as pairings for a given scene, considering how film viewers' understanding of the scene would change according to the change in accompanying music.⁵⁴ Music, she proclaims, enforces an *interpretation* of the diegesis by "emphasizing moods or feelings, in specifying or delineating objects for the spectator's attention."⁵⁵ Gorbman's influential theory, then, presents a continuous reciprocal flow of signification between music and the diegesis in films. However, she stresses, music in most films is subordinate to the narrative—

⁵³ Gorbman op. cit., 12.

⁵⁴ Ibid., 17–19.

⁵⁵ Ibid., 32.

it is a secondary component in the film and has a supporting function.⁵⁶ Viewers of most films are encouraged not to listen closely to the music; the music is almost unnoticeable, and its effect on the viewers is subconscious.⁵⁷ Music can support the structure and narrative of a film on different levels through cinematic codes established within a given film such as leitmotifs or opening and closing title music, through musical codes such as tonal tension and resolution, and through cultural codes—such as violin melodies for “romance music” or pounding drums for “battle music.”⁵⁸ The goal of film music, Gorbman states, is “to render the individual an untroublesome viewing subject: less critical, less ‘awake.’”⁵⁹

Ekphrastic compositions are different from film music. Gorbman characterizes the relationship between music and narrative in a film in terms of a struggle, in which the narrative commonly has the upper hand in the contest on the attention of the viewer. The reason for the primacy of the narrative, she suggests, is in the inherent preference of viewers for visual information over aural. Ekphrastic compositions, however, present a different kind of relationship. Like other compositions in the western tradition that were not conceived as multimedia works, and differently from film music, ekphrastic pieces ask for listeners’ complete

⁵⁶ “Musical form is generally determined by or subordinated to narrative form. The duration of a music cue is determined by the duration of a visually represented action or a sequence.” (Ibid., 76). Neumeyer and Buhler also assume film music’s secondary role (Neumeyer 2015, 3; Neumeyer and Buhler 2001, 18–19).

⁵⁷ An evocative quote from musicologist and composer Leonid Sabaneev illustrates this point: “Music should understand that in the cinema it should nearly always remain in the background: it is, so to speak [...] the ‘left hand’ of the melody on the screen, and it is a bad business when this left hand begins to creep into the foreground and obscure the melody.” (Sabaneev 1935, 22; brought in Gorbman op. cit., 76).

⁵⁸ The latter type of codes are the subject of sharp criticism by Adorno and Eisler: “These [musical “clichés,” as they call them] have [...] become uncearable both to artists and to the audience, so much so that sooner or later no one will be able to enjoy clichés.” (Adorno and Eisler 1947, 18). They also object to the desired unobtrusiveness of film music as well as many other conventions of the classical Hollywood cinema.

⁵⁹ Gorbman op. cit., 5.

attention. At the same time, they demand that listeners also function as observers, treating the pieces as components of sort in a multimedia-like relationship with the artworks to which they refer. These artworks may not present narratives like classical Hollywood films, and the question of synchronizing musical and visual occurrences is by and large irrelevant; for this reason, the influence of film music theories on this project is mainly conceptual, since analytical methods employed for film music, such as those suggested by Gorbman as well as by Neumeyer and Buhler, arrive at interpretations through a focus on issues such as synchronization between the visual- and soundtracks, balance of the musical track and the vocal track, and whether the music is diegetic (meaning part of the world depicted in the film) or non-diegetic (accompanies the film from an external position—the characters cannot hear it).⁶⁰ However, ekphrastic pieces are similar to multimedia works in the sense of the reciprocal flow of signification between different mediums. Musical, cultural, and motivic or thematic codes (in lieu of cinematic codes) function in hearing ekphrastic compositions similarly to their application in film music. Therefore, I treat ekphrastic compositions in this project not as “pure” music (as much as it ever exists), but as music that is shaped by visual and verbal texts; texts which are also shaped, in turn, by the music.

I assume that Nicholas Cook would consider musical ekphrasis as a clear instance of musical multimedia.⁶¹ In the preface to his book on the subject, he confides that he originally intended to start the book with the juxtaposition of music and the images on record sleeves, which he considers the simplest instances of multimedia.⁶² Unlike musical ekphrasis, the image on a record sleeve has no influence, as far as we know, on the creation of the record’s music. It is

⁶⁰ Neumeyer op. cit., Neumeyer and Buhler 2001, Buhler 2001.

⁶¹ Cook 1998.

⁶² Ibid., x.

usually chosen by the designer of the album sleeve who works for the music production company, not by the musicians. In this sense, musical ekphrasis is a stronger instance of multimedia than music and record-sleeve images, since an ekphrastic composition after an image, for example, presents a non-arbitrary music-visual connection; listeners and performers of the music are practically prompted to juxtapose the music with the image. However, by discussing record sleeve images, Cook identifies an important principle behind multimedia works as well as musical ekphrasis, that “the coupling of image and sound contextualizes, clarifies, and in a sense analyses the music. It instigates a new, or at any rate a deepened, experience of the music” that brings Cook to consider the sort of sound-image interactions instigated by record-sleeve images as at least very close to multimedia, if not proper multimedia works.⁶³

My theoretical approach to the relationships between an ekphrastic composition and its object draws from Cook’s models of multimedia. Music, Cook explains, realizes its potential for signification when coming into contact with another art form, for example in a multimedia work. In itself music, Cook problematically claims, is “empty of meaning,” yet it is willing to accommodate any meaning assigned to it.⁶⁴ He stresses that signification is performative, since it arises from context.⁶⁵ Ultimately it arises through metaphors, constructed on characteristics that Cook terms “enabling similarities,” originating in the comparison of sound and image and

⁶³ Ibid., 74. According to Cook’s own definition of multimedia—“the *perceived* interaction of media”—record sleeve images, as well as musical ekphrasis, constitute multimedia works. (Ibid., 33; italics in text).

⁶⁴ One could argue, and indeed it is Claudia Gorbman’s approach, that at least some music carries meaning, which Gorbman terms “codes,” assigned to it by prevalent use in a certain cultural context. Indeed, Cook requires a given piece to afford that meaning through enabling similarity as a condition for accommodating that meaning in a multimedia work.

⁶⁵ Ibid., 83.

making it possible to connect, for example, happenings on a film screen to rhythm, contour, timbre, and other aspects of the musictrack.

Cook categorizes the ways music can relate to other media in multimedia works in three models—conformance, contest, and complementation. The conformance model originates in the cooperation of music with the other medium, so that music adds no quality of its own but only reflects the other medium. As an example of the conformance model Cook presents Corona Schröter's setting of Goethe's *Erlkönig*, which Carolyn Abbate claims “introduces no alien element—no reading—but rather collaborates with the poem, helping the words to shout out their own sounds.”⁶⁶ The polar opposite of conformance is contest, the superimposition of one medium upon another that happens, for example, in a music video and, in a sense, also in musical ekphrasis. Cook characterizes conformance as static and essentialized, while contest is dynamic and contextual; “conformance begins with ordinary meaning, whether located within one medium or diffused between all; contest, on the other hand, ends in meaning.”⁶⁷ Contest, according to Cook, is the most prevalent relationship found between mediums in a multimedia work. To test whether media conform to one another in a multimedia work, Cook proposes that we ask whether the media are consistent in the sense defined by Lakoff and Johnson—whether they employ metaphors that can be considered similar in some way. He suggests a “difference test” to identify contest, checking whether media send competing messages when combined in a multimedia work, or whether media can be said to complement (rather than contest) one another.

However, categorizing media in terms of contest and conformance ignores the multiple metaphors that usually arise between media in a multimedia work, presenting various relationships. For example, although the musical setting of *Erlkönig* by Corona Schröter, which

⁶⁶ Abbate 1988, 134; cited in Cook op. cit., 101–102.

⁶⁷ Cook op. cit., 103.

Abbate describes (after During) as “hardly more than a bit of patterned melody for the recitation of each verse,” conforms to the poem’s rhythm and rhyme pattern, the text remains detached from the story that the poem tells in a way that can be heard, at times, as sarcasm—the boy’s fear, for example, is sung using the same tune and in the same expression as the reassuring statements of his father and the alluring whispers of the *Erlkönig*. In this sense, the music could be considered as contesting the meaning of the poem; we would not expect these lines to be read in this unvaried way.

The third possible relationship between media is complementation, when a new meaning arises by the interaction of mediums in a multimedia work. Cook defines complementation as avoidance of contest, in which each medium is assigned a separate role. As example, he refers to the relationship between pictures and words, on the one hand, and music, on the other, in classic Hollywood films; music is used to shed light on the feelings and thoughts of the characters, while the pictures and words convey a narrative. The music, then, reinforces elements that already exist in the words and pictures, but it does so in a way that the pictures and words cannot. However, Cook contends, it is difficult to find an instance in which the media present no element of conflict or contradiction and stay out of one another’s turf, so to speak.

For Cook, ekphrastic compositions probably present contest when compared to the artworks to which they refer, since they fall into the category of “IMMs [instances of multimedia] that involve the addition of a new medium to an existing production.”⁶⁸ Still, Cook calls for a more sophisticated approach that would identify the different extents to which the three models can take part in any cross-media interaction. However, one could question the ability to differentiate among the three models. Almost all relationships of complementation,

⁶⁸ Cook op. cit., 103.

Cook eventually proposes, involve contest. And all cross-media interactions begin with enabling similarity, meaning a foundation of conformance. One could assume, then, that a given multimedia work would most likely fall in a gray area between the three models, possibly with some clear aspects of conformance, complementation, and contest, but predominantly with aspects that involve more than one model. The three models rely on the point of view—conformance takes the perspective of the composer or artist, while contest refers to the reaction of a listener-observer. The models can be expanded by theoretical models that reflect, and frame, the different connections listener-observers make between mediums in cross-media interactions.

1.6 Towards a Theory: Cognitive Models of Metaphor Construction

Metaphors, as already discussed, are an important component of the way in which music can signify. Comparing music to visual images when watching a film or listening to ekphrastic compositions, “enabling similarities” give rise to musical components that serve as metaphors to visual components and vice versa. A theory of musical ekphrasis would benefit from considering the ways musical metaphors are constructed and give rise to intertextual listening that ultimately leads to ekphrastic interpretation. Cook’s theory, for example, expands Lakoff and Johnson’s work on metaphors from the point of view of cognitive linguistics.⁶⁹

In this project, I draw upon the work of Gilles Fauconnier and Mark Turner on metaphors from the perspective of cognitive science, as well as of Lawrence Zbikowski who innovatively applied their work to musical metaphors.⁷⁰ Explaining the cognitive construction of metaphors, Fauconnier and Turner state that the same cognitive principles operate in areas considered sharply distinct. Specifically, cognitive structures such as analogical mapping and projection

⁶⁹ As expounded in Lakoff and Johnson, 1980/2003.

⁷⁰ Fauconnier and Turner 1998 and 2002; Zbikowski 2002.

between structures (which are essential in the creation of metaphors) operate in linguistic as well as non-linguistic situations. Fauconnier and Turner explicate the process of conceptual integration, in which metaphors are constructed, which entails establishing several types of mental spaces. Input spaces represent the relevant information for the generation of the metaphor taken from different contexts. For example, if a teacher assigns exercise “number 2E” to her students, she is creating a metaphor with two input spaces—letters and numbers—since the letter E is used for a list, in the same way one would use a number. Metaphors also entail a generic space, which maps onto each of the input spaces. In the example, the generic space is linear ordering. Finally, the metaphor is the result of a conceptual blend, represented by a blended space, which in our example is the linear ordering of letters. Fauconnier and Turner use this simple model to categorize metaphors according to the types of networks that generate them. For example, in *one-sided networks* the organization of one input space is projected to organize the blend. An instance of one-sided network is the metaphor of a boxing match between business competitors, in which the organizing frame of a boxing match is projected onto the other input space of the two business competitors, the latter serving as a target of a metaphorical mapping. A different type of metaphor is a *two-sided network*, in which some shared topology is projected from the input spaces onto the blended space. For example, the interface of a computer desktop is a blended space that contains the topology of an office desktop (files and folders, copy and paste, etc.) as well as the topology of a computer command space. Most importantly, we do not expect that every aspect of one input space would be mapped to the other by the generic space; it suffices that the generic space relates only a few aspects for the metaphor to make sense.

Lawrence Zbikowski asserts the importance of the conceptual integration network to musical understanding: “First, it provides a way to connect musical concepts with concepts from

other domains, including those associated with language; second, it provides a way to ground our descriptions of elusive musical phenomena in concepts derived from everyday experience.”⁷¹ For example, conceptual integration gives rise to the metaphorical spatialization of sound when we think of pitches as descending or ascending, lower or higher than one another. He suggests that three operations are represented in the construction of a conceptual integration network: composition, meaning the creation of new entities in the blended space from the input spaces (such as boxing business competitors or letter-numbers); completion, which allows the extension of a metaphor to elements not specified in the input spaces that supply additional structure (for example by extending the metaphor created by the sentence “these two bookstore owners behave no differently than boxing opponents” by saying “yes, I believe one of them just ‘knocked out’ the other”); and elaboration, which allows further extension of the blended space. For example, we could elaborate the boxing metaphor by incorporating additional business competitors that were not included in the initial input spaces. Zbikowski applies conceptual integration networks to examples of musical text painting and to program music. As I aim to show in the following chapters, conceptual integration networks are no less useful for explaining the metaphors that dominate intertextual listening to musical ekphrasis.

1.7 An Overview of the Chapters

Chapter 2 presents the theoretical framework that will be used in the following analytical chapters. First, it introduces my two models of musical representation—descriptive and contextual representation—which draw from Fauconnier and Turner’s cognitive study of the

⁷¹ Zbikowski *op. cit.*, 64.

construction of metaphors.⁷² Next, I will formulate my analytical-interpretive method for ekphrasis, whose approach is influenced by Agawu's theory of nineteenth-century *Lieder*.⁷³ The discussion will then take a step back and reconsider the relationship between an ekphrastic musical composition and its object artwork more generally, with the aim of providing a clear description of the relationship using the two models of representation. The last section explains the reasoning behind the choice of examples, and elucidates their contribution to understanding musical ekphrasis.

Chapter 3 includes a comparative study of three ekphrastic movements from orchestral compositions—Gunther Schuller's *Seven Studies on Themes of Paul Klee* (1959), Peter Maxwell Davies's *Five Klee Pictures* (1959/1976), and Tan Dun's *Death and Fire: A Dialogue with Paul Klee* (1993). All three movements take Paul Klee's painting *Die Zwitschermaschine* (1922) as their subject matter. This chapter serves as a case study for the analytical method proposed here and demonstrates the multiple interpretations an artwork can receive through musical ekphrasis, since each of the pieces provides a different interpretive outlook on the painting. Schuller's piece presents the painting as a mechanical bird trap operated by the turn of the crank—the first impression of living birds confined to a machine turns out to be a mechanical device that emits bird-like calls. Tan's work conveys in my hearing a macabre contraption producing parodic and exaggerated “tweets.” Lastly, I interpret Davies's movement as an allegory in which the twittering machine is a music box that produces, with the consistent turn of a crank, four distinct musical characters. The movements by Schuller and Davies were also interpreted by Siglind Bruhn in her work on musical ekphrasis,⁷⁴ and I will refer to Bruhn's interpretation to

⁷² Fauconnier and Turner op. cit.

⁷³ Agawu op. cit.

⁷⁴ Bruhn 2000, 366–376.

demonstrate, on one hand, the shared quality of descriptive representation, and the singularity of contextual representation on the other.

Chapter 4 examines Morton Feldman's *Rothko Chapel* (1971) as a musical representation of Rothko's chapel in Houston. Feldman composed the piece for performance inside the chapel space and wrote on the significance of the chapel's structure to some of the work's features. For example, he divided the chorus into two antiphonal choirs located on opposite sides of the audience, enveloping it with their voices. I propose that the piece was not only made for performance in the chapel, but it is also musical ekphrasis of the chapel; *Rothko Chapel* provides a sonic identity to the chapel, allowing it to transcend its physical properties by bringing the space into presence in listeners' minds even when listening to a performance away from the chapel. The piece achieves this identity by featuring a "musical persona," to use Edward Cone's evocative term, that guides listeners from one sonic "image" to the other, allowing an interpretation of the music as expressing a person's process of meditation engendered by a prolonged interaction with the paintings.⁷⁵ Memory and its fluctuating, elusive nature becomes a central theme in the piece, encouraging a reflective listening activity that parallels the meditative experience Rothko intended to create in the chapel space.

Chapter 5 turns to a special example that raises the question of the boundaries of ekphrasis and calls to change the focus of ekphrasis from a relationship between different art forms to a relationship between individual works (which Goehr terms "work-to-work relation"). Luciano Berio composed *Ekphrasis (Continuo II)* in 1996, after his *Continuo for Orchestra* (1989–1991). Apart from the question whether descriptive and contextual representation still exist between works in the same art form, Berio's two pieces present an additional challenge;

⁷⁵ Cone 1974.

although Berio published the two pieces under different titles, implying that he considered the pieces as two independent musical works that are nevertheless related to one another, *Ekphrasis* quotes extensively from *Continuo*, to the point that one could consider it a version of the earlier piece. Apart from a new introduction and ending, *Ekphrasis* keeps the structure of *Continuo* and differs from it in minor instrumental changes and the addition of some surface events. As a result, a listener to *Ekphrasis* hears *Continuo* throughout, although at times *Continuo* sounds as if in the background of *Ekphrasis*. Therefore, Berio's *Ekphrasis* presents to listeners the challenge of hearing difference by concentrating on musical events that may seem minor if approaching the piece by itself, but become significant when interpreting the piece in the context of *Continuo*. My analysis will take on the challenge by shifting its focus from issues of structure, which commonly dominate music-theoretical discussions, to the surface.

The last chapter concentrates on an unusual piece of programmatic music. Schoenberg conceived his *Begleitungsmusik zu einer Lichtspielszene*, op. 34 (1929–1930) as film music, but the piece was not composed for a film. Its terse program includes “threatening danger,” “fear,” and “catastrophe,” recalling Schoenberg’s program for his Piano Concerto Op. 42 (1942).⁷⁶ However, by being considered as music for film, op. 34 is unique among Schoenberg’s programmatic pieces, since it calls to be considered as a composition with the potential to become the soundtrack of a film scene that depicts its program.⁷⁷ Although correspondence shows that Schoenberg contemplated working with an artist to create an abstract film scene based on the music for its premier performance, the plan was never realized. Therefore, I approach the piece not only as program music that expresses its text through descriptive and

⁷⁶ The program of each movement of the Piano Concerto includes: “Life was so easy,” “Suddenly hatred broke out,” “A grave situation was created,” and “But life goes on.”

⁷⁷ One can also assume that the piece exemplifies Schoenberg’s approach to composing for films, especially when considering his concurrent interest in film composition.

contextual representation; throughout the analysis, I consider how the piece can accommodate a film scene.⁷⁸ Although the imagetrack of the film scene can be considered an ekphrasis of Schoenberg's piece, the chapter will focus on the music and show how descriptive and contextual representation are applied differently to a programmatic music in relation to its program compared to their application for musical ekphrasis. In the interpretation of Schoenberg's piece the text is significant only as much as it helps understanding the music, while in the preceding analyses of musical ekphrasis the interpretation is bi-directional, including an examination of the way in which the music changes the understanding of the other artwork.

⁷⁸ Based on my work on the piece, I created a film scene for Op. 34 in collaboration with artist Stephen Sewell.

Chapter 2

Analytical Models for Ekphrastic Compositions

This chapter provides a theoretical framework for the following analytical chapters. It focuses on the questions how an ekphrastic piece is heard as commenting on, representing, or expressing another artwork, and what kinds of connections listeners draw between an ekphrastic composition and its object. As discussed in the previous chapter, work in music and multimedia, and in musical semiotics, proposes that music gains signification and creates meaning in the mind of listeners through the different contexts in which it is heard. These contexts can include historical conventions of style and genre, or conventions set within the composer's body of works. The setting of listening can function as context that creates meaning,¹ and so can a listener's experience, knowledge, and mood—a person may understand a piece differently when listening to it in different mindsets.² In the case of musical ekphrasis, further context is provided to the experience of listening by the artwork after which the piece was composed, and vice versa: a listener-observer would understand a composition created, for instance, after a painting, in the context of that painting; musical events would become meaningful as a consequence of perceived connections with elements in the painting, while at the same time the music would influence the way in which the painting is interpreted—elements of the painting would carry a

¹ As discussed in the previous chapter, Nicholas Cook proclaims that record-sleeve images contextualize the music, affecting the way it is understood. Therefore, listening to a recording of a piece while looking at the image on the record sleeve would lead to a different experience than listening to the piece without the image. (Cook 1998, 73–74.)

² For example, I find listening to music in a car or on a bus a different experience than listening at home, in a subway car, or in concert. There is something about the rapid changes of scenery while driving outside that leads me to form connections between what I see and what I hear.

special meaning because of their perceived connection to musical elements. Therefore, an ekphrastic piece after a painting contextualizes the painting as much as the painting contextualizes the music.

Drawing from theories of music in multimedia works, the framework proposed in this chapter takes the point of view of a listener-observer and considers musical representation as much as it is heard and interpreted in listening. Ekphrastic analyses are subjective—the relationship between a piece and another artwork can be interpreted in different ways, with each interpretation based on different aspects of the works. The models suggested in this chapter, therefore, do not prescribe how musical representation should be interpreted, but frame the different ways in which music can be heard as representational, providing conceptual tools necessary for organizing and clarifying listener-observers' analyses.

My two models of musical representation have been formulated through work on ekphrastic pieces. However, they can be used for analysis of music in multimedia, program music, and even for cross-media interactions that do not involve music. Following an explanation of the models, which draws from Fauconnier and Turner's cognitive study of the construction of metaphors and includes examples from programmatic pieces and musical ekphrasis, I will formulate my analytical-interpretive method for ekphrasis, whose approach is influenced by Agawu's theory of nineteenth-century *Lieder*. The discussion will then take a step back and reconsider the relationship between an ekphrastic musical composition and its object artwork more generally, with the aim of providing a clear description of the relationship using the two models of representation. Literature on musical ekphrasis employs terms such as "re-presentation," "representation," and "expression" to refer to ekphrastic relationships, and the proposed models allow examining and clarifying the way these terms are used. The last section

explains the reasoning behind the choice of examples, and elucidates their contribution to understanding musical ekphrasis.

2.1 Descriptive and Contextual Representation: An Overview

I propose two models for understanding the relationships created when listener-observers engage with ekphrastic compositions and their object artworks. The first model, which I term *descriptive representation*, refers to musical components that can be considered representational independently from the other artwork. Generally, descriptive representation stems from the view of ekphrasis as a rhetorical technique, in which an author vividly describes objects or events to elicit mental images from readers. In music, descriptive representation involves a metaphor that is shared (albeit in different ways) between the visual image or text and the musical sound. For example, Sergei Rachmaninoff's *Isle of the Dead* (Op. 29, 1908), which takes Arnold Böcklin's 1886 painting by the same title as its subject, starts with a repetitive rhythmic motive that consists of eighth notes in 5/8 rhythm. The motive represents the motion of the boat depicted in the painting as it approaches the island. Some interpreters hear the motive as representing the movement of the boat's oars, and others, such as Max Harrison, interpret it as "the movement of the river around the isle and the boat rising and falling."³ Either way, the 5/8 motive represents the motion of the painting's boat on the river through descriptive representation, since motion is a metaphor shared between the painting and the music. The depiction of the boat in the painting, which includes a rowing boatman and oars touching the water, implies that the boat is moving and approaching the island. In the music, the rhythmic 5/8 motive engenders the metaphor of motion in several respects. Rhythmically, the motive is asymmetrical, since it is divided into two

³ Harrison 2005, 149.

unequal beats (grouped 2+3). Therefore, it features a metric accent that generates a sense of flow; the effect of movement would have been diminished had the motive consisted of four eighth notes, creating two equal beats. The motive, shown in Example 2.1, also contains melodic motion, since it “moves” between different pitches, with no repetitions among consecutive notes. In addition, the instrumentation creates a timbral sense of motion, because the motive’s presentation gradually involves more instruments—it starts in the harps, then the celli join, followed by the violas, the second violins, and lastly the first violins.⁴ Instances of descriptive representation pervade Western music throughout history. For example, descriptive representation is found in programmatic music, which often relies on musical metaphors to evoke the desired associations in listeners.⁵

Example 2.1: The 5/8 Motive in Rachmaninoff’s *Isle of the Dead*, mm. 30–39, String Section

⁴ Steve Larson conceptualizes the different ways music is perceived as motion. He identifies numerous categories of sensing an object’s motion in space and relates each to a musical metaphor based on the perception of music as “something that moves.” The sense of timbral motion in the 5/8 motive, for example, relates to the sense of music moving in time—each change in instrumentation is heard as an event approaching and “moving past us.” (Larson 2012, 67–70.)

⁵ For instance, Sergei Prokofiev’s programmatic piece for children, *Peter and the Wolf*, op. 67, relies on descriptive representation in the musical expression of some of the story’s characters. The bird, for example, is represented by the high range of a flute, and its theme imitates birdcalls. Therefore, the representation of the program’s bird involves a shared metaphor realized verbally in the program and musically, using imitated birdcalls, in the piece.

Contrastingly, *contextual representation* refers to musical components that are considered representational only in the context of the other artwork. Contextual representation arises from listener-observers' interpretation of specific artworks through contexts added while engaging in multitextual listening. Differently from descriptive representation, which relies on a mediating notion that the two artworks share, contextual representation happens when a listener understands an ekphrastic work, or a component thereof, as evocative *only* in the context of the other artwork. Goehr writes that "the more ekphrasis moved away from description, the more it severed itself from the task it once had, as a listening and temporal art, to render present through words what was absent to the eye."⁶ As ekphrasis transcended description, it emphasized interpretation, inviting listener-observers to construe elements not explicitly depicted in an artwork. In music, contextual representation allows a listener to hear an ekphrastic piece as interpreting another artwork. For instance, David Code suggests that Debussy's *Prelude to The Afternoon of a Faun* can be considered a "close reading" of Mallarmé's poem. In his interpretation, Code draws various structural parallels between the poem's lines and the musical phrases of the prelude, and argues that the music prompts listeners towards a new understanding of the text. For example, Code proposes that the striking moment in which the first violins join the oboe in a repeated ascending crescendo in mm. 18–20 is a musical expression of a literary crescendo in the relevant line of the text—"brise du jour chaude"—which is created by a gradually intensifying sequence of three sibilant consonants in the words "brise," "jour," and "chaude."⁷ Code draws the analogy between the music and the text following multitextual listening to Debussy's piece as a musical interpretation of Mallarmé's poem. The music,

⁶ Goehr 2010, 393.

⁷ Code 2001, 518–520.

therefore, highlights for Code an element in the poem that otherwise may not attract attention. Indeed, the numerous analyses of Debussy's *Prelude* do not point to the crescendo metaphor. Moreover, the metaphor is dependent only on the music and the poem—it does not necessitate a mediating space to connect music and text, but the musical crescendo becomes itself a prism through which to consider the text, focusing on its sound.

An example to contextual representation in literary ekphrasis is found in Grant Scott's discussion of Keats's "On Seeing the Elgin Marbles for the First Time" (presented in Appendix 2.1). Scott argues that picturing the ruined marbles when reading Keats's poem is crucial for understanding the poet's sense of defeat especially at the end, when a series of dashes turns the last pair of lines into a succession of fragments.⁸ The poem does not aim to elicit an image of the marbles in a reader's mind, but rather takes it as a given that readers have already seen the marbles mentioned in the poem's title. Still, it is considered ekphrastic for taking the marbles as its subject. The poet's sensation of his own mortality, while looking at the acclaimed marbles presented in the British Museum in their degraded and decontextualized state, is expressed especially in the disintegration of the sonnet towards the end into the series of dashes that implies the poet's loss for words, or perhaps the poet's own demise.⁹ At the same time, Scott explains,

⁸ Scott 1994, 45–68.

⁹ Keats sent his poem to Benjamin Haydon with an accompanying poem titled "To Haydon" that begins with the following apology (Keats 1899, 36):

Haydon! Forgive me that I cannot speak
Definitively of these mighty things;
Forgive me, that I have not eagle's wings,
That what I want I know not where to seek, [...]

The apology may lead one to interpret the ending of the poem on the Elgin marbles as expressing Keats's loss for words. The second possibility of interpreting the dashes in the ending as expressing the poet's own demise would emerge from the poem's focus on the poet's sense of mortality, raised by his encounter with the marbles.

“like the curious mortality of the marbles [...], the sonnet—a moment’s monument of Keats’s own sculpting—crumbles and is at last held up by a scaffolding of makeshift dashes. As such, the ekphrasis [the poem] seeks to attain or reproduce the shape of the marbles themselves.”¹⁰ An ekphrastic reading of the poem, Scott suggests, makes it possible to interpret its ending differently. It opens up the possibility of relating the dashes to the marbles’ ruined condition, rather than to their impressiveness as products of a supreme civilization.¹¹ Indeed, up to the mention of a “rude wasting of old time,” one may get the impression that the poet is equally impressed and mortified by the marbles’ apparent grandeur. Scott’s interpretation, however, draws a direct connection from the run-down condition of the marbles to the disintegrated sentence structure of the poem’s ending lines.

I consider this contextual representation for several reasons. First, interpreting the last couple of lines in Keats’s poem as a poetic falling apart relies directly on the marbles as a metaphor; no mediating space is used to relate the poem to the ruins. Moreover, the metaphor does not rely on the cultural knowledge of readers, on the contrary—it is readers’ knowledge that leads them to focus on the grandeur of the marbles as expressions of a remarkable culture, while ignoring the way in which the poem may express the marbles’ incomplete state. Therefore, Scott’s metaphor elucidates elements in the visual artwork that are usually ignored. It depends only on the marbles as context, and it is interpretive and subjective: Scott aims to convince

¹⁰ Scott *op. cit.*, 56.

¹¹ *Ibid.*, 48–50.

readers to understand the last pair of lines in a new way, and indeed other interpreters offer different explanations for the meaning of the dashes in those lines.¹²

In summary, musical descriptive and contextual representation of another artwork differ in their construction, since descriptive representation relies on a metaphor shared between the mediums, while contextual representation entails a unique interpretive path between the two artworks that does not rely on a mediating metaphor—a singular connection is made between the two mediums. While descriptive representation depends on common cultural knowledge or experience,¹³ contextual representation is worked out in interpretation by listener-observers. Therefore, we can expect descriptive representation to be shared between different listeners, however contextual representation is subjective in the sense that different listeners will often develop distinct contextual interpretations. Indeed, Harrison's tone in his discussion of *The Isle of the Dead* suggests that he assumes other listeners interpret the 5/8 motive in a similar way, while Code proposes an original interpretation of the *Prelude*—rather than expecting listeners to interpret the music in the same way, he asks readers to consider his interpretation as a possible way of understanding the connection between the *Prelude* and the poem.

In analysis, descriptive and contextual representation are intended to be used as points of departure that frame analytical discussion focused on the particularities of each piece. The models provide analysts with a terminology, which allows a reflexive approach that clearly marks the boundaries between cultural and personal interpretation by stating which elements of representation in a particular case of musical ekphrasis arise from the cultural, stylistic, or other

¹² Other interpreters of the poem suggest that the closing lines are a type of conclusion to the poem; that they are a list of enigmatic associations; that they represent a sunset; and that they serve as a hidden reference to a mentor (ibid., 189n1).

¹³ Since different cultures conceptualize music differently, instances of descriptive representation would vary among cultures and periods (Larson op. cit., 316–317).

contexts that the piece carries, and which parts of the analysis are subjective, originating in the analyst's interpretation. While in the former case interpretive statements can be corroborated or refuted by readers, the latter case requires readers to hear the relationship in the way suggested by the author, while assuming that other rewarding and valid interpretations are possible.

The next section will employ some of the examples presented so far to discuss and demonstrate the use of Fauconnier and Turner's conceptual integration networks for explaining the construction of descriptive and contextual representation. The networks will be used to clarify the difference between the two representation types, and additional examples introduced in the next section will lead to an exploration of the boundaries between them.

2.2 Cross-Media Representation as Conceptual Blending

Descriptive and contextual representation are different types of connections made between separate cognitive structures. Linguist Gilles Fauconnier and cognitive scientist Mark Turner term the process in which such connections arise "conceptual blending."¹⁴ Two of the types of conceptual blending that they define broadly include descriptive and contextual representation, and the differences between types of conceptual blending will be used here to explicate the difference between types of representation. Conceptual blending is founded on basic building blocks, termed "mental spaces." Mental spaces are constructs that regulate the understanding of linguistic expressions, created instantly in one's mind in any discourse.¹⁵ For example, in order to comprehend the sentence "In Prokofiev's *Peter and the Wolf*, the bird is represented by a flute" we create a mental space that represents Prokofiev's piece. The creation

¹⁴ Fauconnier and Turner 1998.

¹⁵ Fauconnier 1994, 16.

of the mental space is subconscious; it occurs immediately when the sentence is heard or read. The words “in Prokofiev’s *Peter and the Wolf*” are the “space builder,” the impetus for generating the mental space, and the space includes the information provided in the sentence on *Peter and the Wolf*—the relationship between the bird and the flute. A more complex example is the sentence “Most people know that, in Prokofiev’s *Peter and the Wolf*, the bird is represented by a flute.” This latter sentence induces readers or listeners to create two mental spaces—the first represents what “most people know,” and the second is generated by the space builder “in Prokofiev’s *Peter and the Wolf*” as the previous sentence. The second mental space in this latter case, *Peter and the Wolf*, is dependent upon the first (“most people know”) which provides the context—the sentence frames the information on *Peter and the Wolf* within what most people know.

Conceptual blending involves at least four mental spaces—two input spaces, a “generic space,” and a “blended space.” Each input space is a mental space that provides the basis for the cognitive connection. For example, the metaphor implied in the sentence “She is fishing in troubled waters” includes the input space “fishing,” and also the input space “she,” the person to whom the speaker refers. The generic space includes the construct that the two input spaces have in common. For instance, the generic space of the metaphor “fishing in troubled waters” is extreme difficulty—she is doing something very difficult, which is compared to fishing in troubled water. The blended space contains the mapping between the two input spaces using the generic space. The difficulty of fishing in troubled waters is mapped onto the input space “she,” so that the blended space includes: she is doing something as difficult as fishing in troubled waters.

When applied to musical ekphrasis, the two input spaces would include elements in the musical composition and the other artwork; the generic space is the common concept or relationship that guides the mapping between these elements, and the blended space contains the ekphrastic representation. Conceptual integration networks (CINs) model conceptual blending, and can be represented in diagrams that visualize the cognitive stages involved in creating metaphors. CINs have already been applied to the interpretation of music, notably by Lawrence Zbikowski.¹⁶ Framing intertextual analyses using CINs allows analysts and readers to consider the interpretation methodically, and to distinguish clearly between instances of descriptive and contextual representation.

As an example of the use of CINs in musical ekphrasis, the diagram in Figure 2.1 shows the network created when listeners hear the 5/8 motive from Rachmaninoff's *Isle of the Dead* as a representation of the motion of the boat in the painting. The two "input spaces," the mental spaces to which the metaphor applies, are marked M for music and P for painting. In the construction of the metaphor, they are mapped onto one another through the shared metaphor presented in the generic space, the mental space that contains what the input spaces have in common—the metaphor of motion, expressed musically and visually in the two artworks. The blended space below combines the two input spaces according to the connection made in the generic space, linking the visual motion to the musical motion in a musical representation of the painting's boat. Using Fauconnier and Turner's terminology, the network in Figure 2.1 is a "shared topology network," meaning that each of the input spaces projects the organization of the generic space without the other input space—in this case, each of the music and the painting

¹⁶ Zbikowski 2002.

gives rise to the metaphor of motion independently from the other input space.¹⁷ Other types of CINs may feature different connections between the generic space and the input spaces—as we shall see, in a different type of network the generic space represents the organization of just one of the input spaces, which is then projected onto the other to create the metaphor. Shared topology networks are characteristic of descriptive representation, since they rely on the commonality of the metaphor’s mapping to both input spaces—the common concept is expressed in a different way in each input space.

¹⁷ By “topology” Fauconnier and Turner are referring to the way in which the constituent parts of the generic space are arranged. In the CIN in Figure 2.1, the metaphor of motion constitutes the arrangement of the generic space. Each of the input spaces—the 5/8 motive and the boat in the painting—features the metaphor of motion separately.

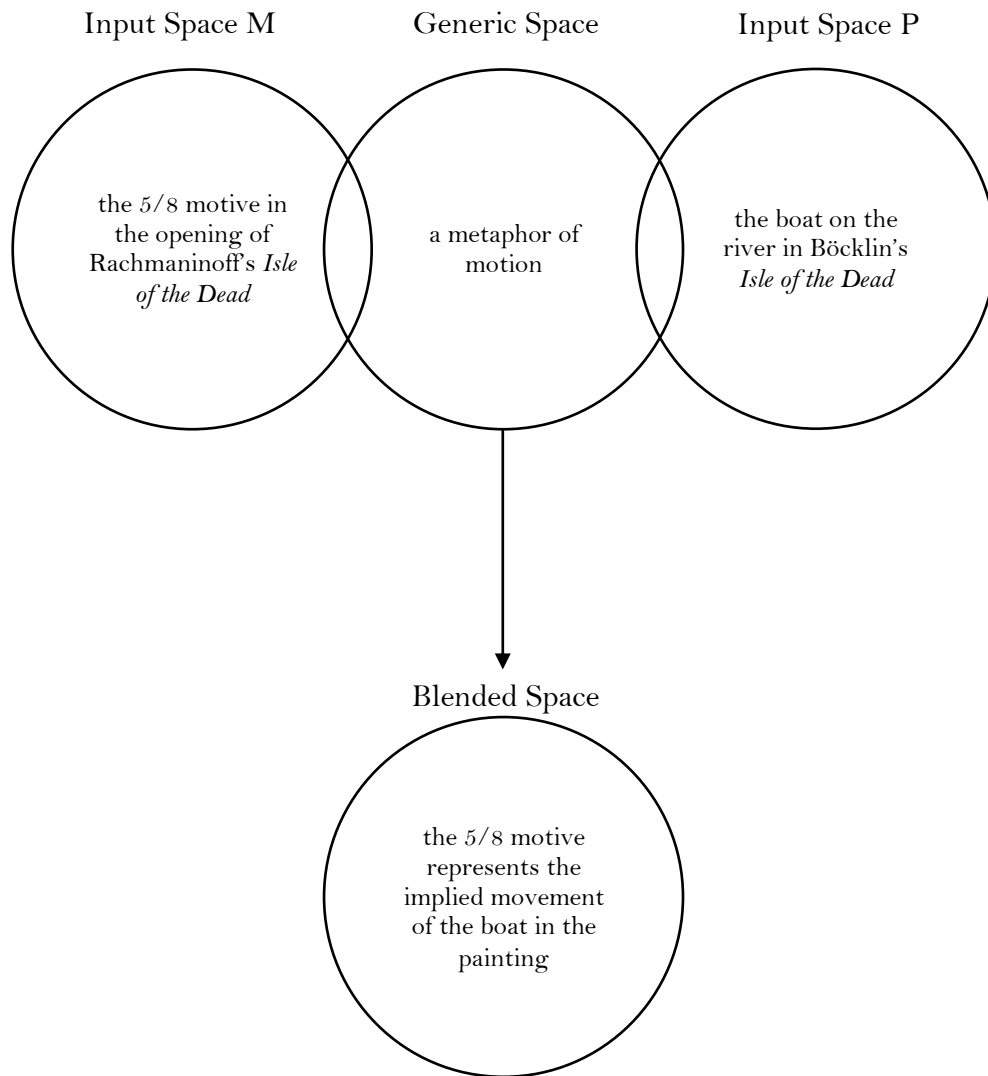


Figure 2.1: Musical Representation of the Boat in Rachmaninoff's *Isle of the Dead*

An example of contextual representation, the diagram in Figure 2.2 presents the network at the basis of Code's interpretation of the crescendo in Debussy's *Prelude*. While both input spaces, the musical and the poetic, feature a crescendo, it is Code's interpretation that considers the musical crescendo as highlighting the literary. Therefore, the blended space is the result of a projection from the input space of the music onto that of the poem: the music input space projects its organizing principle, the crescendo, onto the poem's input space. Such a network, in which one of the input spaces projects its organization onto the other, is termed "single scope"

network by Fauconnier and Turner. Single scope networks are typical of contextual representation, since such representation entails a new understanding of the represented artwork through interpretation of the ekphrastic artwork. In contrast to the shared topology network typical of descriptive representation, in which each input space features the mapping of the generic space, a single scope network means that one input space is projected onto the other.

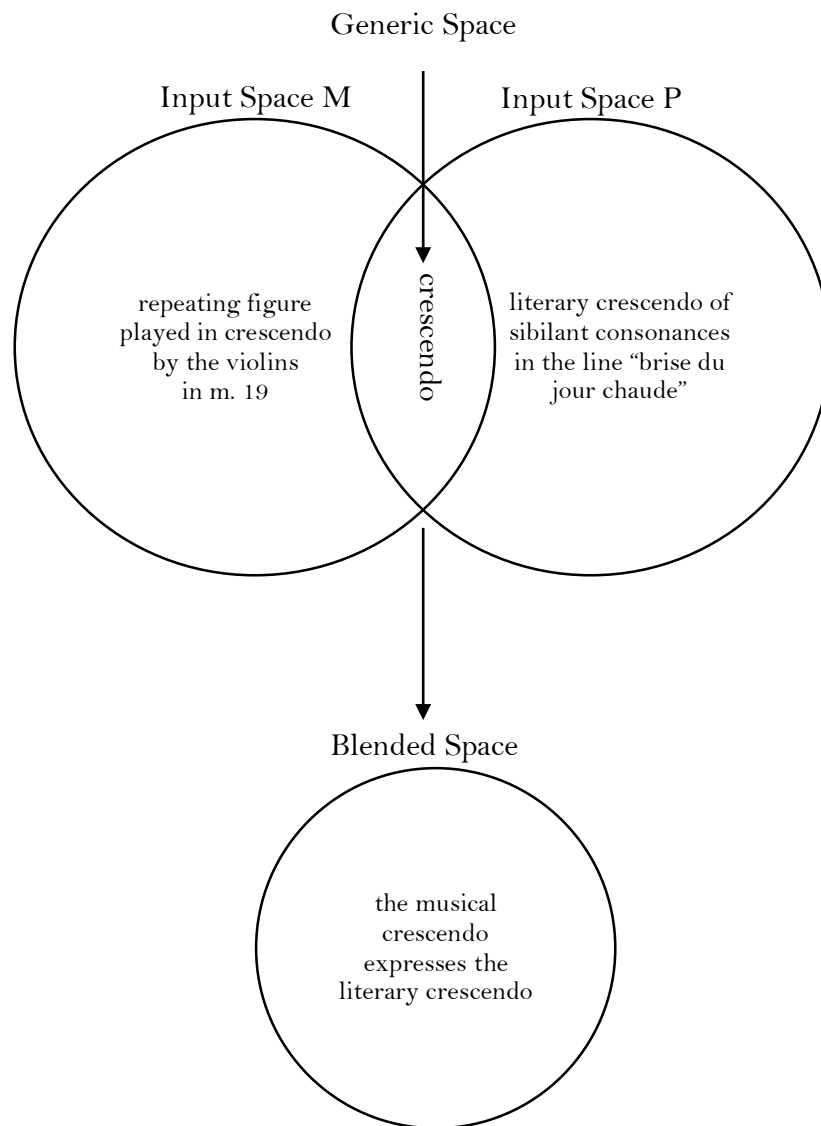


Figure 2.2: David Code's Interpretation of Debussy's *Prelude* as Expressing Mallarmé's Poem

A more complex example of descriptive representation is the climactic moment in the documentary film *Man on Wire*, depicting French acrobat Philippe Petit's famous wire-walk between the Twin Towers in 1974. Apart from the scene's position as the pinnacle of the entire film, which tells the story of the extensive preparations and nerve-wracking journey Petit and his crew undertook to perform this incredible feat, this moment is unique for combining still images of Petit's walk interwoven with emotional accounts of his crew who were watching; the film in general consists of interviews and footage. However, there is no video footage of Petit's walk between the Towers. Erik Satie's *Gymnopedie* no. 1 is used as the musictrack in this scene. In his discussion of the music used in *Man on Wire*, John Corner lists the scene as one of the most memorable moments in the film.¹⁸ The combination of Satie's music with the still images, seen for the most part without verbal narration, and the interspersed descriptions of Petit's crew, who illustrate the sense of time stopping still as they are holding their breath first in fear and then in awe, certainly create a unique moment in the film. The music contributes to the striking effect of the scene in reinforcing the sense of a stopped moment in the film's narrative as well as the acrobat's virtuosic movements that the photos depict. Figures 2.3a and 2.3b present the two instances of descriptive representation arising from the use of Satie's piece as musictrack for the scene.

¹⁸ Corner 2015, 129.

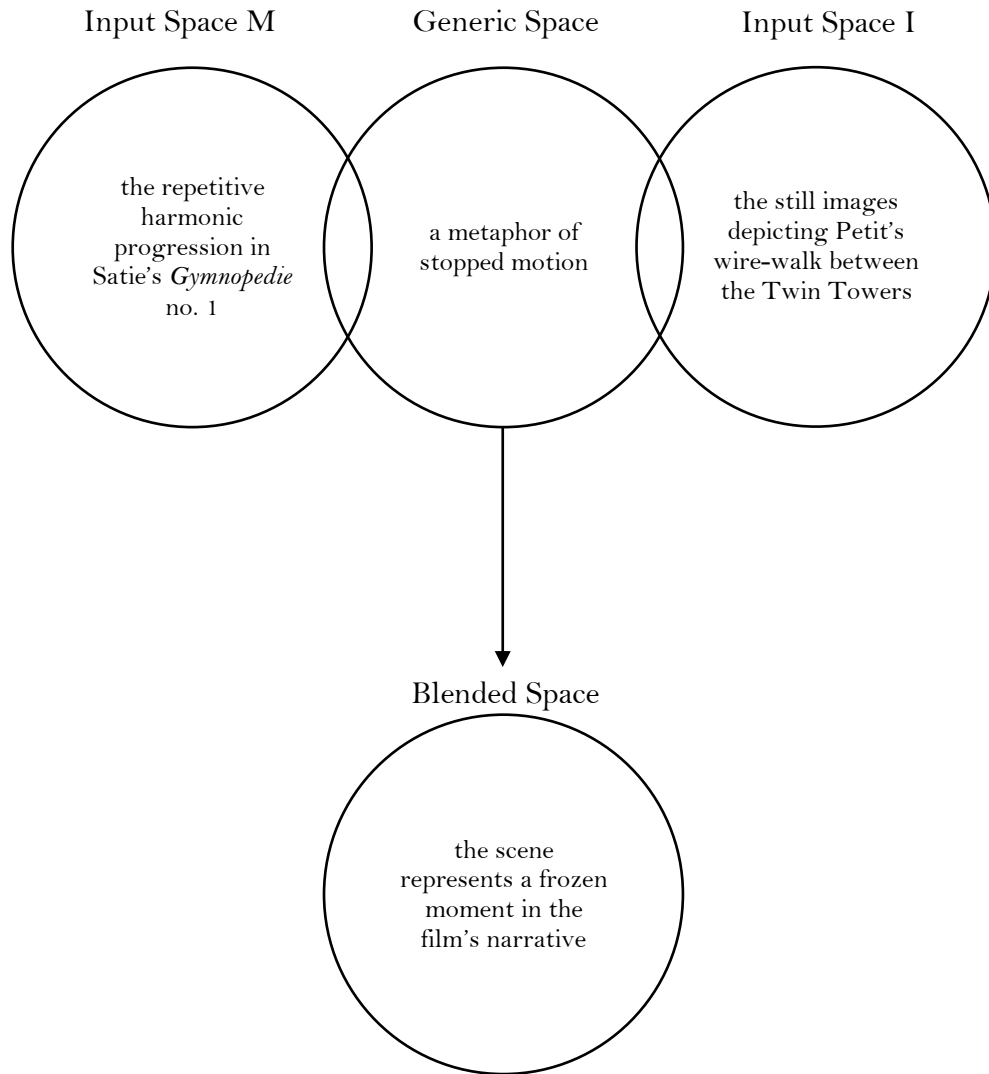


Figure 2.3a: The Musictrack of the Wire Walk in *Man on Wire* Reinforcing a Freeze in the Narrative

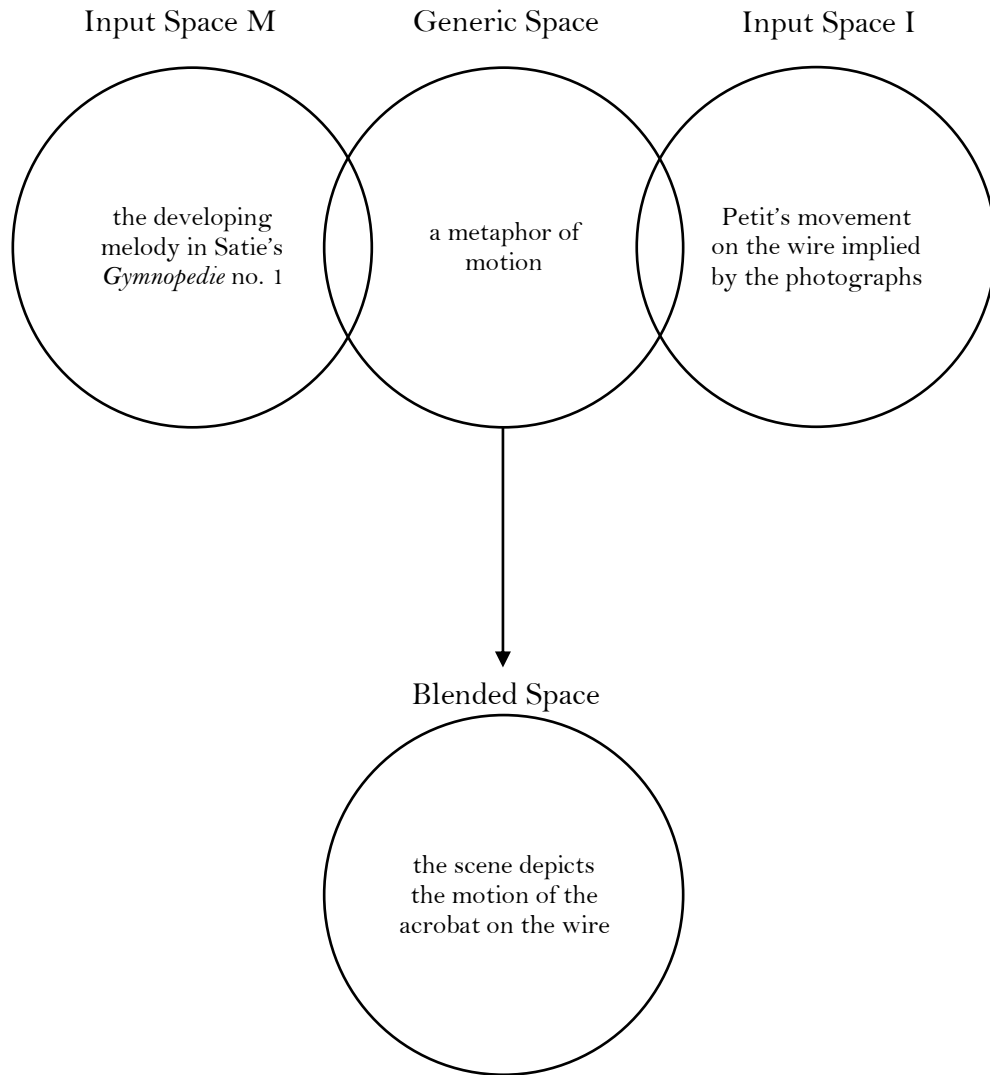


Figure 2.3b: The Musictrack of the Wire Walk in *Man on Wire* Reinforcing the Implied Acrobatic Movement

Both the still photographs and Satie's piece provide a combination of stasis and movement—the series of photos depicts the acrobat walking, lying, and gesturing on the wire, however they also freeze the movement of the film, reflecting the sense of holding one's breath in suspense. In the music, the sense of stasis originates in the harmony, which repeatedly alternates two major seventh chords in a plagal progression. The sensation of motion emanates from the directed melodic line. Overall, the combination of stopped motion and directed

movement, featured in different ways in the scene's music and imagetrack, brings Corner to claim that "although Satie's piece has been used elsewhere in film soundtracks, its employment in this core scene [...] makes it [...] the defining music of the film."¹⁹ In combining these two opposed senses, Satie's piece engenders an especially powerful effect in the scene.

The examples above demonstrate that descriptive and contextual representation are not categories for classifying pieces, but are useful for identifying ways in which connections are made between components of artworks or moments in musical multimedia works. An ekphrastic piece and the artwork that inspired it are likely to feature numerous instances of descriptive as well as contextual representation. Rather than a categorizing principle for music, the two types of representation provide a conceptual framework for understanding the various relationships created between different mediums or art forms. Each case of intertextual interpretation would feature a singular interplay of these two types, and it is the particularities of representation that become the focus of interpretation.

The following section proposes a method for approaching musical ekphrasis based on descriptive and contextual representation. While an analyst may choose to forego some of the proposed stages, or to focus on some stages more than others, the method provides a comprehensive approach that takes aspects of representation into account as well as moments that do not imply relationships between the artworks.

2.3 An Analytical-Interpretive Approach for Analyzing Musical Ekphrasis

Despite their differences, both descriptive and contextual representation are based on the perception of similarity between the two input spaces, which Cook termed "enabling

¹⁹ Corner op. cit., 129.

similarity”—the ability of each input space to either support a given metaphor, or not to resist it. While descriptive representation entails a shared metaphor that each artwork supports, contextual representation involves the projection of a metaphor from one of the artworks onto the other; for contextual representation to be formed, the latter artwork needs only not to resist the construction of such a metaphor. For example, the line “brise du jour chaude” in Mallarmé’s *The Afternoon of the Faun* does not resist the projection of the musical crescendo, while the boat in Böcklin’s *Isle of the Dead* not only affords but supports the metaphor of motion, since it implies movement even without Rachmaninoff’s musical representation. However, both Kofi Agawu in his discussion of nineteenth-century Lieder and Nicholas Cook in his work on music in multimedia works rightly emphasize the importance of treating moments of contrast in analysis in addition to aspects of similarity between media or artworks. Therefore, Cook’s contest model explained in the previous chapter for cases in which substantial differences arise between media, prevalent in song settings and film music,²⁰ also plays a role in musical ekphrasis. A sense of contest in musical ekphrasis would be created by elements in the composition that are *not* heard as representing elements in the other artwork and vice versa.²¹ Analysis of musical ekphrasis would include these elements, because the moments in which an ekphrastic composition is heard as not related to the other artwork are no less important than moments in which connections are

²⁰ “Singing in the Rain” heard as diegetic music during a violent rape scene in Stanley Kubrick’s *A Clockwork Orange* (1971), Stealers Wheel’s “Stuck in the Middle with You” used for an especially gruesome moment in Quentin Tarantino’s *Reservoir Dogs* (1992), and the chilling effect of Louis Armstrong’s “It’s a Wonderful World” heard in the background of images of the planes crashing into the World Trade Center in Michael Moore’s *Fahrenheit 9/11* (2004) are just a few well-known examples of this highly effective device.

²¹ According to Cook, “IMMs [instances of multimedia] that involve the addition of a new medium to an existing production are a particularly rich source of examples [for contest].” (Cook op. cit., 103). Ekphrastic compositions are not *added* to existing artworks but are heard side by side with them, yet they have a similar potential for contest resulting from their relationship to another artwork.

made—both shed light on the interpretive relationship between an ekphrastic composition and its object artwork by showing which elements are, and are not, included in the interpretation.

The following is a method for analysis of musical ekphrasis. The stages can follow one another in any order that seems appropriate to the particular case:

- Analysis of the object of ekphrasis, touching on issues of structure and surface, and raising any observations that seem interesting and significant to that artwork using methods appropriate to the work's genre and style;
- Analysis of the ekphrastic artwork, touching on issues of structure and surface, and raising any observations that seem interesting and significant to that artwork using methods appropriate to the work's genre and style;
- Interpretation of the ekphrastic artwork in context of its object that investigates whether there are components that can be explained as results of descriptive or contextual representation of components in the object of ekphrasis;
- Interpretation of the object of ekphrasis in context of the ekphrastic work that investigates whether there are components that can be explained as results of descriptive or contextual representation of components in the ekphrastic artwork.

The resulting analysis would include a full interpretation of the reciprocal relationship between the ekphrastic work and the object of ekphrasis as understood by the analyst, as well as analytical discussion of notable features in each of the artworks that are not considered representational.

Both types of discussions, of each artwork by itself and of their connection to one another, would be interpretive—by choosing which components the analysis features, an analyst is necessarily making interpretive decisions. The differentiation in the wording of each stage between analysis and interpretation aims only to highlight the difference of context between the act of approaching each artwork independently (as if it is not part of an ekphrastic relationship), and in the act of

interpreting each artwork in relation to the other. Each of the artworks can be featured by itself in a concert, an exhibition, or a book, while the other artwork, although contributing to a richer understanding of the former, is not required for the former to make sense. Therefore, one would expect some components in each artwork in a given analysis not to be included in the ekphrastic interpretation, yet to be significant enough that the analysis would mention them. Different analyses of an ekphrastic relationship may feature differing ekphrastic interpretations, in which case a reader of the analyses would gain multiple ways of hearing, reading, or viewing the artworks.

According to this method, each of the artworks would be treated as an independent piece and as a component of a “virtual multimedia work.” An ekphrastic piece and its object artwork do not create a multimedia work per se—they were created separately, they are not synchronized with one another, and they are not necessarily heard, seen, or read at the same time. Therefore, treating them as components of a multimedia work by focusing solely on the connections between them, as film music analyses tend to do, would result in analysis that falls short of noticing important aspects of the experience of each work. Yet, their relation to one another, which reminds of Cook’s record-sleeve example discussed in the previous chapter, means that musical ekphrasis is closely related to musical multimedia works.

The following builds on the models introduced here to clarify what it is that musical ekphrasis *does*—what it means to claim that a composition brings another artwork into presence.

2.4 Defining Musical Ekphrasis

After considering the kinds of relationships listeners create when comparing an ekphrastic composition to the artwork that it takes as its subject matter, it is time to reexamine

the words commonly used when referring to that relationship. In particular, it is time to contemplate the meaning of references made in writings on musical ekphrasis to the connection between the two artworks as “re-presentation” (Goehr), “poetic description,” “a sounding gloss that releases the frozen composition of a painting or drawing into the fluid, dynamic state of musical composition” (both by Grey), and “paraphrase” (Kramer). What the different definitions have in common is the idea of musical ekphrasis as presenting something from another artwork, or the entirety of that work, *again*. While Goehr’s and Kramer’s definitions refer to a relationship akin to translation—expressing the same thing in a different artistic “language”—Grey’s idea of ekphrasis as poetic description, and his reference to the ekphrastic piece as fleshing out an intrinsic temporal potential inherent in its object, places more weight on the interpretive aspect of ekphrasis, its ability to realize something not already apparent in the other artwork.

It would be too simplistic to take Goehr’s and Kramer’s definitions at face value. Indeed, Goehr asks whether, in presenting a painting again, musical ekphrasis renders it redundant. She immediately answers “not if our interest was in how the musical work changes our understanding of the painting.”²² Therefore, Goehr justifiably considers the achievement of ekphrasis in providing an interpretation to the other artwork. I believe that the function of ekphrasis—to raise an image in the mind’s eye—is distinct from a physical presence of that image in the interpretive aspect that comes into play; what a listener to ekphrastic composition gets (like a listener to ekphrastic speech) is a viewpoint on that other artwork, a perspective that highlights some elements of that artwork while foregoing others. Such perspective has the power to change, as Goehr writes, listeners’ understanding of that work.

²² Goehr op. cit., 404.

Since analyses of musical ekphrasis often include multiple components of descriptive and contextual representation as well as elements that are not considered representational, only part of an ekphrastic composition re-presents, or presents again, the other artwork, and (as in any act of interpretation) just a part of that artwork is being re-presented. As will be shown in the next chapter, an artwork can inspire numerous ekphrastic compositions, each presenting a different interpretation of that work. Two ekphrastic compositions of the same artwork can present different interpretations of the same components; they can present interpretations of different elements from the artwork, or—as happens most often—a combination of both options.

Moreover, the way in which a composition interprets another artwork as musical ekphrasis is also open to interpretation. While descriptive representation can be founded on common cultural knowledge, and different listeners (versed in that culture) are likely to interpret elements of descriptive representation similarly, contextual representation is often unique to the interpretation of an individual listener. In addition, contextual representation is unique to the piece in the sense that the same element in a different piece may not be understood as representational at all, or may be considered representational in a different way. Furthermore, the understanding of elements of contextual representation can vary even between different hearings by the same person. This means that listening to musical ekphrasis is not a passive behavior, but rather an activity. Like Quintilian's extraordinary response to Cicero's ekphrasis mentioned in the previous chapter,²³ one's understanding of musical ekphrasis reflects skill and can change and develop over time, as with any other type of analysis.

²³ Ruth Webb quotes from Quintilian's description of his experience reading a passage from Cicero's *Verrine Orations*, in which Quintilian found himself imagining details that were not even mentioned in the text. Quintilian attributed the detailed images raised in his mind's eye to Cicero's outstanding *enargeia*. However, Webb emphatically points to the skills insinuated in

To put it in a nutshell, when I make statements throughout this study that a piece, or something in a piece, represents, expresses, interprets, or conveys another artwork or something in that artwork, I refer to either a single example of descriptive or contextual representation or, in the case of a complete composition representing another artwork, I refer to the entire collection of components that, through descriptive and contextual representation, allow me to mentally construct a musical interpretation of the other artwork in listening. In the following, I explain the reasoning behind the choices of musical examples in the next analytical chapters and how analyses exemplify different aspects of musical ekphrasis.

2.5 The Examples of Musical Ekphrasis Chosen for this Project

Each of the following chapters focuses on a different type of cross-media interaction: music and painting, music and space or structure, cross-work interaction between two pieces of music, and lastly a piece of program music that has the potential to become the object of an ekphrastic film scene. When choosing examples of musical ekphrasis, I focused on twentieth-century instrumental pieces. Although there are many examples of earlier pieces that could be included in this project, it seems to me that a greater contribution would be made by dealing with pieces that do not adhere to tonal conventions, and do not necessarily carry a baggage of analytical methodologies one would be expected to use when approaching them. There is a rich literature on representational elements in tonal harmony from the perspectives of musical semiotics, topic theory, and musical multimedia. However, there is a gap to be filled when it comes to representation in post-tonal music. In addition, considering post-tonal works as musical ekphrasis provides a way of approaching components in the pieces that may otherwise seem

Quintilian's text that a reader must acquire in order to appropriately perceive and respond to Cicero's exquisite *enargeia* with an especially vivid imagination (Webb 2009, 21).

obscure and therefore end up outside the analytical discussion. Moreover, post-tonal music is commonly considered less approachable or communicative to listeners, as one can gather from examining the programs of symphony and opera houses, which commonly feature, in the best scenario, just a few productions of works composed after 1900 in a season. Ekphrastic twentieth-century pieces, however, have the potential to be perceived as more approachable to listeners than other pieces of the same period, because their connection to other artworks provides ways of understanding them that do not require extensive musical training or habitual exposure to a vast body of works. Two out of three analyses of musical ekphrasis focus on pieces made after works that involve visual art—Paul Klee’s painting *Die Zwitschermaschine* and Mark Rothko’s chapel—with the goal to enrich music-theoretical discourse, which already includes innovative approaches to pieces composed after poems,²⁴ as well as writings on programmatic music, while fewer studies are dedicated to intertextual interpretations of instrumental works.

²⁴ Apart from Agawu’s project on analysis of Lieder (Agawu op. cit.), a few central examples include David Lewin’s work on music with text (Lewin 2006), Yonatan Malin’s study of Lieder (Malin 2010), and Andrew Mead’s intertextual analysis of Milton Babbitt’s *Philomel* (Mead 2004).

Chapter 3

Reciprocal Interpretations of Music and Painting: Representation Types in Schuller, Tan, and Davies after Paul Klee

Paul Klee's 1922 painting *Die Zwitschermaschine* is unique for inspiring an exceptional variety of musical compositions, three of which are the focus of this chapter. The sheer number of compositions based on *Die Zwitschermaschine* (Appendix 3.2 lists twenty two such pieces) may lead one to suspect redundancy in representation—after all, how many different ways could there be for music to express a painting of four creatures on a mechanism? However, the three works at the focus of this chapter—by Gunther Schuller, Tan Dun, and Peter Maxwell Davies—will give a sense of the variety of ways in which music can be heard as interpreting a painting. Each piece provides an interpretive path into the painting by including a distinct combination of descriptive and contextual types of representation. In this chapter, I propose an approach to analyzing pieces that take paintings as their subject matter. As a second step, I flip the relationship around and explore how music can affect the way in which we *view* a painting—how the painting is interpreted by music.

In this chapter, I do not aim to trace all ekphrastic interpretations possible for each the three pieces, but instead focus on my own interpretation as a listener and musician, while situating my “hearings” (to use Guck's word¹) in the larger context of musical modes of representation. Other analysts could come up with interpretations that reveal additional

¹ Guck 2006.

intertextual relationships, which they could situate using the theoretical framework proposed here.

Each of the three ekphrastic compositions analyzed in this chapter exemplifies a distinct interplay of descriptive and contextual representation in its expression of Klee's *Die Zwitschermaschine*. One of the differences between their forms of representation is found in the way in which they imitate, or avoid imitating, the sound of birdcalls to express the birds depicted in the painting. Musical representations of the painting, depicting a machine that produces birdcalls, could either take advantage of music's ability to imitate tweets or find other ways of representation altogether. While I hear two of the pieces, by Tan Dun and Gunther Schuller, as imitating tweets to some extent, Peter Maxwell Davies's representation avoids such imitation. Even among Schuller's and Tan's representations of birdcalls I find substantial differences, with the latter presenting birdcalls in an exaggerated manner similar to the sounds of animated cartoon figures, bringing out the humoristic aspect of the painting. Other differences between the representational properties of the pieces are found in their attempt, or lack thereof, to interpret the way in which the painting's twittering machine operates, thereby adding new information left undetermined by the image.

My discussion of the pieces is preceded by a short interpretive description of Paul Klee's painting, since understanding the three pieces qua musical ekphrasis depends on familiarity with the object that they represent. Subsequently, I focus on each piece and suggest a multitextual interpretation. Lastly, I draw conclusions on the way that each of the compositions impacts the interpretation of the painting.

3.1 Paul Klee's *Die Zwitschermaschine* (1922)

Paul Klee's paintings in general, and *Die Zwitschermaschine* in particular, are especially suitable for this project. Born to a family of musicians, Klee was a gifted violinist who expressed musical ideas in his paintings, viewing both arts as temporal.² He applied musical concepts in his paintings and developed a "musical theory of painting" consisting of "individual" and "structural" elements, the former expressing the innovative and irregular elements of a painting, while the latter is divisible into small units, serving as the foundation over which individual components are presented. In addition, numerous paintings by Klee feature musical topics or incorporate elements of musical notation.³ It is not surprising that paintings by Klee became the inspiration to numerous musical compositions.⁴

Die Zwitschermaschine, shown in Appendix 3.1, depicts four bird-like creatures standing on a wire, which is loosely connected to a mechanism operated by a manual crank. The handle seems to be in motion, but we cannot see the hand operating it. The birds' bodies are depicted like stick figures that contrast their massive heads in a grotesque and cartoonish manner. Their heads are shaped similarly to fermatas, with their bills filling in the fermatas' open spaces. Maurice Shapiro remarks that the painting has dark undertones—a close look reveals that arrows pierce each of the birds' heads (apart from the leftmost bird).⁵ Moreover, except for the leftmost bird, that gives the impression of the leader of the group, the birds look quite miserable. The second bird, for example, is looking directly downward, like an inverse of the first bird. Its bill is

² Paul Klee, *Diaries*, 177 (entry no. 640), cited in a different translation in DÜchting 2012, 9.

³ Examples include *Drawing (Instrument for the New Music)*, 1914; *Drawing with the Fermata*, 1918; *Singer of the Comic Opera*, 1923; *Abstract Trio*, 1923.

⁴ A concise discussion of Klee's theory appears in DÜchting 2012, 33–64.

⁵ Shapiro 1968.

open wide, perhaps involuntarily, and its note-shaped tongue is drooping, almost curling backwards. The third bird is standing taller and seems steadier than the two birds adjacent to it on both sides. Its tongue is curled upward, and its head is turned slightly downwards. There is an arrow piercing its eye, which is completely black. The fourth bird is striking for its apparent determination. Facing the right side of the painting with its head tilted slightly upwards, its tongue is shooting out of its beak like a sharp arrow directed toward the upper right corner, where gray clouds seem to be approaching. The birds direct their tweets in all four directions in this image, which is humorous and sinister, while at the same time touching in the futility of the mechanical contraption. The twittering machine's mode of operation is left undetermined in the painting, since the engineering detail is inexplicit.

In general, the depiction of four birds is symmetrically organized. The birds can be segmented into two pairs according to the direction of their heads, each containing a tall and a short bird standing side by side, with their heads directed 180 degrees from one another. Such structure can bring to mind different connotations. Shapiro, for example, likens the structure to iconography of the Wheel of Life, which depicts the four stages of life in a sequence.⁶ They are standing on a mechanism controlled by a crankshaft, but the person operating the manual is missing from view. The machine's stand ends with four legs on the ground, its back legs seeming longer than the front, which end out of view inside a ditch dug in the ground. A wire frame is placed over the opening of the ditch, with two pegs that hold it over the ground at the front, on both sides of the machine's stand. Shapiro describes the frame as made of mesh, but the light

⁶ Ibid., 69. In such case, one could ask who would be turning the wheel's crank in the painting's metaphor, in order for life to progress in its different stages.

coming from above and reflecting in the transparent surface of the frame suggests it may be made of glass or some other reflective and translucent material.⁷

Shapiro suggests that the painting relays a conflicted relationship between industry and the natural world, represented by a man-made device aimed to control natural birdcalls in the form of a distorted music box that fetishizes birdsong.⁸ He also proposes that the machine is a bird trap and illustrates three ways in which it could fulfill this purpose. The frame could be used to trap birds who enter the ditch below the machine; moreover, the black blots surrounding the birds could represent lime, which is sometimes employed in fowling to glue a decoy bird on a twig or branch, and its calls then attract other birds. On a side note, before birds are captured the decoy bird is often fatally injured, adding another dark undertone to the painting—the tweets of the birds will eventually bring to their death.⁹ Finally, Shapiro proposes that the machine’s governor, consisting two white triangles, could denote a revolving mirror used to attract birds.

The painting may be popular among composers for its inherent musicality, expressed in the image of birds with open beaks (which bring to mind songbirds). The machine seems to invite spectators to metaphorically turn the crank and imagine the sounds that would come out. Numerous composers have accepted the challenge over the years and suggested various sonic

⁷ *Ibid.*, 67.

⁸ Janson, on the other hand, describes the twittering machine as “a ghostly mechanism that imitates the sounds of birds, simultaneously mocking our faith in the miracles of the machine age and our sentimental appreciation of birdsong” (Janson 1963, 527).

⁹ In his worldwide account of fowling methods, Hugh Alexander Macpherson mentions numerous techniques of trapping birds using decoy birds and lime. An especially cruel procedure, used for catching shrikes, seems particularly fitting to Klee’s painting. It involves sewing the eyelids of a captured shrike and gluing it to a branch (in Klee’s painting, the eyes are maimed instead by the arrows). The shrike’s tweets attract other male shrikes in the area, which attempt (and many times succeed) to attack and kill the decoy bird, getting captured in the process (Macpherson 1897, 80–81).

depictions of the machine, and we can expect additional musical twittering machines to be created in the future. Three of these realizations, constituting differing approaches to musical representation, are examined below. The analytical discussion begins with the two pieces that feature descriptive representation most strongly and continues to Peter Maxwell Davies's musical machine, in which contextual representation is dominant.

3.2 Gunther Schuller's "Die Zwitschermaschine"

Gunther Schuller's "Die Zwitschermaschine" is the middle movement of his *Seven Studies on Themes of Paul Klee* (1959), a collection of short movements for orchestra, each based on a Klee painting.¹⁰ "Die Zwitschermaschine" might have been difficult to understand without the reference to a twittering machine in the title—the movement opens with a buzzing sonority that returns twice more later. Short and fragmented sounds distributed among different orchestral sections are added to the initial hum and gradually take over as the hum ceases. The following analysis will first focus on these short fragments, which give the impression of a stylized version of birdcalls. I will then consider the role of the accompanying percussion instruments, the significance of the twelve-tone row that governs the fragmented sounds' pitch-class material, and suggest an interpretation to the buzzing sound from the opening. Lastly, I will suggest a way in which Schuller's movement helps interpret ambiguous aspects in the image.

This analysis agrees with Siglind Bruhn's interpretation of the composition in some details, but departs from it in other points.¹¹ Bruhn's discussion, organized as a chronological

¹⁰ Oliver Knussen and the BBC Symphony Orchestra's 2015 recording of Schuller's "Die Zwitschermaschine" is available on the following link: <https://youtu.be/jUmYkbCchWg?t=7m51s>.

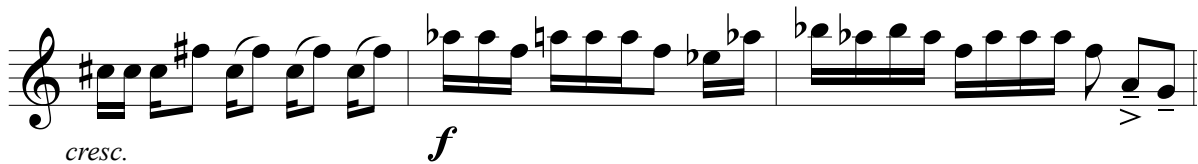
¹¹ Bruhn 2000, 372–376.

account of the movement, interprets the movement qua ekphrasis as cultural critique on humans' obsession with abstraction, which she also understands as the statement that the painting makes. The buzzing sonority that opens the movement expresses the mechanism, and the changing tempo embodies the speed in which a human hand is turning the painting's crank. When the music decelerates, it means that the person turning the crank is becoming tired or bored. The glissando following the deceleration suggests that there is a minimal speed in which the crank needs to be turned for the machine to produce accurate tweets. The mechanical origin of the tweets is betrayed by their high degree of pitch-class organization. In the second part of the movement, after m. 42, the person starts to turn the crank in the opposite direction, resulting in a reversal of the order of events in the movement. Rather than suggesting a replacement for Bruhn's analysis, I would like to propose and explore other possible ways of understanding the piece.

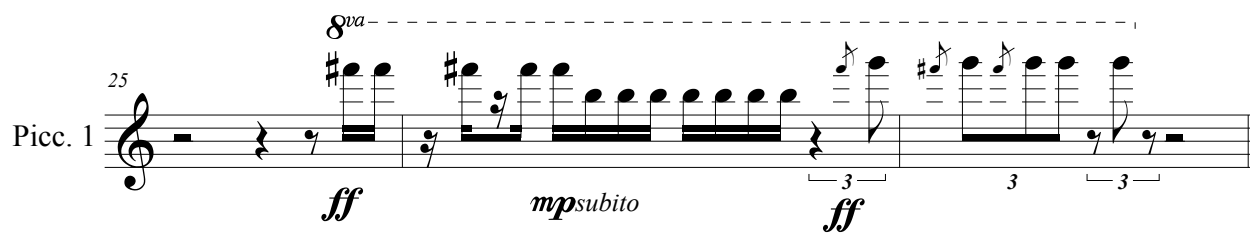
Of all pieces composed about Klee's *Die Zwitschermaschine* I will examine in this chapter, Schuller's movement sounds to me the most depictive in representing the painting for the imitative qualities of the birdcalls in the piece. I am not the only listener hearing musical birdcalls in the rhythmically fragmented sounds beginning in m. 5, as evident in Siglind Bruhn's analysis. However, it seems unlikely that Schuller based these sounds on musical transcriptions of birdcalls (like those in the music of Olivier Messiaen). Some of their characteristics are similar to what I perceive as properties of birdcalls in nature, and I wonder about the musical means that allow such a hearing of material based on the transformations of a twelve-tone row. My hearing, as well as Bruhn's analysis, calls for examining the musical birdcalls more closely. Comparing them to recordings of birdcalls in nature, I notice that the resemblance originates in an avoidance of pulse and a high rate of rhythmic variation. In addition, the variety of

instruments and instrumental combinations that generate the tweets in the movement suggest that a group of different bird species is heard rather than a single bird type. Lastly, the use of a twelve-tone row, surprisingly, helps rather than hinders the convincing impression of musical birdcalls.

Both rhythmic and instrumental diversity, and especially the lack of a sense of beat, contribute to the perceived randomness that is characteristic of birdcalls in nature, whose rhythmic qualities have been described as “jumbles” and “rhythmic pedals” by Messiaen.¹² For example, see an excerpt from Messiaen’s stylized transcription of the lark’s call in Example 3.1a.¹³ Similarly, some of the “tweets” in Schuller’s piece, as the excerpt in Example 3.1b, contain repeating pitches in rhythmic groups while avoiding a sense of pulse.



Example 3.1a: Excerpt from Messiaen’s transcription of the lark call



Example 3.1b: Stylized “tweets” in Schuller’s “Die Zwitschermaschine,” mm. 25–27

¹² Messiaen 1944/1966, 38.

¹³ The transcription is taken from Messiaen 1944/1966, 39.

However, musical birdcalls throughout the movement are not heard individually—the music consists of a multiplicity of tweets heard simultaneously, as if listening to a group of birds from different species. The diversity of rhythms and articulations, which sounds at first as if not regulated by a system, is a crucial contribution to the convincing impression of the birdcalls, since the constant variation causes the tweets to sound spontaneous and improvised rather than carefully predetermined. Example 3.2 presents two measures from the first moment in the piece in which only musical tweets are heard, demonstrating that there is little repetition of rhythm and articulation between the different parts, resulting in an impression of spontaneity that is nonetheless completely determined and organized. Concurrent tweets, for example, have differing rhythms for the most part—see the flute’s eighth note at the end of the second measure of the example, superimposed on the piccolos’ triplet eighth notes, such that they are heard slightly displaced rhythmically from one another.¹⁴ The changes in instrumentation between the tweets add another dimension of diversity; overall, I get the impression of a multiplicity of different birds, more than the four birds in the painting, heard at the same time.

¹⁴ When simultaneous tweets have the same rhythm, they also share a common pitch, as in the two piccolos at the end of the second measure in Example 3.2, creating diversity in instrumental color (rather than pitch or rhythm).

The image shows a musical score for three staves, labeled 'A' in a box on the left. The instruments and parts are: Fl. 1, Picc. 2, Clar. 1, Picc. 1, E. H., Ob. 1, Picc. 1, Fl. 1, Ob. 1, Bssn. 1, Vln. 1, Vln. 1 solo, Vln. 1 solo, and Picc. 1 + 2. The score consists of three staves of music. The first staff has notes for Fl. 1, Picc. 2, Clar. 1, Picc. 1, E. H., Ob. 1, Picc. 1, and Fl. 1. The second staff has notes for Ob. 1, Bssn. 1, Vln. 1 solo, and Vln. 1 solo. The third staff has notes for Vln. 1 and Picc. 1 + 2. There are several triplets indicated by a '3' and a bracket under the notes. The music is in a 2/4 time signature.

Example 3.2: Musical tweets in mm. 9–10 (showing sounds heard instead of the notated harmonics)

Siglind Bruhn observes that the tweets are regulated by a twelve-tone row (Figure 3.1) and comments on the appropriateness of such regulation for birdcalls that supposedly originate in a mechanical contraption.¹⁵ However, I contend that using transformations of an ordering of the complete aggregate for the musical birdcalls contributes in this case to the spontaneous quality of their sound perhaps more than any other model of pitch-class organization, since it allows a non-hierarchical treatment of notes in the sense that no single pitch class is heard as more central than others.¹⁶ The fragmented and disparate sounds, scattered throughout the orchestra, obstruct the row in listening, thereby hiding the systematic organization of pitch class.

¹⁵ Bruhn op. cit., 373–4.

¹⁶ Many twelve-tone compositions do not consist of such egalitarian organization of pitch classes, and one must admit that Schuller's evocation of serialism in the movement seems satirical in its crudeness. Nonetheless, serial techniques afford such a treatment of musical material more than pitch-centric modes of organization.

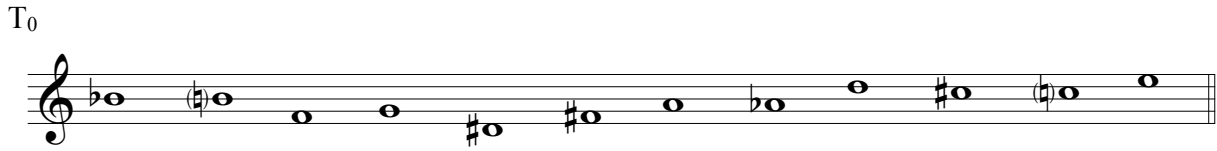


Figure 3.1: The twelve-tone series depicting the tweets in Schuller’s “Twittering Machine”

The imitative features of Schuller’s movement generate an immediate connotation of birdcalls, which we relate to Klee’s painting following Schuller’s movement title. The CIN visualized in Figure 3.2 below summarizes this musical metaphor. The diagram shows that hearing musical tweets in Schuller’s piece is independent of Klee’s painting, because the tweets are contingent on a separate mediating space. This type of a shared topology network, in which all parts of the metaphor share the topology of the generic space (in this case—the mapping between traits of birds), is characteristic to descriptive representation, which relies on a mediating concept expressed in a different way in each of the two artworks. The mimetic quality of the musical birdcalls sets them apart from other representational elements in the piece, such as the buzzing sound heard when the music starts, or the role of the percussion instruments—understanding the latter two depends on an ad-hoc intention on part of a listener to make sense of the sounds in context of the painting. While both Siglind Bruhn and I interpret the same musical figures as birdcalls, my interpretation of the percussion parts and the buzzing sound differs from Bruhn’s, demonstrating the difference between the directness of mimetic musical elements (the birdcalls) and other types of musical representations.

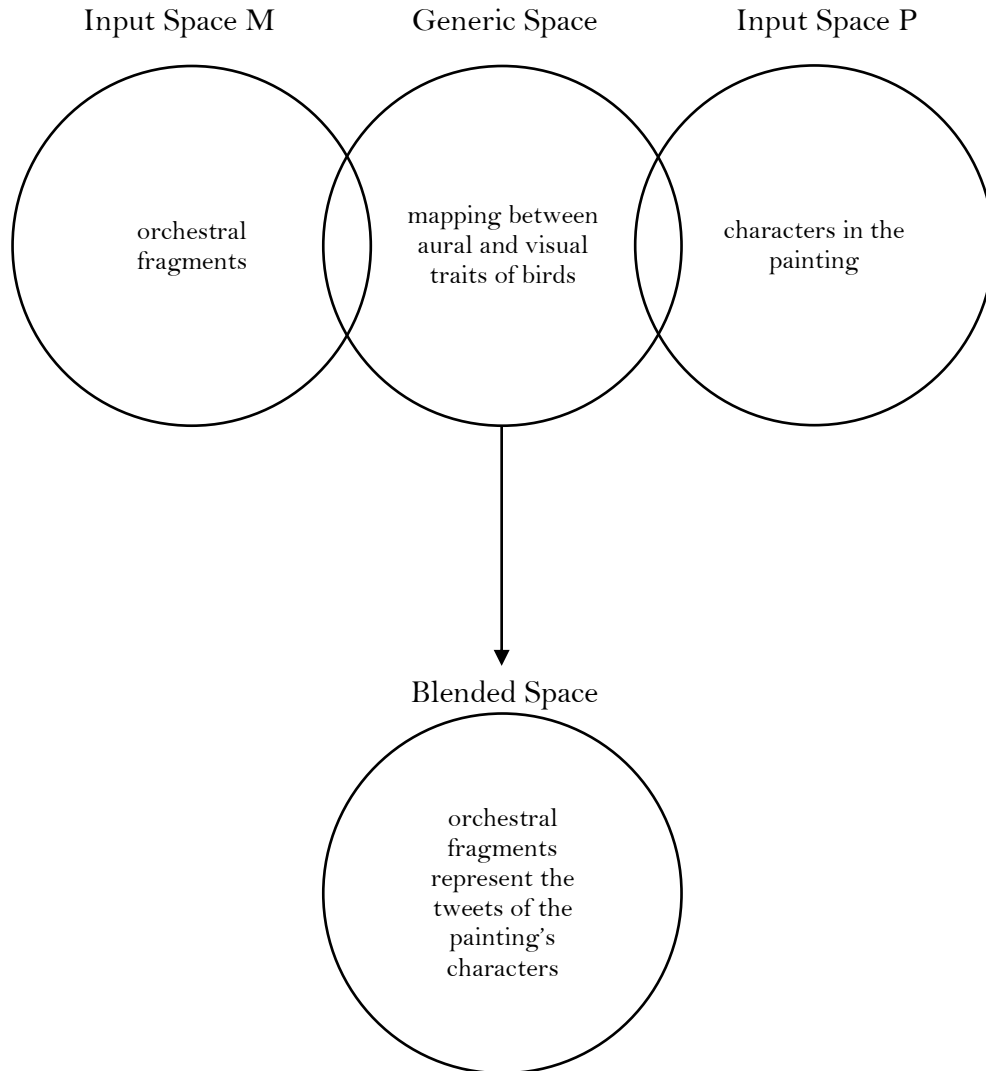


Figure 3.2: Descriptive representation of the birdcalls in Schuller, “Die Zwitschermaschine,” mm. 5–11

While early in the movement the tweets sound spontaneous and improvised, the impression is contradicted later in the piece, suggesting that the musical birds are controlled by the mechanism. First, some listeners could interpret the percussion parts as expressions of a mechanism. Some may interpret the gourd and woodblock accompanying the series of tweets (in m. 11 ff.) as belonging to the birdcalls, referring to birds such as the marsh wren, that

characteristically feature percussive sounds in their calls.¹⁷ However, others may hear the percussion instruments as representing the clinking mechanism that generates the tweets, functioning as reference to the mechanism in the painting to which Klee's birds are confined. Second, perhaps the most obvious hint that the birdcalls are mechanized is found in the repetition of the entire series of tweets, together with the percussion parts. After the second time in which the buzzing "machine" is heard, the series of tweets is repeated in the same instrumentation, pitch, and rhythm—compare mm. 26–32 to mm. 44–50 in Example 3.3 below.

¹⁷ A recording of the marsh wren call is available at the CLO database: https://www.allaboutbirds.org/guide/Marsh_Wren/id.

The image displays a handwritten musical score for the piece "Die Zwitschermaschine" by Schuller, specifically focusing on measures 26-32. The score is arranged in a standard orchestral format with multiple staves. At the top left, a box labeled 'C' indicates the start of a section. The instruments listed on the left are: Picc. (Piccolo), 1. Fl. (First Flute), 1. Ob. (First Oboe), E.H. (English Horn), 1. Clar. (First Clarinet), 1. Bssn. (First Bassoon), 1. Tpt. (First Trumpet), Woodbl. (Woodwind), Gourd. (Gourd), Vln. 1. (3 soli) (Violin 1, 3 solo), Vln. 2. (2 soli) (Violin 2, 2 solo), Va. (2 soli) (Viola, 2 solo), and 1 solo Vc. (First solo Violoncello). The score features complex rhythmic patterns, including triplets and sixteenth-note runs, which are characteristic of the "birdcalls" mentioned in the caption. Dynamic markings such as *mp sub.*, *f*, *ff*, *pp*, *mf*, and *ppp* are used throughout. Performance instructions like "1. solo" and "vis." are also present. The notation includes various note values, rests, and articulation marks.

Example 3.3a: Musical “birdcalls” in Schuller’s “Die Zwitschermaschine,” mm. 26–32

This image shows a page of handwritten musical notation for a symphony orchestra. The score is arranged in a standard orchestral layout with staves for various instruments and soloists. The instruments listed on the left side of the page are:

- 1. Picc. (Piccolo)
- 2. Picc. (Piccolo)
- 1. Fl. (Flute)
- 1. Ob. (Oboe)
- E.H. (English Horn)
- 1. Clar. (Clarinet)
- 2. Clar. (Clarinet)
- 1. Bsn. (Bassoon)
- 1. Tpt. (Trumpet)
- Woodbl. (Woodblock)
- Goord. (Gong)
- (3 soli) Vln. 1. (Violin 1)
- (altri) Vln. 1. (Violin 1)
- Vln. 2. (2 soli) (Violin 2)
- Va. (2 soli) (Viola)
- 1 solo Vc. (Violoncello)

The notation includes various musical symbols such as notes, rests, beams, and dynamic markings (e.g., *mp*, *mf*, *pp*, *p*). There are also some handwritten annotations and markings above the staves, including a dotted line at the top and some numbers like '3' and '7'. The score is written in a clear, legible hand.

Example 3.3a (cont'd.)

35

4
4

E

1. Picc. 2.
1. Fl. 2. Fl.
1. Ob.
E.H.
1. Clar. 2.
1. Bass.
Contra-Bass.
1. Horns 4.
1. Tpt.
Woodb.
Gourd
Vln. 1. (3 soli) Vln. 2. (2 soli)
2 soli
Va. altri div. à 3
1 solo Vc.

Example 3.3b: Repeating “birdcalls” in Schuller’s “Die Zwitschermaschine,” mm. 44–50

This image shows a page of handwritten musical notation for a symphony orchestra. The score is arranged in a standard vertical layout with staves for various instruments. The instruments listed on the left side of the page are: Picc. (Piccolo), 1. Fl. (First Flute), 1. Ob. (First Oboe), E.H. (English Horn), 1. Clar. (First Clarinet), 2. Clar. (Second Clarinet), 1. Bsn. (First Bassoon), 1. Tpt. (First Trumpet), Woodbl. (Woodwinds), Grand (Grand Piano), (3 soli) Vln. 1. (Violin 1, 3 solo parts), (altri) (Violin 1, other parts), Vln. 2. (2 soli) (Violin 2, 2 solo parts), Va. (2 soli) (Viola, 2 solo parts), and 1 solo Vc. (Solo Violoncello). The notation includes various musical symbols such as notes, rests, beams, and dynamic markings like *mp*, *f*, and *pp*. There are also some handwritten annotations and markings above the staves, possibly indicating phrasing or performance instructions.

Example 3.3b (cont'd.)

Like a music box, which repeats the same tune after its key has been turned, thus hindering the impression of spontaneous sound, the tweets' exact repetition implies that the musical birds are not spontaneous at all. While their calls may sound improvised, they are entirely predetermined. Consequently, listeners can infer from the music a solution to the ambiguity of the birds in the painting—the painted birds are not alive; rather, they are mechanical devices controlled by the turn of the crank. Figure 3.3 presents the CIN of the musical representation of the painting's birds as mechanical through descriptive representation. Unlike the bird metaphor discussed earlier, to which each artwork contributes equally since the painting and the music suggest the metaphor without their relation to one another, the mechanization metaphor draws from the music and projects onto the ambiguous condition of the painting's birds. However, this network is still a shared topology network similarly to the bird metaphor's network, since both input spaces—the painting and the music—share the mechanization metaphor; without the musical interpretation provided by Schuller's piece, one would still wonder whether the creatures in the painting are living or part of the machine. For example, the arrows piercing the birds' heads in the painting support an assumption that the birds are not alive but part of the mechanism, so that both the painting and the music share the mechanization metaphor.

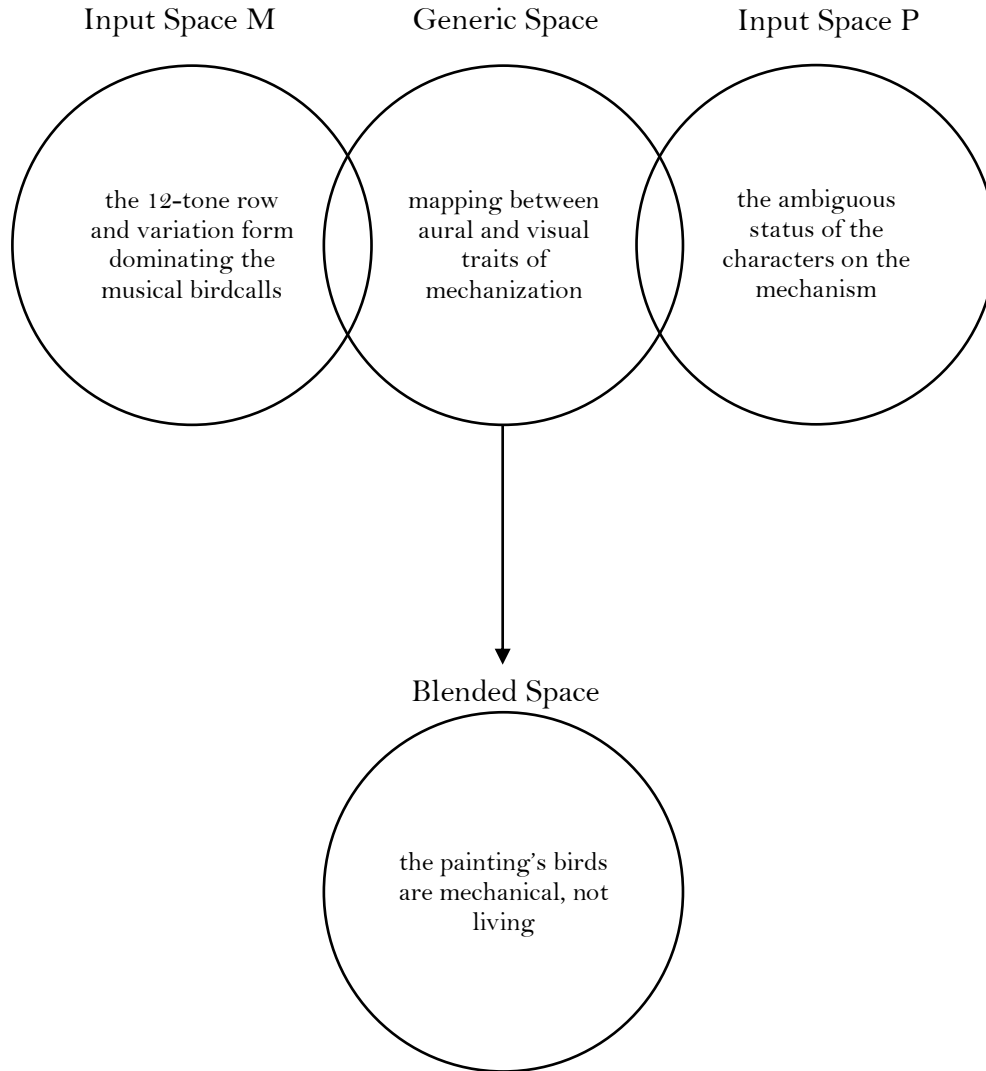


Figure 3.3: The metaphor of mechanization in Schuller's "Die Zwitschermaschine," emerging after m. 17

Interpreting the buzzing sound heard in the opening of the movement is less immediate to me in listening than the musical tweets. I understand it as the sound of the manual turning if only in contrast to the following musical birdcalls. The crank is represented by a rhythmic superimposition of sextuplets and sixteenth notes in the first measure of the movement, to which triplets are added in the second measure. All parts, shown in Example 3.4, unfold a chromatic tetrachord from D sharp to G flat such that at each moment all notes of the tetrachord are heard

(shown in the example by the rectangle that marks one moment in the passage). The result is a continuous buzzing sound, obstructing the rhythm and pitch of its constituent individual parts. It accelerates during the opening three bars, while at the same time also becoming gradually louder, until disappearing once the tweets begin to sound, as if giving rise to the birdcalls. Repeating three times in the movement, the consequential relations between the buzzing sound and the tweets that follow become established as the piece progresses.

The image displays a musical score for three systems of instruments in 4/4 time. The first system includes Oboe 1 (Ob. 1), Oboe 2 (Ob. 2), and English Horn (E. H.). The second system includes Horns 1, 2, 3, and 4. The third system includes three staves for Viola. The score is divided into three measures. In the first measure, the woodwinds and horns play a melodic line with various accidentals (flats and sharps). In the second measure, the woodwinds and horns continue with similar patterns. In the third measure, the woodwinds and horns play a triplet of eighth notes, while the horns and violas play a sixteenth-note accompaniment. The Viola part consists of three staves, each playing a sixteenth-note accompaniment with a '6' above the notes, indicating a sixteenth-note figure.

Example 3.4: The musical “mechanism” in Schuller’s “Die Zwitschermaschine”

One could imagine how the movement represents some sort of a “twittering machine” even without Klee’s painting, considering only its title as a reference, however using the painting as text for interpreting the movement (and vice versa) allows for a reciprocal flow of

signification between the music and the image in a listener’s mind as each artwork completes aspects perceived as ambiguous in the other. I already mentioned some of these ambiguous elements—the music leads to interpret the birds in the painting as parts of the machine, and the painting leads to interpret the buzzing sound as the turn of the manual. Moreover, Schuller’s movement provides a sense of temporal coherence that turns Klee’s static image into a film-like scene. Figure 3.4 presents a timeline for the movement. Measure numbers are denoted above the arrows. Tempo changes are shown below each arrow, and, when applicable, row forms. The figure shows the repetitive pattern of twelve-tone row forms that represents the tweets, beginning in m. 9, and heard continuously throughout the movement.

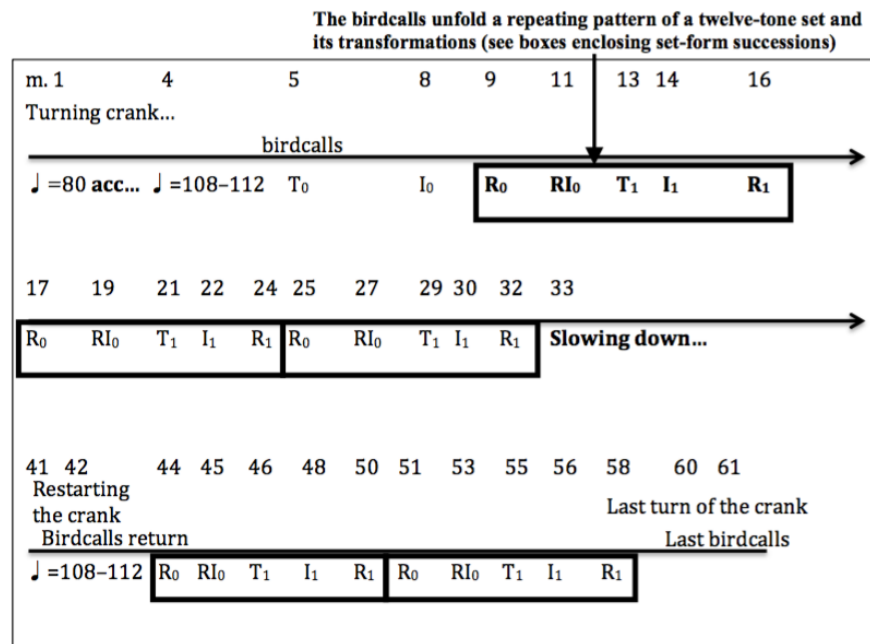


Figure 3.4: Timeline for the movement

In Klee’s painting, as already noted, the relation between the birds and the machine is open to interpretation—they could either be attached to the mechanism or just standing on top of

it. In the former case, they would have sounded like birds in nature (or a caricature of such, given the style of the painting), but in the latter situation, they would have sounded mechanical. My hearing of Schuller's piece provides a possible solution to the ambiguity, suggesting the birds are mechanical. However, they are only revealed as such later in the piece, while at least until the entrance of the percussion in m. 11 if not later (depending on a listener's level of alertness) the tweets still sound like an imitation of birdcalls. In this sense, the music presents a humorous take on a component left ambiguous in the painting, suggesting on one level that the birds are part of the mechanism meant to entrap real, living birds, and on a higher level forming a trap for listeners, who (at least for some time) mistake the systematic and regulated tweets for spontaneous and improvisatory expressions.

Lastly, the music not only provides a soundtrack to the visual mechanism in the painting, but also suggests how the machine operates, which in the painting is left undetermined. The buzzing sound, I proposed above, originates in the moving manual, which operates the machine and eventually generates the tweets. Bruhn notices a direct relation between the lengths of the periods in which the sound is heard and the periods of tweets that follow, both becoming shorter as the piece progresses. I interpret this periodical relationship as implying that the turning crank creating the tweets functions like the key to a windup mechanism: after a while, the mechanism loses power and winds down (shown in Figure 3.4, m. 33), and then the crank needs to be turned again in order to restart the tweets.¹⁸ The buzzing accelerates in mm. 1–3 from MM 80 to 108–

¹⁸ Bruhn interprets the relation between the buzzing sound and the tweets differently—she describes a person turning the crank for the entire duration of the movement; the winding down of the tweets signifies that the hand turning the manual has become tired, causing the speed of the turn to become significantly slower (Bruhn op. cit., 375). However, this interpretation does not explain the disappearance of the buzzing sound when the tweets are heard, and, as Bruhn herself notes, the return of the main tempo after the tweets wind down. In addition, my

112, but in its two returns later in the movement it remains on 108–112. Rather than a failure in representation on Schuller's part (as Bruhn explains the lacks of acceleration), the difference in tempo could reflect a hasty turn of the manual meant to reignite the tweets as quickly as possible. It also explains the reason that the tweets are heard for shorter periods later in the piece, when the crank is not turned as much as it was at the beginning. By restarting the mechanism three times in the piece, the music conveys the twittering machine's method of operation and reinforces the repetitive (and, hence, mechanical) quality of the repeated tweets.

Compared to the two bird metaphors above, a different mode of representation was at play in interpreting the painting's twittering machine as a windup mechanism, because of the especially dominant role the music plays in generating the metaphor, as well as the principal role of the listener-observer in the metaphor's construction. The painting does not suggest such a mechanism—I projected my musical interpretation onto a component ambiguous in the painting. Such representation, in which a listener-observer projects an interpretation of one artwork to fill in details not present in another, is an exemplar of contextual representation. Since contextual representation originates in a listener-observer, it is more likely that different listeners would come up with distinct interpretation of the music, and thereby the painting, and indeed my interpretation of the workings of the machine according to Schuller's piece differs from Bruhn's, who interprets the machine, following studying Schuller's movement, as a music box in which the manual is consistently turned to generate tweets.

The CINs visualized in Figure 4 and Figure 6 share a common form—both denote shared topology networks, in which both artworks project the organization of the generic space. The

interpretation accounts for the reason no hand appears to be turning the crank in the painting, which shows the twittering machine in action, as indicated by the opened beaks of the birds.

network that gives rise to the contextual representation of the mechanism, shown below in Figure 3.5, is a single-scope network, since the generic space relies on a metaphor arising from the music, which is then projected onto the painting. The painting, of course, does not resist this interpretation—nothing in the painting suggests that the machine is *not* a windup mechanism—however there is no reason to suspect the twittering machine works in such way from the painting alone.

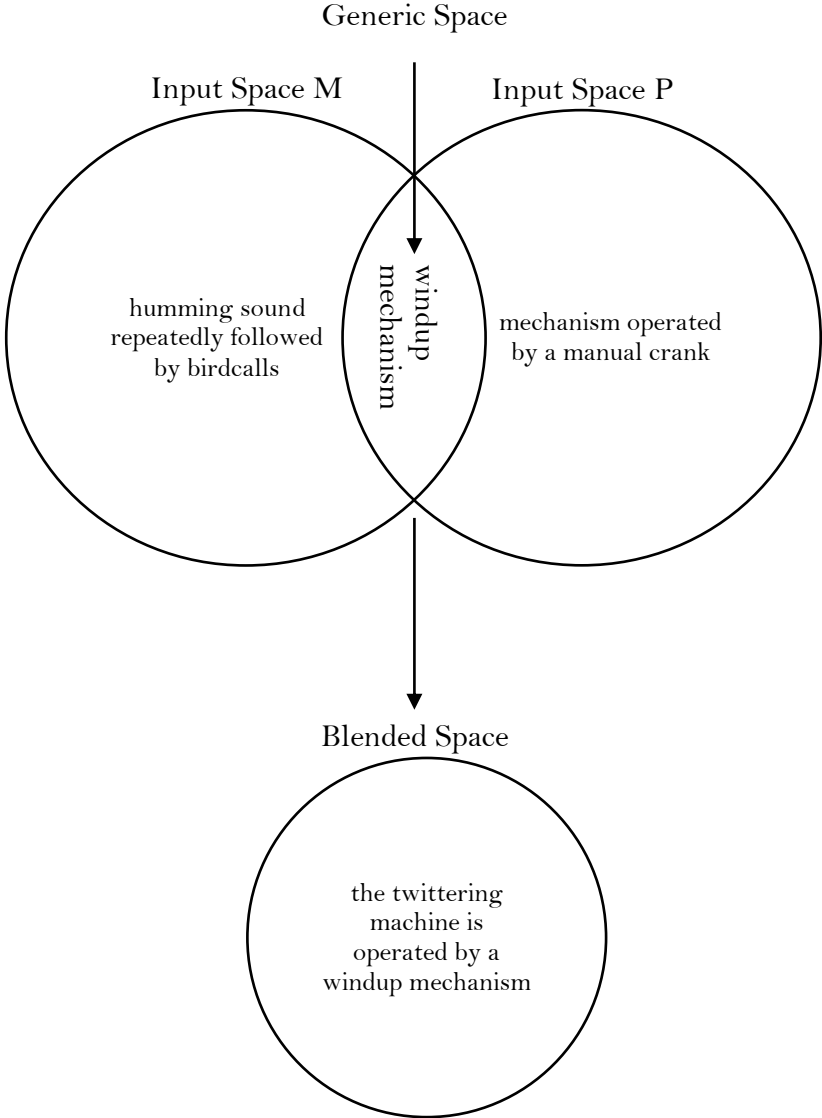


Figure 3.5: The twittering machine as a windup mechanism

3.3 Tan Dun's Twittering Machine

“Twittering Machine” is the sixth movement in Tan Dun’s *Death and Fire: Dialogue with Paul Klee* (1993), composed during his studies in the composition DMA program at Columbia University. Unlike the two other multi-movement works discussed in this chapter, not all movements of *Death and Fire* can be considered ekphrastic. The piece consists of three movements for small subsets of the orchestra, numbered with roman numerals, that are generally inspired by Klee’s writings and paintings. Interwoven between the three movements are seven “inserts,” numbered using Arabic numerals, which engage the entire orchestra, each conceived as a musical imagining of a particular Klee painting and numbered using Arabic numerals. “Twittering Machine” follows the second roman-numeral movement, which is the longest in the piece (its recording is more than seven minutes long), contrasting the movement’s expansiveness in a focused and concise miniature.¹⁹

Listening to Tan’s “Twittering Machine,” I visualize a caricatural machine that emits idiosyncratic musical birdcalls. Tapping into my sonic memories of cartoons, the music sounds as if imitating tweets while at the same time remaining at a parodic distance from birdcalls in nature; as imitation it occupies a unique stylistic space not shared with any of the other ekphrastic pieces. While the tweets in Schuller’s piece sound stylized as well, being the products of orchestral wind instruments, Tan’s twittering machine conveys a musical satire on first listening that in Schuller’s piece I only experience once the trap of repetitive twelve-tone transformations is revealed—while at first I hear Schuller’s movement as a musical depiction of birdcalls similar, in some sense, to Messiaen’s bird melodies, Tan’s movement makes it clear

¹⁹ The recording is available on the following link: <http://columbia128k.naxosmusiclibrary.com.ezproxy.cul.columbia.edu/catalogue/item.asp?cid=ODE864-2>.

from the first moment that it aims for exaggeration and caricature rather than imitation. In the text that accompanies the piece, Tan explains that, in reacting to specific Klee paintings in the inserts, he aimed to “view each painting as a whole, to find the particular positive character of each experienced *as a whole*.”²⁰ Indeed, his piece does not provide a narrative of the machine’s mode of operation, but instead he aspired for his inserts to function as character pieces, relaying the particular *atmosphere* of the paintings on which they are based. In the following discussion I examine how the music qua ekphrastic representation differs from other instances of representation, and particularly from Gunther Schuller’s movement, as the only other movement discussed here that also features musical imitations of birdcalls.

Tan’s twittering machine is unique for its temporal quality, which recalls moment form as characterized by Jonathan Kramer in the self-containment of consecutive events in the movement and lack of a sense of development and continuity.²¹ The piece consists of musical events, each of which conveys a distinct sonorous identity, and none is heard as originating from, or depending upon, others. Some events are unique, such as the *pizzicato* section in mm. 11–18, and others involve sonorities already heard. In addition, the beginning and ending of the piece are also characteristic of moment form—they convey the impression that the music has already begun and continues to play after the movement has ended, as if we happened to wander into a room in which the twittering machine is already in action, and it will continue its operation after we leave. In avoiding a sense of overarching process and temporal trajectory, Tan’s movement

²⁰ Tan 1993, 18 (emphasis added).

²¹ J. Kramer 1988, 50–52, 207–210. “I [define] moments [...] as self-contained entities, capable of standing on their own yet in some nonlinear sense belonging to the context of the composition. If no moment ever returned, the requirement of constant newness would in itself imply a kind of progression [...] A return must seem arbitrary” (ibid., 207–208).

brings out the surreal in Klee's painting. The music turns the twittering machine into a phantasmagoric contraption that emits other-worldly birdcalls.

The diagram in Figure 3.6 traces distinct musical events as I hear them in the piece. For each event, the diagram specifies its position in the piece, types of extended techniques used, and a specific impression where applicable. Each moment conveys its own sonorous identity, consisting of a particular combination of sonorities and textures produced using a variety of extended techniques already familiar from the previous movements of *Death and Fire*.²² While extended techniques are used all through the piece, they dominate "Twittering Machine" entirely, endowing it with a cartoonish yet sinister quality that suits the dark-humored tone of the painting. Some of the events in the movement are disconnected from their surroundings with rests, while others have no clear boundaries, overlapping with one another in a smooth flow. Although only one technique is marked "twittering" in the score,²³ I hear tweets in different types of sounds heard in the movement. In fact, in the caricatural sonic world of Tan's piece, I found myself willing to accept many unlikely sonorities as tweets.

²² Tan op. cit., 10–11. In the text that accompanies the score, Tan mentions that techniques in a given insert are limited to those introduced in the *preceding* roman numeral movements. Consequently, "Twittering Machine," heard after the second roman-numeral movement, includes only techniques already introduced in the first and second movements (ibid., 19).

²³ "Twittering" consists of an instruction to performers to pronounce "Chi-k" or "Dz" using either the mouthpiece of a wind instrument or, in the case of string players, only the voice.

Measure no.	1–3	4	5	6–7	8	9	10–12	13–18
Sound types	Glissando; Sustained sleighbells	Twittering (“chik”)	Other percussion	Slapped fingerboard	Glissando; Sustained sleighbells; Pizzicato	Other percussion; Arpeggiated open fifths	Wind tremolo with mouthpiece	Pizzicato

Measure no.	19–22	23–25	26–29	30
Sound types	Mouthpiece tremolo; Twittering (“chik”, “Tsm”)	<i>Col legno</i> ; Glissando	<i>Col legno</i> ; Twittering (“Dz”)	Twittering (“Dz”, “chik”)

Figure 3.6: Tan’s “Twittering Machine” as a collection of musical events

I am open to considering different sounds as tweets in Tan’s movement because of its reference to Klee’s painting. However, I hear the unconventional sounds produced by musicians’ voices as especially resembling birdcalls in an exaggerated and distorted way. I hear the human voice in the movement contrasted to instrumental sounds produced by the percussion or strings, implying an interpretation in which voices represent the living aspect of the painting, while purely instrumental sounds (which do not depend on breathing) relate to the mechanism. Figure 3.7 presents the division of the movement’s sonorities. Two remarks are in order—first, I probably would not have categorized sounds heard in the movement in the manner of Figure 3.7 without knowing the movement’s title. Second, like my hearing of Schuller’s movement, my interpretation so far of Tan’s movement as a representation of Klee’s painting does not require the image. The title is sufficient for eliciting an ekphrastic interpretation.

Vocal (tweets)		Instrumental (mechanism)	
Glissando	mm. 1–3 (winds)	Clapping mouthpiece	mm. 1–3 (brass)
Whistle	mm. 2–3	Sleighbells, güiro, ratchet, etc.	mm. 1–3
“Twittering”— (“chik”; “Dz”)	“chik”—m. 4 (strings and winds) “Dz”—m. 26 (winds)	String tremolos on open fifths	m. 3
Wind tremolo using only the mouthpiece	m. 10 (brass)	Slapping fingerboard of strings	mm. 6–7
		Pizzicato strings	mm. 8
		Arpeggiating open fifths in strings	mm. 9–10
		<i>Col legno</i>	mm. 22–29

Figure 3.7: Sonorities in Tan’s movement categorized according to their mode of production

Tan’s piece represents the birds and mechanism descriptively like Schuller’s, as Figure 3.8 below shows, since the contradistinction between life and machine, or technology, exists as a concept independently from each of the artworks. On one hand, it is a familiar twentieth-century idiom that plays a central role not only in Klee’s *Die Zwitschermaschine*, but in numerous works starting in the first half of the twentieth century,²⁴ translating in music to the anxiety that accompanied the formation of alternatives to functional tonality.²⁵ Like the metaphor of birdcalls in Schuller’s movement (visualized in Figure 3.2), the metaphor in Figure 3.8 is symmetrical, since the music and the painting contribute equally to its construction—the distinction between living and mechanical and their musical connotations (spontaneous versus controlled; improvised as opposed to composed) can be identified in the painting as much as the music. However, while the birdcall metaphor in Schuller’s piece is based on imitation, in Tan’s piece it is constructed on

²⁴ Among the most well-known examples are Aldus Huxley’s *Brave New World* (1931) and George Orwell’s *1984* (1949).

²⁵ For example, Adorno asserted that anxiety, confusion, and distress shaped the formation of atonal masterworks early in the twentieth century (Adorno 1955/2002, 181–183).

a distinction in the production of sound, reflecting that, without its title, we probably would not hear twittering in Tan’s movement. Nevertheless, the relation that dominates the generic space in Tan’s metaphor—living as opposed to mechanistic—is shared between the music and the painting. Thus Tan’s “Twittering Machine” confronts one of the central issues posed in the painting and suggests, in contrast to Schuller’s piece, that the birds in the painting are living rather than mechanical.

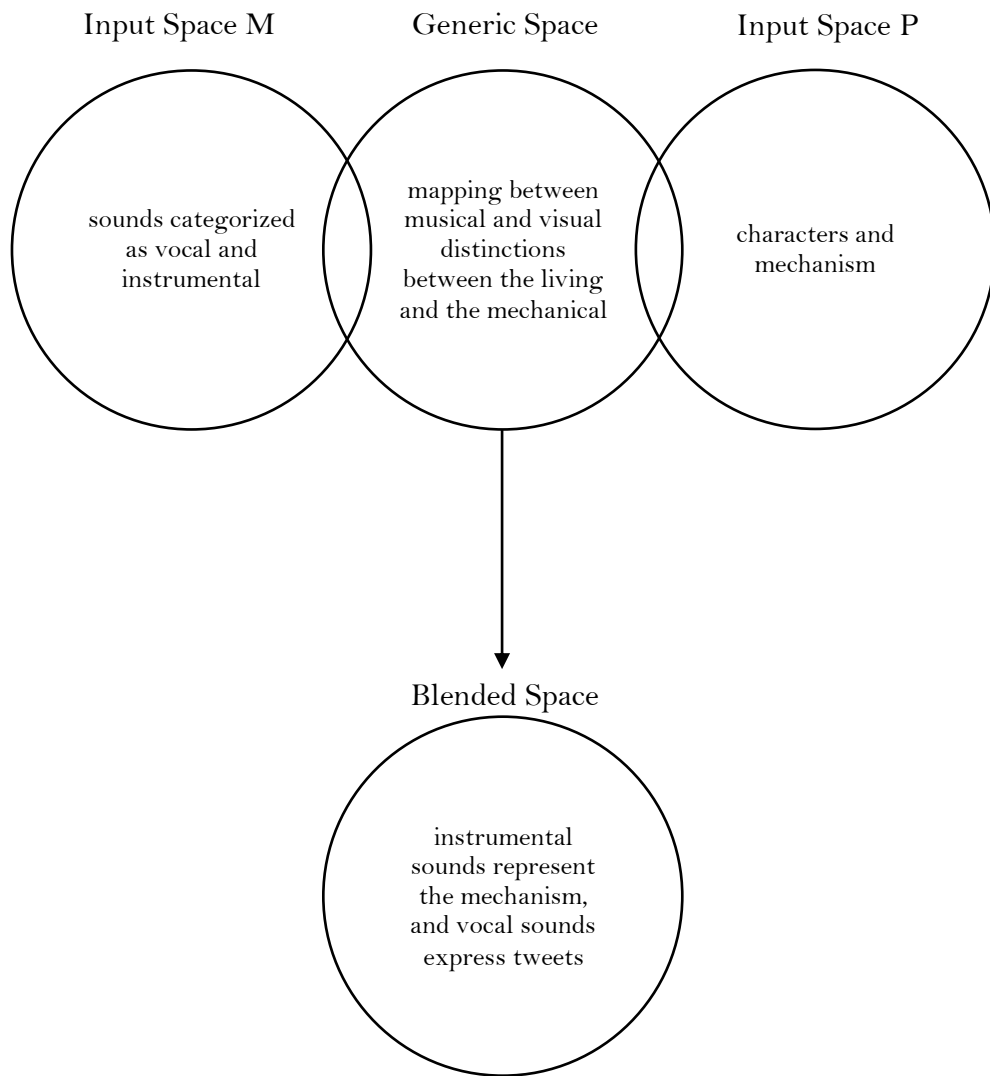


Figure 3.8: Representation in Tan’s movement

The mechanized aspect of the piece can also be heard in the physical way in which its sounds are produced. Sounds throughout the movement manifest the presence of the bodies that create them—the voices of performers sounding through mutilated instruments or by themselves, and their fingers plucking the strings, slapping the fingerboards, and clapping the mouthpieces, are all dominant in my experience of Tan’s movement. The result is a clunky and grotesque mechanism emitting cartoon-like birdcalls. Creating a distinctive sound-world to complement the painting’s idiosyncratic style, Tan’s “Twittering Machine” brings out, through descriptive representation, the chaotic and distorted properties of the image, giving an impression of cartoon-like innocence over violent undercurrents. One can imagine the paradoxically horrific yet comical effect created in performance inside a concert hall, as musicians in the winds are playing their mouthpieces and string players are slapping their fingerboards while emitting “dz” and “chik” sounds using their voices.

After having examined my hearing of the different representational elements in Tan’s piece, I would like to return to the earlier comparison between Tan’s and Schuller’s two movements and reiterate the different ways presented so far in which musical elements can represent an image. Apart from the use of voices and the contrast created between instrumental and vocal sound in Tan’s movement, an important difference between the two pieces, I posited, stems from different senses of musical temporality that they inspire. In contrast to the almost capricious display of musical events in Tan’s representation, the three times in which the buzzing sound is heard in Schuller’s piece, each time followed by tweets, relays a relationship of causality that explains the way in which the machine operates. Tan’s piece, however, does not afford such interpretation, but rather portrays the soundscape of the machine already in action. Therefore, while Schuller’s movement involves a contextually representational element that adds

new information to the painting, descriptive representation dominates Tan's piece, which concentrates on present elements in the painting—the birds and the mechanism. Rather than adding new information to the painting, the interpretive aspect of Tan's piece consists of the peculiar soundscape it supplies to the image, bringing out its parodic and absurd aspects.

Lastly, while in Schuller's piece the tweets obstruct their mechanized origin (reflected in the music by their adherence to a twelve-tone row and its transformations), Tan's tweets manifest their source by way of emphasizing the material origin of the sounds using a great variety of extended techniques. As a result of these differences in representing the machine and the birdcalls, Schuller's twittering machine employs the orchestra in a luring imitation of birdcalls, presenting the painting as a windup music box that is at the same time a bird trap, while Tan's machine presents the painting as a distorted parody that comically manifests the futility of man's violent dominance over the spontaneous call of birds.

3.4 Peter Maxwell Davies, "The Twittering Machine"

"The Twittering Machine" is the third and middle movement in Peter Maxwell Davies's *Five Klee Pictures*.²⁶ It was composed shortly prior to his appointment as Director of Music at Cirencester Grammar School in 1959, where he conducted the first performance. However, the score was lost for fifteen years, until Christopher Ford found a set of parts and reconstructed the piece, albeit with slight revisions.²⁷ Davies composed his piece around the same time as Schuller,

²⁶ A recording by Philharmonia Orchestra, conducted by the composer, is available on the following link: <https://www.youtube.com/watch?v=AIDPoXVdb8U>.

²⁷ Knussen 1978, 17–18; According to Siglind Bruhn's account, it was Davies himself who found the parts and reconstructed the score. Bruhn interprets the passive voice in Paul Griffith's note for the piece as implying an action by Davies ("The revelation [that Davies considered his *Five Klee Pictures* the most successful composition of the Cirencester Grammar School period] prompted a search; a set of orchestral parts came to light, a full score was written out of them,

yet the two composers, both at the early stages of their careers, were not aware of each other's Klee-inspired works. Schuller's and Davies's compositions share a common intent, since each of their movements takes a painting by Paul Klee as its subject matter. *Die Zwitschermaschine* is the only painting represented in both Schuller's and Davies's works, but the two movements are radically different as expressions of the painting—when it comes to depicting the birds, while Schuller's movement involves descriptive representation through musical imitation of birdcalls, Davies's "Twittering Machine" does not sound like birdcalls at all.²⁸

Davies's movement consists of eight sections, marked in the score with roman numerals. Each section either adds parts to concurrent happenings or loses parts from the previous section. In addition, each of the sections (except for the last) repeats. Overall, the piece features an additive process in which new material is gradually incorporated over a multi-layered ostinato, until a loud and chaotic climax is reached in section VI, following which layers quickly dissolve until the end. Orchestral parts in the movement involve varying degrees of improvisation that range from improvisation of both pitch and rhythm to total composition (with partially improvised parts, which allow rhythmic freedom while pitch is determined, between the two

and the work was played by the University of Glasgow orchestra conducted by Stephen Arnold, lecturer in music there." Griffiths 2016). She writes that Davies revised the score to make it compatible with the instruments and techniques available to professional orchestra musicians (Bruhn op. cit., 366–67).

²⁸ Davies's is not the only ekphrasis of *Die Zwitschermaschine* that avoids imitation. Cindy McTee's *The Twittering Machine* (1993) is divided into sections each expressing the character of a different bird from the painting, while the motion of the mechanism dominates slower sections in the piece and remains in the background throughout as a rhythmically consistent and ongoing musical line. While McTee's piece expresses the humoristic aspect of the painting, it avoids imitation of birdcalls. Another example is Giselher Klebe's *Die Zwitschermaschine* (1951), which consists of four miniature movements, expressing the painting in a musical "machine" that combines distinct compositional techniques and styles (loosely applied twelve tones juxtaposed with tonal centers) parallel to the distinct characters of the painting's birds. Klebe's piece is discussed in Bruhn op. cit., 376–380.

extremities). As I listen to the movement, I construct a metaphor involving composed parts that express the mechanical aspect of the painting and improvised components that relate to the painting's living aspect.²⁹ While the metaphor connects Davies's movement to Schuller's and Tan's, we shall see that it leads to a profoundly distinct interpretation of Davies's movement from the other two pieces, because of the distinct ways in which spontaneity and mechanization are featured in each piece. Although the piece features no imitated birdcalls and the birds are not depicted using descriptive representation, contextual representation allows a listener-observer to hear the bird-characters from the painting in a different way—for example, I hear them represented in the different improvisatory parts. My interpretation is just one of multiple possibilities, as evident from Siglind Bruhn's interpretation.

Bruhn interprets the movement as a satire, in which birds are confined to a mechanism meant to restrain their creativity. The birds consistently attempt to defeat the machine by varying their parts in number, as more birds are gradually joining the group, and in quality, since their tweets are constantly changing. She interprets the ostinato figure heard throughout the movement as the “mechanical wheel in the contraption depicted by Klee.”³⁰ By mechanical wheel, I believe Bruhn is referring to the implied rotation of the wire supporting the birds, which is controlled by

²⁹ The term “mechanical” is used here meaning perfunctory, impersonal, and lifeless. A similar contrast was made in my discussion of Schuller's piece between the repetitive and inexpressive buzzing sound representing the turning of the crank and the spontaneous-sounding musical tweets, and in Tan's piece between the stability of the rhythmic sections of string *pizzicato* and the impulsive, jittery quality of the musical tweets. Contrasting improvisation with composition as a metaphor to the mechanical and living aspects of the painting is also featured in Siglind Bruhn's interpretation of Davies's and Schuller's movements, demonstrating the prevalence of the idiom, and also the ubiquitous characteristics of descriptive representation as opposed to contextual representation, which is more dependent on the individual listener (Bruhn op. cit., 370–371).

³⁰ Ibid., 368.

the crank.³¹ The partly-improvised parts gradually added to the ostinato as the movement progresses embody the twittering, and the steady meter expresses the constraints that man-made machines place on nature, limiting natural expressive freedom.

The steady quarter-note ostinato in the celli and double basses, heard consistently from the beginning of the movement to its end, is the only component in the movement that involves no improvisation and remains constant throughout. It is shown in Example 3.5. As a stable and continuous component, it is not surprising that Bruhn considers the ostinato as the musical expression of the continuously turning crank, which generates the improvised parts that follow.³² It is gradually accelerated until a sudden return to the initial tempo in section VIII, implying the speed of the hand turning the crank. A visualization of the metaphor appears in Figure 3.9. The metaphor is generated in descriptive representation, since both the music and the painting share the mechanism metaphor—the relentless consistency of the ostinato sounds mechanical even without the context provided by the machine in Klee’s painting.

³¹ On a side note, Siglind Bruhn’s discussion of the similarity of the solo cello and first trombone parts to cogwheels, transferring the motion from one to the other, bespeaks the interpretive power of the appearance of the musical score, functioning as a visual trace that guides the interpretation of the aural musical experience (Bruhn *op. cit.*, 368–69).

³² Bruhn, however, considers the piano as part of the ostinato.

Allegro moderato (♩ = 80, poco a poco accel.)*)

Solo *pizz*
p

Violoncelli *pizz.*
p

gli altri *p*

Doublebasses (*pizz.*)
p

*) very gradual accelerando up to ♩ = 100 by end of Section VII.

Example 3.5: The ostinato in Davies's "Twittering Machine," mm. 1–4

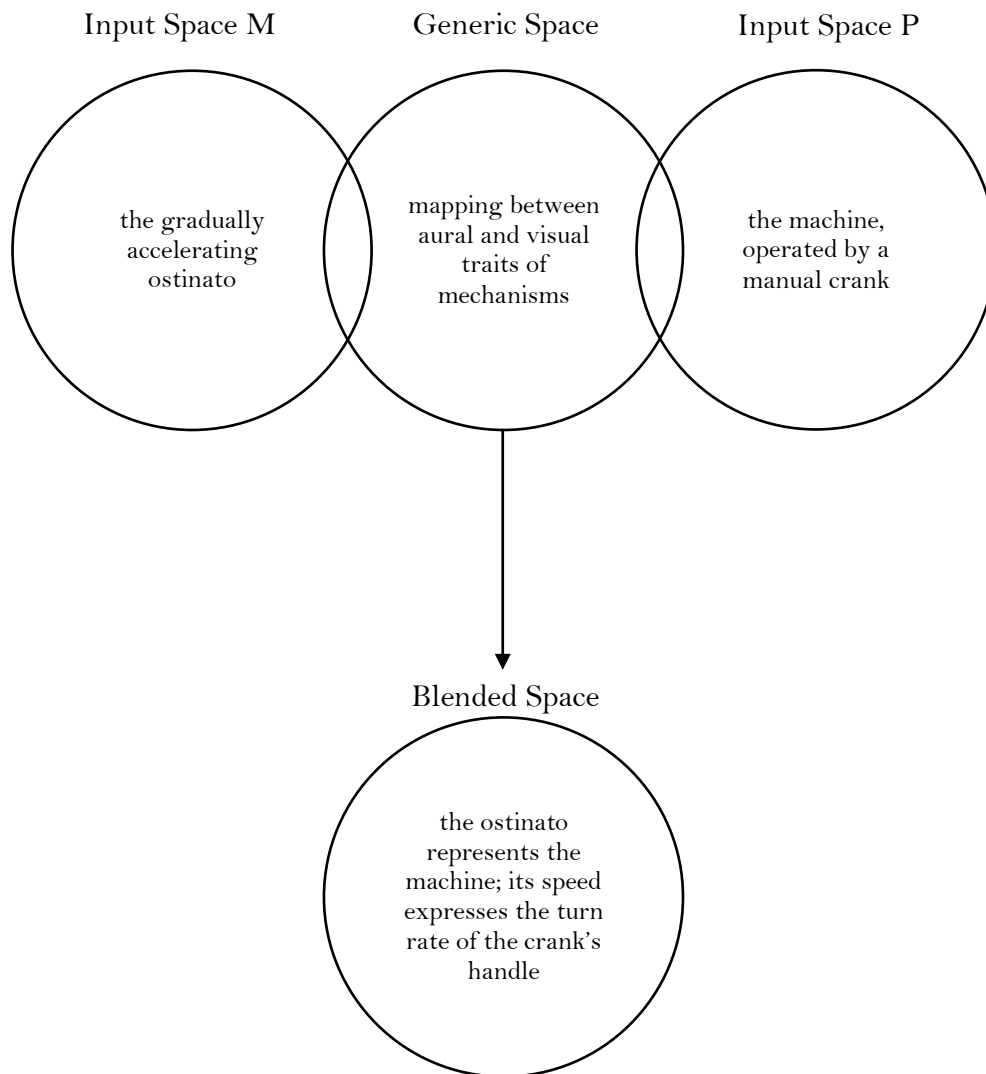


Figure 3.9: The crank-operated mechanism represented in Davies's movement

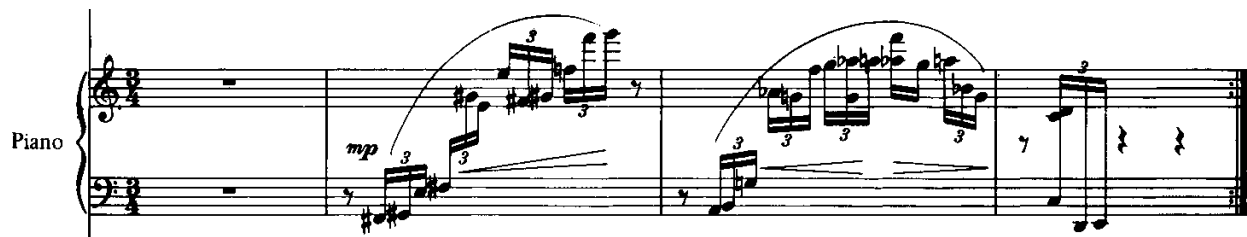
The ascending and descending patterns of eighth notes in the first trombone, doubled in the solo cello, contribute an additional layer to the steady pattern. However, they differ from the bass parts in their improvised aspect, which comes into play in section III when the cello part becomes syncopated (and the trombone follows suite in section IV). Figure 3.10 presents the rising and descending scales used in the ostinato. All notes in the figure are contained in the solo cello and trombone parts, while the stemmed notes are also heard as quarter notes in the celli and double basses. The pitch material of the solo cello and first trombone consists of a rise on OCT12 followed by a descent on OCT01. At the same time, the quarter notes in the double basses and celli, marked in the figure using stems, unfold the diminished tetrachord common to these two octatonic collections—{C sharp, E, G, B flat}.



Figure 3.10: Octatonic collections in the ostinato

On the spectrum between thoroughly composed and utterly improvised, the piano part is located one degree closer to improvisation than the ostinato, since it involves free rhythmic variation beginning in section II. It is shown here in Example 3.6. Starting at the beginning of the movement, and repeating consistently until the penultimate section, the piano plays vivacious rising and falling arpeggiated flourishes. Its free-sounding rhythm is characterized by a rest on the first eighth note of each bar and running sixteenth-note triplets. In addition, the piano part differs from the ostinato's progressions of minor thirds and filled-in octatonic scales in its unsystematic pitch material, which consists of fragments of the whole-tone collection, combined

with passing chromatic notes. Still, the piano remains related to the ostinato, since its first note in each measure alternates doubling the concurrent last note of the solo cello and that of the first trombone. In this sense, the piano part adds a rhythmically-free ornamentation to each of the measured eighth-note phrases of the cello and trombone. Since both the ostinato parts and the piano are played continuously from the beginning of the piece, they provide a frame of reference to the following added layers. However, the ebullient piano flourishes are only heard until section VII and disappear in the last section.



Example 3.6: Piano flourishes in Davies’s “Twittering Machine,” mm. 1–4

I consider the piano as representing the living aspect of the painting. In thinking about the music as “ebullient” I employ different means, the most dominant of which are the concepts of motion as musical metaphor and visual space as a metaphor for pitch—quick and regular rhythm, combined with inconsistent “motion” up and down pitch space, symbolizes vivaciousness, in contrast to slower regular rhythm, combined with consistent and systematic motion in pitch space, which symbolizes steady (mechanical) motion. Although not an imitation of birdcalls, the piano part, as well as other improvised parts in the piece, relates to the painting’s birds in presenting a unique character in the piece. In fact, I find that the piano flourishes express musically Klee’s leftmost bird, which seems like the leader of the group—heard from the beginning of the movement together with the ostinato, the piano precedes and supplies a

framework for the other parts that follow, functioning in this sense as a “leader,” or a guide, in listening to the other parts. Unlike the representation of the mechanism, the leftmost bird is represented contextually in the piano part—I construct the relationship as a listener, projecting my interpretation of the painting onto my musical interpretation.

The clarinet part, shown here in Example 3.7, expresses a wholly different character when compared to the flourishes of the piano—in contradistinction to the piano’s energy and swiftness, the stumbling rhythms and quasi glissandi of the second clarinet bring to mind limping motion, lacking enthusiasm and vibrancy. I hear the clarinets as expressing the character of the dingy second bird, which is standing with its head turned downwards, seeming like the least energetic of the four.

Example 3.7: The clarinet part in Davies’s “Twittering Machine,” mm. 5ff

The oboes’ part (shown in Example 3.8), on one hand, consists of syncopated eighth- and quarter notes like the second clarinet, yet the pitch figure is repeating and directed, with the first oboe rising and the second descending in stepwise motion. I link the oboe part to the third bird, which is standing taller than the second with a somewhat livelier expression.³³

³³ Maurice Shapiro characterizes the second bird as “limp” and “lifeless,” while the third “still stands firm and well above his companions on either side” (Shapiro op. cit., 68).

Example 3.8: The oboe’s part in Davies’s “Twittering Machine,” mm. 9ff

The trumpets (shown in Example 3.9), beginning in section V, contrast the hesitant rhythm of the oboes, emitting a loud and accented sequence of steps that ends with a “jagged flourish,” as indicated in the score, reminding of the flourishes of the piano part (yet contrasting the piano in their indeterminate pitch content). Nevertheless, the rough quality of the *marcato* trumpets sets them apart from the spirited quality of the piano, while denoting an affinity to the combative rightmost bird, with its sharp, pointed tongue.

Example 3.9: The trumpet part in Davies’s “Twittering Machine,” mm. 13ff

Like the birds in the painting, all drawn using the same type of line utilized to depict the machine, the musical lines representing the three less fortunate birds in Maxwell Davies’s movement are all constructed using the same building blocks, taken from the movement’s ostinato. The [013] trichords that constitute the octatonic collection dominate not only the ostinato material, but also the added parts in the following sections—Figure 3.11a below shows

that the clarinet part combines trichords from the two octatonic collections used in the ostinato.³⁴

The same is true for the oboes, shown in Figure 3.11b. Combining elements from the three octatonic collections, the trumpets differ from all other melodic parts heard so far, since they introduce new material that was not already heard as part of the ostinato—see Figure 20c. In general, apart from the piano, only parts (or components within parts) that contain pitch improvisation, such as the continuous glissandi in the upper strings beginning in section IV, do not conform to the ostinato's pitch material.

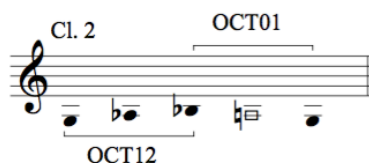


Figure 3.11a: [013] components from the octatonic collections in the clarinet part



Figure 3.11b: [013] components from the octatonic collections in the oboe part



Figure 3.11c: [013] components from the three octatonic collections in the trumpet part

³⁴ The empty notehead indicates that the pitch was lowered by an octave for clearer visual representation. Durations are not represented in Figures 11 a–c, which focus on pitch class.

While the parts added in each section contain material common to the ostinato and to one another, each part is also unique in its individual rhythmic and expressive character. As a result, the depiction of birds in Maxwell Davies's piece consists of the same building blocks as the mechanism, suggesting that the birds in Klee's painting are part of the machine. Furthermore, the absence of mimesis suggests that the birds in the painting are not birds at all, but an allegory of something else—the creative problems of composition—the innovative activity of birds (that is, composers or performers) caught up in mechanical frameworks (meaning techniques).

Throughout the movement, I identified some of the parts added to the ostinato as representations of specific birds from the painting, thereby marking them as events of special significance in the movement. However, I ignored other parts that are also heard at different stages—the six percussion instruments that are gradually added (five instruments are first heard before the end of section VI, and the temple blocks, which are only added *after* the climax), the sweeping glissando gestures in the upper strings, and the flutes' oscillations from section VI. Since an ekphrastic hearing of a piece does not require each musical component to be understood as expressing a specific element from the object of ekphrasis, the layers left unaccounted for should not detract from the sensibility of the interpretation I propose here. Nonetheless, these parts add significance to the already-formed interpretation of the movement, whether interpreted as mechanized sounds that accompany the birdcalls, as I hear them, or as additional tweets, as in Bruhn's interpretation. Furthermore, in the process of intensification that ends with the climax in section VI, these additional parts contribute to the emerging cacophony, helping make the twittering machine unbearably loud to the hand that turns the crank in an ever increasing speed, giving the impression that the machine is about to break or explode, so that the hand returns to its original turning speed at once.

Bruhn discusses her surprise at the meter of the movement that remains constant throughout with three beats per measure. She suggests that the meter expresses the firm control of the mechanism on the birdcalls, thereby harnessing nature to the man-made machine while depriving it of its free, spontaneous expression.³⁵ However, my impression of meter in the movement is characterized by a sensation of disorientation resulting from an altered sense of the downbeat in several moments in the movement. At the opening, the notated 3/4 gives the impression of 6/8 with two beats per measure rather than three, while the downbeat of each notated measure is displaced in my hearing by an eighth note. This metric displacement is the result of the accent on the second eighth note of the first trombone in each measure, the piano's rest at each downbeat, and the doubling of the first note of the piano in each measure by the second trombone. When the oboes enter in section III, my sensation of meter changes to cut time, with each bar consisting of a couple of quarter notes in the oboes. The first moment in which my feeling of meter synchronizes with the notated measure occurs in section V, with the entrance of the metrically-steady trumpets. However, the sensation of disorientation returns for a brief moment later, in section VII, when most of the parts disappear but the piano remains with the ostinato. Lastly, in section VIII, my impression of meter changes again as a result of the second eighth note in each measure in the trombone part, which is no longer accented, as well as the disappearance of the piano part. As a result, while notated meter remains fixed for the duration of the movement, my sense of heard meter is fluid and dynamic throughout. In combining dynamic components with a fixed framework, leading to a sensation of freedom within the confines of the machine, meter in the movement parallels the ostinato's combination

³⁵ Bruhn op. cit., 371.

of fixed and improvised elements, extending the mixture of mechanization and spontaneity and furthering the sense of identification between the living and mechanical aspects of the painting.

I probably would not have linked Davies's piece to a twittering machine without its title. In addition, my interpretation of the piece as representational links it to the specific characters of birds in the painting rather than to general twittering. In this sense, Davies's piece as ekphrasis forms in my hearing an immediate connection to unique aspects of the painting. In addition, unlike representations of the painting's birds in Schuller's and Tan's movements, Davies's representation foregoes elements of presence in the painting, and instead concentrates on conveying an interpretive lens, according to which the bird-like appearance of the four characters is secondary to the contrasting qualities they express. While Schuller's representation may convey the impression of a music box that produces lifelike birdcalls, Davies's movement can be thought of as a different kind of music box, which produces music rather than tweets. Figure 3.12 visualizes the CIN that links the painting's bird characters to the instrumental parts in Davies's movement. Each of the characters in the painting is represented in an instrumental part through contextual representation, because the qualities of each instrumental part project directly onto the qualities of one of the characters, without a mediating shared metaphor. However, differently from the contextual representation of the windup mechanism in Schuller's piece, which projected from the music an element that was not implied in the painting, the network in Figure 3.12 visualizes a projection from the music to the painting that is dependent on the painting's characters as much as it is contingent on the qualities of the instrumental parts.

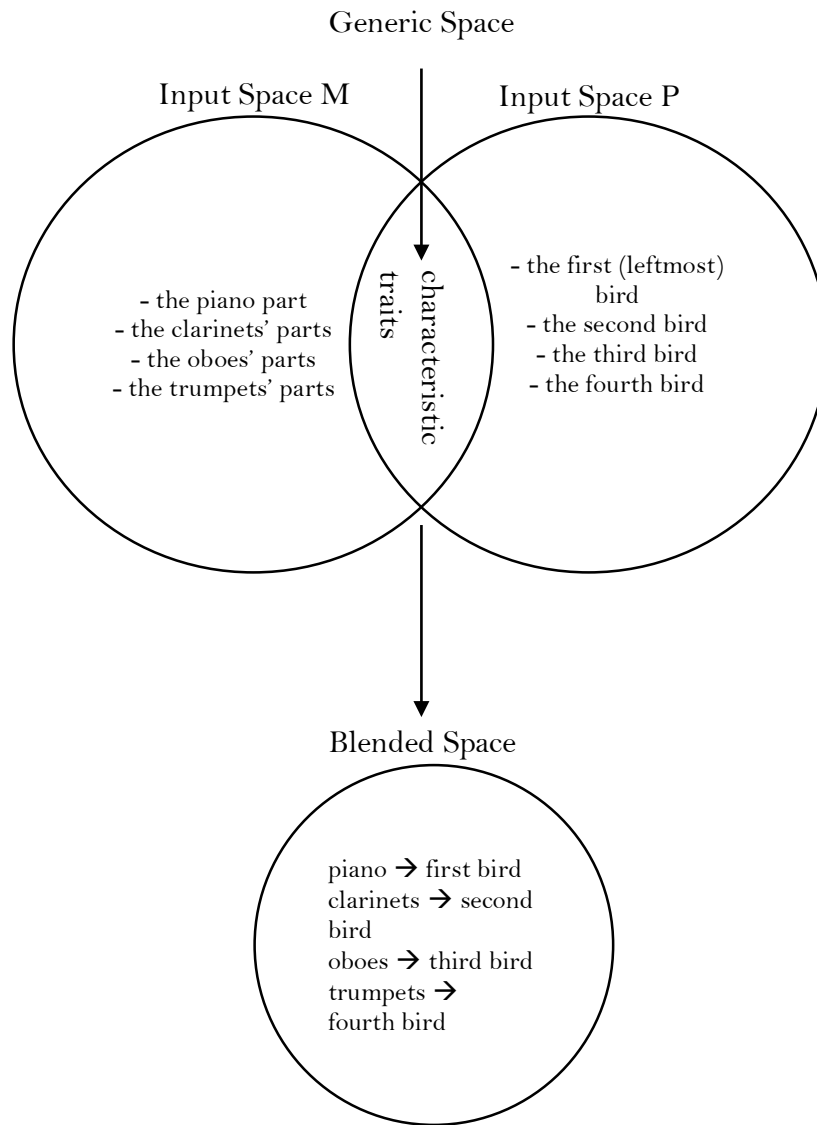


Figure 3.12: Representation of the four bird-characters in Davies’s “Twittering Machine”

A final remark will touch on the issue of temporality as a means of representation. Like Schuller’s “Die Zwitschermaschine,” in which the accelerating buzz symbolizes the turning of the crank, followed by a musical representation of the tweets, Davies’s “Twittering Machine” presents a temporal process. However, while Schuller’s movement iterates the process three consecutive times in what becomes an especially clear explanation of the mechanism, Davies’s process is heard only once in the piece. When the music becomes faster and louder in the course

of the movement, I begin to sense the human hand, left invisible in Klee's painting, that turns the crank at a gradually increasing speed, leading to the addition of more and more parts to the noisy group.³⁶ When the music reaches its climax, the hand suddenly slows down to its original speed, and as a result many of the parts either disappear or lose much of their material, leaving the piano part alone (meaning, the call of the leftmost bird) unchanged. Like Schuller's buzzing sound, the musical metaphor of motion is a crucial factor in musically expressing the crank in the painting. However, differently from Schuller's musical turn of the crank, Davies's representation features a consistent turning motion, which does not cease when the birds are heard, further contributing to the presentation of the birds as parts of the mechanism.

3.5 Conclusion

The three pieces examined in this chapter provide a sense of the various ways in which musical works can express a painting. Each of the compositions elicited an ekphrastic interpretation, supplying another viewpoint into the painting. By providing a unique lens through which to view the painting, each piece participated in generating a new twittering machine, so that the analyses helped uncover three different *Zwitschermaschinen*. Considered together with the painting, the three compositions take part in creating three distinct virtual multimedia works, each consisting of a combination of the painting with the music, bringing the painting to life by providing a musical environment to the image. First, the work consisting of Schuller's movement and Klee's painting comprises of a mechanical bird trap operated with the turn of a key; while we get the first impression of living birds confined to a machine, they turn out as a mechanical

³⁶ In performance, the arm would have belonged to the orchestral conductor who dominates the acceleration. The first performance of the piece, by the Cirencester Grammar School orchestra, appropriately featured Peter Maxwell Davies as the invisible hand that operates the machine.

device that emits bird-like calls. Second, Tan and Klee's work is not a trap, but rather a humoristic, surreal contraption producing parodic and exaggerated "tweets." Finally, the work that combines the painting with Davies's movement expresses an allegory in which the twittering machine is a musical box that produces, with the consistent turn of a crank, four distinct musical characters, expressing four ways to realize the motive introduced by the mechanism. Treating the music and the painting as virtual components of a single artwork expresses the notion that each of the different musical representations of *Die Zwitschermaschine* discussed in this chapter impacts the way in which we view the painting. Each composition brings out a distinct facet of the painting and, as a result, engenders what seems like a multiplicity of musical paintings, identical in their visual appearance but contrasting in their modes of signification.³⁷

³⁷ In considering music and painting (and text) as mixed media events, I draw from Lawrence Kramer, who argues for alliance between music and imagetext (after W. J. T. Mitchell 1995—see Mitchell's footnote 9 on p. 89), however with the caveat that "[u]nlike texts or images, which generally seem to "have" meaning regardless of their circumstances, music tends to "get" [semantic] meaning [...] only from the process of application itself [...] as an effect of being applied to texts or images" (L. Kramer 2002, 147). As for the process in which music receives and provides meaning to images, Kramer explains that "[t]he meaning emerges in the music on the basis of something in the imagetext, and at the same time emerges in the imagetext on the basis of something in the music. The temporality of the process is unclear; the meaning is everywhere at once" (ibid., 149). Claudia Gorbman demonstrates the multiplicity of meanings that music can endow on a single image (or a sequence of images) through a mind experiment, in which she examines the different interpretations arising from the pairing of a single scene in François Truffaut's *Jules and Jim* (1962) with different musical styles. The simplicity of the visual aspect of the scene, showing Jules, Jim, and Catherine riding bicycles down a country road, makes the stark differences in interpretation arising from the coupling of the visuals with different soundtracks all the more pronounced. (Gorbman 1987, 16–18).

Chapter 4

Morton Feldman's *Rothko Chapel* as Musical Ekphrasis

*There's this place in Houston Texas, seems like the perfect church to me
reminds me of your heart and how comforting a cold black void could be*

—David Dondero, *Rothko Chapel*

Rothko Chapel is a unique piece in Morton Feldman's oeuvre. Feldman titled several of his pieces after New York abstract expressionist painters. However, *Rothko Chapel* is his only composition entitled after a space that is itself a work of art—the chapel Mark Rothko designed in Houston, Texas, for which Rothko also created a series of fourteen paintings that became an inextricable part of the space.¹ Feldman originally titled his piece *For Mark Rothko*, a title that recalls other dedicated compositions such as *For Philip Guston*, *For Robert Rauschenberg*, and *For Franz Kline*, however he later changed the title to indicate the space for which the piece was composed.² He elucidated on several occasions that, while his other works titled after painters

¹ Rothko's chapel inspired several musical works; apart from Feldman's *Rothko Chapel*, at least four pieces of different genres are titled after the chapel: the middle movement of William Kraft's *Gallery 4–5*—appears in *William Kraft: Chamber Works*, Boston Musica Viva, conducted by Richard Pittman (Albany Records, TROY218, 1985); Richard Coates's *Rothko Chapel (for K)*—appears in *Dedications*, Richard Coates and B.J. Barker (885767158023, 2012); Raymond L. Moore's *Rothko Chapel (Tone Sketch)*, which the composer describes as a musical sketch of the chapel in Houston—appears in *Rothko Chapel, String Quartet, and Chamber Music* (Ramp Records 888174000671, 2013); and David Dondero's song, a line of which is quoted in the epigraph to this chapter, from the album *Simple Love* (Team Love Records TL-23, 2007).

² The original title appears on Feldman's handwritten draft for the score (*Vertical Thoughts* 2010, 223).

should be considered dedications more than references, *Rothko Chapel* was in fact composed for the place:

To a large degree, my choice of instruments (in terms of forces used, balance and timbre) was affected by the space of the chapel as well as the paintings. Rothko's imagery goes right to the edge of his canvas, and I wanted the same effect with the music—that it should permeate the whole octagonal-shaped room and not be heard from a certain distance. [...] While it was possible with the paintings to reiterate color and scale and still retain dramatic interest, I felt that the music called for a series of highly contrasted merging sections.³

It was a piece written for an occasion, and I think it's one of those pieces which I'll never write again. I felt that I had to write something that I thought was appropriate. I enjoyed doing it.⁴

Feldman's words suggest that the piece was composed for the chapel space as an ideal space of performance. This chapter aims to show that the chapel had a deeper effect over Feldman's compositional decisions than issues of instrumentation and timbre. In this chapter, I consider the piece as an example of musical ekphrasis. I propose that Feldman's *Rothko Chapel* provides a sonic identity to the chapel, allowing it to transcend its physical properties by bringing the space into presence in listeners' minds even when listening to a performance away from the chapel. The piece achieves this identity by featuring a "musical persona," to use Edward Cone's term,⁵ that guides listeners from one sonic "image" to the other, allowing an interpretation of the music as expressing a person's process of meditation engendered by a prolonged interaction with the paintings. Memory and its fluctuating, elusive nature becomes a central theme in the piece, encouraging a reflective listening activity that parallels the experience Rothko intended to create in the chapel space.

³ Feldman 2000, 125.

⁴ Gagne and Caras 1982, 170. Feldman explained that other pieces should be considered dedications rather than references in Orton and Bryars 1976, 244–45.

⁵ Cone 1974, 84.

The chapter will progress according to the following outline: first, I will explain the reasons for dedicating a chapter to musical ekphrasis of a structure, elucidating the possibilities afforded by such musical representation. Second, I will iterate the main questions on which the discussion of the piece qua ekphrasis will focus, and how it can contribute to the understanding of musical ekphrasis in general. The third section will supply background information as well as an interpretation of Rothko's chapel, since familiarity with the object of ekphrasis is required for ekphrastic interpretation. The fourth section will include analysis and interpretation of Feldman's *Rothko Chapel*. Groups of instruments in the piece—the chorus, the viola, and the percussion—are clearly distinguished, and the relationship between them, especially between the viola and the chorus, shapes my understanding of the piece as musical ekphrasis. Therefore, the analysis will first concentrate on the harmony produced by the chorus, then focus on the viola part, and end with a brief discussion of the percussion parts. Lastly, I will summarize my interpretation of the piece as musical ekphrasis, reflecting on the representation generated by my hearing, and drawing conclusions on differences between musical ekphrasis of a structure and that of a painting.

4.1 The Possibilities of Musical Ekphrasis of Structures and Spaces

The previous chapter concentrated on musical ekphrasis of painting, examining multiple musical representations of a single painting by Paul Klee. While it may seem at first as if similar possibilities emerge when music represents a structure, several distinctions stem from the different figurative and sensual potentialities of spaces compared to paintings.

Paul Klee's *Die Zwitschermaschine* and Rothko's chapel differ in their representation of characters and figures, and the possibilities they afford to interpretation. The birds in Klee's

painting became a touchstone for different types of musical representation, inviting representation based on musical imitation of birdcalls or, alternatively, depiction of their contrasting characters. Rothko's chapel contains no characters, unless considering the people present inside the structure at each moment.⁶ One could justly claim that paintings are created, and generate ekphrastic musical compositions, with or without imagery or characters, and mention as an example Klee's abstract *Ancient Harmonies* (1925) and its musical ekphrasis in the first movement of Gunther Schuller's *Seven Studies on Themes of Paul Klee* (1959). Yet paintings, more than structures, tend to incorporate characters and other figurative depictions, generating potential for musical imitation.

Structures can depict characters or figures in a different way. One can enter a space and experience it from the inside, being surrounded by it and consequently becoming part of the space in the eyes of another person for the duration of their stay, similarly to the way in which Rothko's paintings are part of the chapel space, or to the way in which I become a part of my study carrel in the eyes of my carrel-mate when she enters the room.

A second difference is the sensual experience that each art form affords. When looking at a painting, an observer is external to the artwork, seeing it as a whole. A building, by contrast, can never be seen in its entirety—parts of the structure always remain outside one's view, both inside and outside, depending on the observer's perspective. For example, as I am sitting in my study carrel at Butler Library at Columbia University, I see the white walls, the books on the shelves, and the view of an enormous residential building by Central Park reflected in the

⁶ In contrast, Matisse's murals in the Catholic *La Chapelle du Rosaire* in Vence contain numerous figures, including an image of the Virgin and Child, affording different possibilities for musical interpretation.

window. I cannot see the library's ornate façade, the stained-glass windows and chandeliers in the study halls, or the dark domain of the stacks that they surround.

Moreover, when it comes to the senses involved, a painting is perceived only by sight, while a structure can be considered a multi-sensual experience, involving also smell and touch. A structure can be dark and cold, like Rothko's chapel in Dondero's song, providing relief from the scorching Texas sun, or alternatively sunlit and warm, like Matisse's *Chapelle du Rosaire*, reflecting the soft light and colors of the south of France. Structures also employ the sense of hearing, since every building has a sonic identity determined by its environment as well as the materials from which it is constructed—the way it echoes the sounds of people walking and talking (or playing music) inside, and the way in which it carries or obstructs sounds coming from the outside. While I already compared musical ekphrasis of a painting to a multimedia work created in the mind of a listener-observer, in expressing structures, music has the ability to become one of the physical components of the space, like the paintings hung inside it or the color of the walls. When performed inside the space, music changes the sonic scape as well as the visual properties of the space (since the performers and their instruments become, for a limited time, part of the place). For a listener-observer, musical ekphrasis of a structure provides a temporal framework for experiencing the space and moving inside it, allowing different paths of experience of the music and the structure.

Therefore, we could consider the difference between listening to Feldman's *Rothko Chapel* performed inside the chapel and listening to a recording outside the chapel space. The first scenario presents the possibility of a multimedia work consisting of the chapel space (including Rothko's paintings) and Feldman's music. The second scenario sets forth the possibility for music to bring the non-present (although existing) structure into presence. As a

result, listening to a recording of the piece is similar, in a sense, to the rhetorical technique delineated by Ruth Webb (and termed “the ancient method” by Goehr),⁷ according to which a non-present object is brought into presence in a listener’s mind through vivid description,⁸ while the first scenario generates an immediate work-to-work relation, to use Goehr’s term, when the music becomes interpretive of the chapel space and vice versa.

However, like musical ekphrasis of a painting, music that takes a structure as its subject matter offers a unique musical identity to its object, which brings out certain aspects of the structure on account of others. As a result, similarly to the way in which each of the different *Zwitschermaschine* compositions demands a listener to form an interpretation of the painting, Morton Feldman’s *Rothko Chapel* generates a unique interpretation of the space in a mind of a listener.

4.2 The Central Questions

This chapter aims to provide a conceptual framework for interpreting musical compositions that express spaces, or structures, using Morton Feldman’s *Rothko Chapel* as a model. Therefore, like other instances of musical ekphrasis, I examine which aspects of the

⁷ Webb 2009; Goehr 2010, 389.

⁸ According to Goehr’s categories, Feldman’s *Rothko Chapel* falls under the modern conception of ekphrasis, or the work-to-work relation, since it represents an existing artwork (Goehr op. cit., 405). However, when listening to the piece outside of the chapel space, the music arguably brings the non-present chapel into one’s imagination. We could compare *Rothko Chapel* to Mussorgsky’s *Pictures at an Exhibition*, since several of Viktor Hartmann’s paintings expressed in the piece are no longer available. In Hartmann’s case, listener-observers can imagine the paintings based on his existing works, as well as written reports about the exhibition that Mussorgsky attended, while in Rothko’s they can imagine the experience inside the chapel’s space based on photographs and descriptions of visitors to the place.

object of ekphrasis (i.e., the chapel) are included in my interpretation of the piece, and for which aspects the interpretation does not account. Ekphrastic pieces can be heard as interpretations of their objects in multitextual listening.⁹ As a case of musical ekphrasis, I can expect my hearing of *Rothko Chapel* to treat some aspects of the chapel as more important than others, allowing me to construct an interpretation of the space based on the music.

In addition, this chapter aims to examine whether, and in which way, it is significant that Feldman's *Rothko Chapel* is a musical expression of a structure rather than a painting for its ekphrastic interpretation. The concluding section of this chapter will focus on issues of representation arising from the analytical discussion of the piece.

Interpreting Feldman's *Rothko Chapel* under the framework supplied by the first question, while returning to the second in the concluding section of this chapter, will not only provide a foundation for considering potential relationships between music and structures, but also provide a framework for interpreting this unusual piece. First, however, we will turn to Rothko's chapel, which Feldman characterized as "a spiritual environment created [...] as a place for contemplation where men and women of all faiths, or of none, may meditate in silence, in solitude or celebration together."¹⁰

⁹ For example, in my interpretation of Tan Dun's piece in the previous chapter, the caricatural aspect of Klee's *Die Zwitschermaschine* was especially important, while I heard Peter Maxwell Davies's piece as placing an emphasis on the different characters of the painting's birds.

¹⁰ Feldman op. cit., 125.

4.3 Rothko Chapel's History and Aesthetics

In her monograph on Rothko's chapel project, Susan Barnes elucidates the circumstances that led to the creation of the structure.¹¹ The project was started in 1964, when Mark Rothko was commissioned by John and Dominique de Menil to design a Catholic chapel that would feature his paintings. According to his contract, he was to work with architect Philip Johnson, planner of the St. Thomas University campus in Houston, where the chapel was to be built. Dore Ashton recounts that Rothko came up with the octagonal structure of the chapel, shown in Figure 4.1, justifying his aesthetically motivated choice with historical influences after he learned that octagonal chapels were indeed built in early Christian times.¹² Rothko completed the design of the structure and the paintings in 1967, and remained closely involved in the work on the chapel's construction until his death in 1970.

¹¹ Barnes 1989.

¹² Ibid 80. According to other accounts, however, it was Johnson who proposed the octagonal design, and Rothko enthusiastically accepted (ibid., 81). The diagram of the chapel space in Figure 1 appears in ibid., 66.

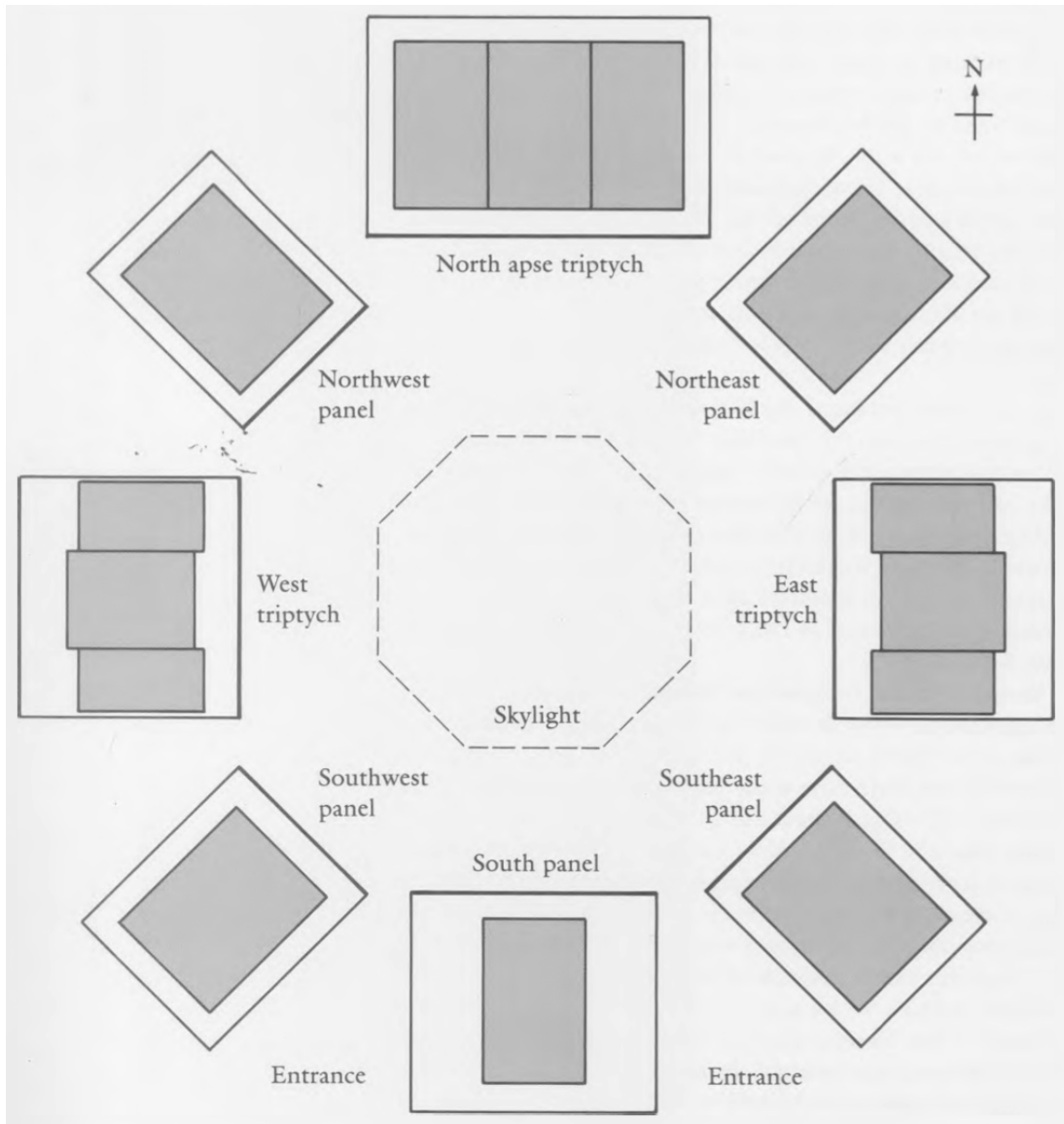


Figure 4.1: The arrangement of the paintings inside Rothko's chapel space

The conception of the chapel combined Rothko's childhood fascination with religion and spirituality with his aspiration, as a mature artist, to create a perfect environment to host his paintings. Rothko's friend Ethel Schwabacher recalls that he discussed his desire for an ideal space to present his works, and insisted on thinking of that space as a chapel rather than a

museum, emphasizing the spiritual aspect of his paintings.¹³ Rothko referred to spirituality in his paintings on different occasions, claiming that people who weep when they see his paintings are having “the same religious experience I had when I painted them.”¹⁴ He described the chapel’s paintings as “voices in an opera” and arranged them in the space in order to create relationships between the paintings through the octagonal shape of the structure, across the diagonal, lateral, or oblique axes of the space.¹⁵ Rothko also designed the lighting in the chapel, which emanates from a single source—a central skylight, concealed by a suspended octagonal panel.¹⁶ He began working with Johnson on the project, which originally was conceived as a Catholic chapel. However, Johnson withdrew his participation following Rothko’s objections to some of his ideas concerning the chapel’s design, and the structure, eventually deemed interdenominational, was completed with help from architect Howard Barnstone. Rothko did not live to see the completed chapel—he died in February of 1970, approximately a year before the chapel’s opening ceremony, when Morton Feldman was asked to compose a piece for the chapel, to be performed on the occasion of its one-year anniversary.

Several aspects of the chapel seem prominent when interpreting it, together with its paintings, as a work of art. The first impression one usually hears from visitors to the chapel is its darkness. The chapel’s single light source, concealed by a panel, supplies scarce light inside the

¹³ Ibid., 44.

¹⁴ Ibid.

¹⁵ Ibid, 50.

¹⁶ Rothko rejected Johnson’s original suggestion of a tall pyramid-like structure with ample light coming from its top, and insisted on a structure no taller than the surrounding campus buildings—a truncated pyramid. While Rothko did not oppose the idea of a central light-source, he feared the light in the chapel would be too strong (ibid., 81–83).

space. A visitor to the chapel wrote in a blog post: “I...spent a three-hour college class sitting in the Rothko Chapel staring at these paintings, which have been called ‘impenetrable fortresses’ of color and ‘massive, imposing visions of darkness.’ [...] Here are some of the Rothko Chapel paintings. It was bad enough that I had to sit in the chapel for the entire three-hour duration of the class. Talk about sensory deprivation [...]”¹⁷ In addition, Rothko’s paintings inside the chapel feature dark colors, including dark shades of red, purple, and gray.¹⁸ One of the effects of the chapel’s darkness is a heightened awareness to variations of color and texture, an impression supported by the absence of figures in the paintings. The chapel’s darkness also sustains its intimate setting as a space for individual meditation and contemplation. Prompted by the dark colors of the paintings, literary theorist Leo Bersani and art theorist Ullyse Dutoit explain that especially in his late works Rothko aimed to create works of impoverishment, as if saying to spectators “my work is without authority. You will learn nothing from it; it will not even enhance your life with that delight or superior pleasure which, you have been led to believe, artists have the obligation to provide you.”¹⁹

The chapel’s octagonal structure neutralizes a predetermined sense of direction that might arise as a result of the paintings’ order of presentation.²⁰ Therefore, a visitor is not directed to

¹⁷ Gary, *2 or 3 Lines (and so much more)* (blog), April 26, 2013, <http://2or3lines.blogspot.com/2013/04/talking-heads-artists-only-1978.html>.

¹⁸ Steven Johnson provides a detailed description of the chapel’s painting in Johnson 1994, 13–14.

¹⁹ Bersani and Dutoit 1993, 3.

²⁰ However, not all paintings in the space are equal; as the diagram in Figure 4.1 shows, the panels in the north, west, east, and south parts of the chapel are larger, with the North apse triptych the largest and most pronounced in the space. In addition, the name of the north apse triptych implies that it stands for the chapel’s altar, endowing the triptych with special significance.

look at the paintings in a certain order, but is free to roam the space and experience the paintings in any order. The shape of the space also generates several axes of symmetry, generating the relationships Rothko sought between the paintings.

On a different note, the chapel features no religious symbolism of any kind. The lack of religious icons is especially pronounced when comparing Rothko's chapel to Henri Matisse's Catholic chapel in Vence. With no sacred iconography in Rothko's chapel, and no religious messages to contemplate, visitors are encouraged to reflect and meditate on Rothko's paintings. Therefore, apart from their aesthetic value, the chapel paintings also serve a spiritual function.

One could imagine various possibilities for a composer who wishes to create musical ekphrasis of Rothko's chapel. For example, elements from the chapel could be represented in the musical structure (such as the octagonal shape of the space). Musical phrases could be "meditative" in some way, such as repetition. This last possibility is not an unexpected musical feature from Feldman, who was also working at the time on *The Viola in My Life*. The next part of this chapter examines the approach Feldman took to representing the chapel in music and the possibilities that his piece affords in listening, examining *Rothko Chapel* as an interpretation of the chapel.

4.4 An Interpretation of Morton Feldman's *Rothko Chapel* as Musical Ekphrasis

The piece Feldman composed for the chapel defies the above expectations. *Rothko Chapel* is strikingly distinct in Feldman's oeuvre for several reasons. First, Feldman's works are characterized by their continuous quality that makes the music sound as if it has already begun and we happen to hear it from an arbitrary moment. Jonathan Bernard elucidates this point in his account of the aesthetics of Feldman's music, writing that "attacks for Feldman were a necessary

evil: the sound had to begin sometime, but its actual point of onset [...] ought to be greatly deemphasized.”²¹ Indeed, Feldman described his compositions as “time canvases in which I more or less prime the canvas with an overall hue of the music.”²² Yet *Rothko Chapel* has a distinct opening, marked by ceremonial-sounding timpani that raises in my mind the image of a ritual procession. The warm declamations of the viola, which follow soon thereafter, signal another divergence from Feldman’s style. The viola gives the impression of a human voice with a distinct and expressive melody, shaped like an arc, unusual for Feldman even when compared to the viola part of *The Viola in my Life*. Perhaps the most typically “Feldmanesque” component in the piece is the recurring harmonic passages of the chorus, which contrast the expressive viola part in their distant, opaque tone.

I propose an interpretation of Feldman’s piece based on a parallel between the chorus’s passages and the chapel’s paintings. Varied repetitions of the choral harmonies throughout the piece result in a heightened sense of musical differentiation, parallel to the paintings’ varied hues of dark colors. In addition, the obstructed tone produced by the chorus as instructed in Feldman’s score, as well as its absence of text, parallels the absence of religious figuration and symbolism. The vocal quality of the viola part weaves a melodic thread connecting the harmonic choral “images,” as if delineating a path among the paintings in the chapel. At times merging into the chorus, while otherwise remaining remarkably distinct, the viola can be heard as a person in the chapel—perhaps Rothko, Feldman, or us listeners—who reacts to the paintings, meditates with them, and eventually finds a new voice coming from within, a new form of expression, which relates to the images yet remains on a separate realm. The last part of the analysis will focus on

²¹ Bernard 2002, 181.

²² Feldman op. cit., 88.

the percussion instruments, which support the different musical “scenes” presented in the piece while at the same time functioning as links between them, and provide a distinct impression of the sacred, expressing the chapel’s setting, which consecrates the art inside it as well as the spiritual activity of meditation.

The following analysis refers to specific events in the piece in order to generate an overall interpretation of the piece as a representation of the chapel. While it does not discuss every moment in the piece, Figure 4.2 provides a large-scale view of the piece that can serve as a point of reference for the following discussions of local events. The text in bold marks components that give a passage its character. For example, the passage in mm. 135–210 is distinct for the rhythmic timpani. The table does not intend to identify sections in the piece, since sectionalization would not represent my experience of *Rothko Chapel*, which is a fluid piece full of repetitions and variations throughout. It is meant to be used only as a point of reference, not interpretation.

Measure numbers/ Instrument	1–134	135–210	211–242	243–301	302–427
Viola/ solo soprano	melodic declamations, later fragmented; participating in some harmonic progressions	melodic declamations, later fragmented; participating in some harmonic progressions	silent	solo soprano and viola duet	modal melody, intertwined with chorus
Chorus	harmonic progressions and their variations	harmonic progressions and their variations	antiphonal choir (SA), echoing a single harmony (“monochromey”)	silent	static harmony from antiphonal choir (SATB)
Percussion	sporadic accompaniment	rhythmic timpani passage (procession)	chimes accompaniment, sporadic chords	timpani, sporadic tremolo	vibraphone/ celesta: continuous broken chords

Figure 4.2: Large-scale form diagram of Feldman, *Rothko Chapel*

4.4.1 The Chorus’s Musical Images

One of the first things I notice when I listen to the piece is the sharp contrast between the expressive viola part and the chorus, which is remarkable for the dispassionate quality of its tone. Instructed in the score to sing continuously “on the vowel ‘n’ [sic] but not too nasal,” the chorus sounds as if originating in a remote source. Its tone sounds opaque and detached compared to the wholehearted voice of the viola, which comes across as if it is right nearby. The successions of harmonies produced by the chorus throughout the piece introduce a harmonic “vocabulary” that makes the occasional perfect octave or unison sound jarring and void. Harmonies progress from one to the next for the most part in stepwise motion, often retaining common tones, and intensifying to different extents also through changes in dynamics.

An example of the harmonic vocabulary of the chorus is presented in Example 4.1, showing the first chorus phrase in the piece. The harmonic progression intensifies in m. 30 and resolves through suspension of some of the voices (annotated in the example), while others move in stepwise motion (except for the bass part). The harmonic sense of intensification and release is dynamically supported by *messa di voce*. The last chord in mm. 30–31, which sounds like a resolution, is more dissonant than its predecessor—while the predecessor is made of two perfect fourths and a tritone, the “resolving” harmony consists of three stacked tritones. The pitch C4, moved from the alto to the tenor section, is the only note in both chords that does not take part in the stacked fourths or fifths. In this context, the perfect octave in m. 34 sounds hollow and harsh (indeed it is also sung with *messa di voce*), and that “resolving” chord, which returns in mm. 35–36, again brings a sense of repose.

The image shows a musical score for a chorus's first entry, starting at measure 29. The score is arranged in two systems. The first system (measures 29-33) includes parts for Soprano 1, Soprano 2, Alto 1, Alto 2, Tenor 1, Tenor 2, and Bass. The second system (measures 34-38) includes parts for Soprano 1 (S 1), Soprano 2 (S 2), Alto 1 (A 1), Alto 2 (A 2), Tenor 1 (T 1), Tenor 2 (T 2), and Bass (B). The music is in 3/2 time and includes dynamic markings like 'pp' and 'sustained'. The score features a variety of rhythmic patterns, including triplets and sustained notes, and is marked with 'pp' (pianissimo) and 'sustained'.

Example 4.1: The chorus's first entry, mm. 29ff

As if presenting changing scenes, the chorus alters its harmonic and expressive qualities between subsequent passages, featuring short phrases as well as long, almost static sections of

frozen harmonies, echoing from one part of a divided choir to the other. In his analysis of *Rothko Chapel*, Steven Johnson compares sections he marked in the piece to the succession of Rothko's paintings in the chapel, connecting what Johnson hears as different musical temporal states—ranging from linear (dominated by the viola) to vertical—to the colors and textures of Rothko's canvases. I would like to suggest a different interpretation. As I listen to *Rothko Chapel*, I hear the chorus iterating familiar harmonies that sound as if repeating with variations from one choral passage to another. During every chorus passage that I hear, I get the feeling that I have heard these chords already, but at some point I give up trying to notice repetition in the face of what sounds like sporadic successions of fluctuating mutters.

It is not until studying the score that I find the connections between different successions, presented in Figure 4.3 in the next page. The four areas in the figure present all the harmonic progressions in the piece. In each area, progressions are arranged chronologically from top to bottom (the fourth area, on the lower left, includes only a single harmony). Repeating or varied harmonies between progressions are identified with surrounding rectangles and arrows, showing that the different harmonies in the piece share common harmonic building blocks, relating choral passages to one another as a constellation of variations featuring common basic materials that reappear in new progressions and articulations. Some of the phrases generate multiple paths of variations and repetitions, such as the first progression, in mm. 29ff, which generates two strands of variations on the top right and left of the figure. The only lonely planet in the constellation presented in Figure 4.3 is the extended passage of “vibrating stasis,” which Feldman described as “monochrome” and Johnson described as “completely vertical,” in mm. 211ff.

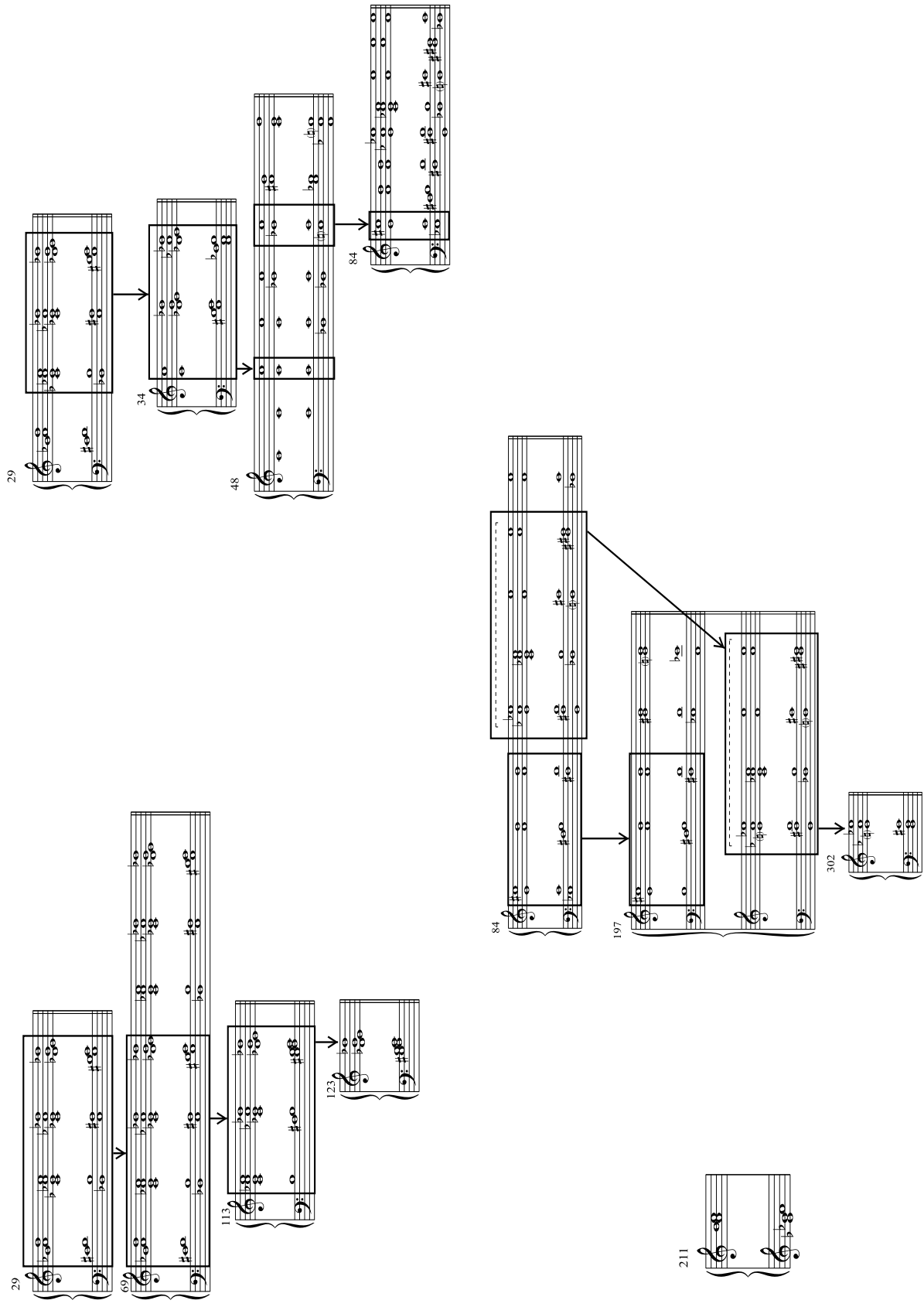


Figure 4.3: A generative diagram of the chorus's harmonies

Several qualities of the choral passages furnish a comparison to the paintings in the chapel as may be seen by a visitor who takes time to observe each image before moving on to the next. First, I hear the opaque quality of the chorus's sound, giving the impression that the singers' voices are obstructed, as parallel to the dark setting in which the chapel paintings are presented. The singers produce the sound while blocking the air coming out of their throats using their tongues—compare singing an open “ah” to the sound that emanates when singing “n.” In the earlier case, the voice sounds full-bodied, warm, and projecting, while in the latter the tongue touching the hard palate gets in the way of the stream of air, consequently obstructing the sound. The direction to sing “n” inhibits the potential lucidity of the chorus's harmonies, giving its tone a blurred quality that functions in my hearing as a musical metaphor to the darkness of the chapel's space that obstructs the paintings from view.

Figure 4.4 presents the CIN that visualizes the metaphor's formation, explicating its structure.²³ The figure shows that obstruction serves as a metaphor that connects the chorus in the music's input space (marked M) to the chapel space in the chapel input space (marked C). In thinking of the chorus's sound as obstructed, I projected the impression of Rothko's paintings as affected by the darkness of the chapel onto the effect of the chorus's distinct mode of producing its sound. As characteristic for contextual representation, the diagram presents a single-scope network, in which the organization of the chapel's input space projects onto the music's input space—I would not interpret the sound as representational in this way without using the chapel as context in listening.

²³ Fauconnier and Turner 1998.

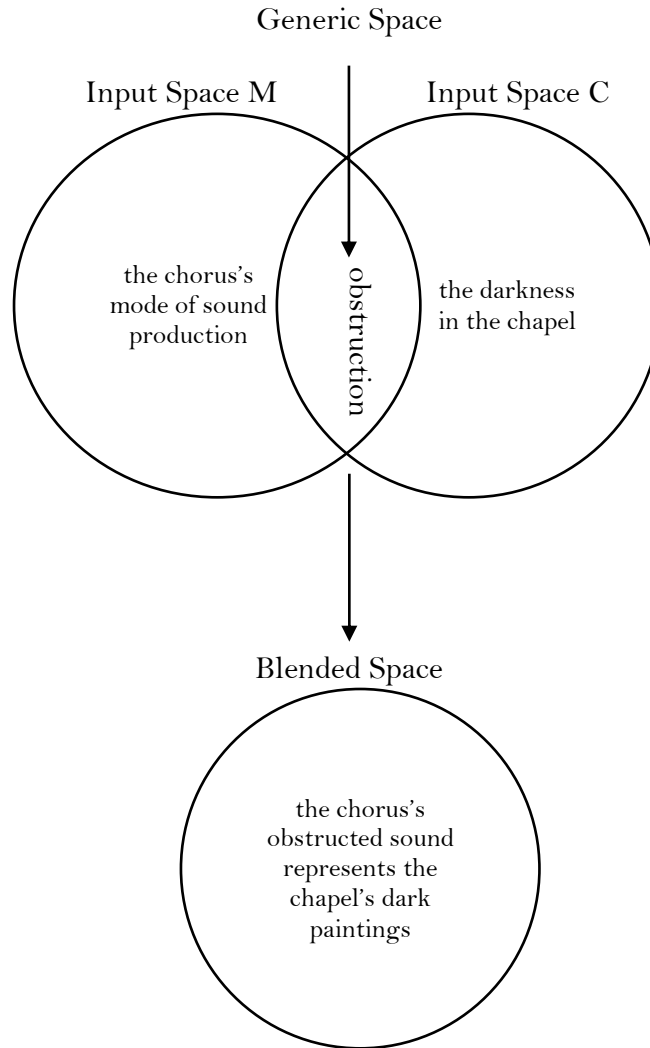


Figure 4.4: Contextual representation of the chapel's darkness

Secondly, as Figure 4.3 above shows, the chorus's passages throughout the piece consist of variations on returning harmonies, as successions of chords combine familiar and new sonorities. In this sense, I hear the choral passages as expressing a musical parallel to the variations in shades of dark colors and textures between the chapel's paintings. However, while the order of the paintings depends on the person viewing them, the passages of the chorus follow one another in a predetermined order. The musical ekphrasis, therefore, provides a sense of direction when compared to the chapel space. Lastly, the absence of figures and shapes in the

paintings is expressed in the music in the absence of text in the chorus part, as well as in the nebulous shape of its phrases, contrasting the viola's melodic declamations with the chorus's non-demarcated beginnings and endings and limited motion.

Overall, as summarized in the diagram in Figure 4.5, I hear the chorus as a musical representation of the paintings *as they appear inside the chapel space* through contextual representation. Other listeners may interpret the music differently. Steven Johnson, for example, proposes that the controlled atmosphere in which Rothko's paintings are presented in the chapel translates into the passage Feldman termed "monochrome," in which the chorus, divided into two antiphonal choirs, envelops the audience in the chapel from both sides. In Johnson's interpretation, the sense of variation between the paintings in the chapel is represented contextually in the progression of Feldman's piece between different textures and thematic materials. This multiplicity of possible interpretations is a point of strength in applying intertextual relations in analysis, since it reflects the similarity between multitextual listening and musical performance—both open multiple avenues into compositions, reflecting the complexity and flexibility of musical experience.

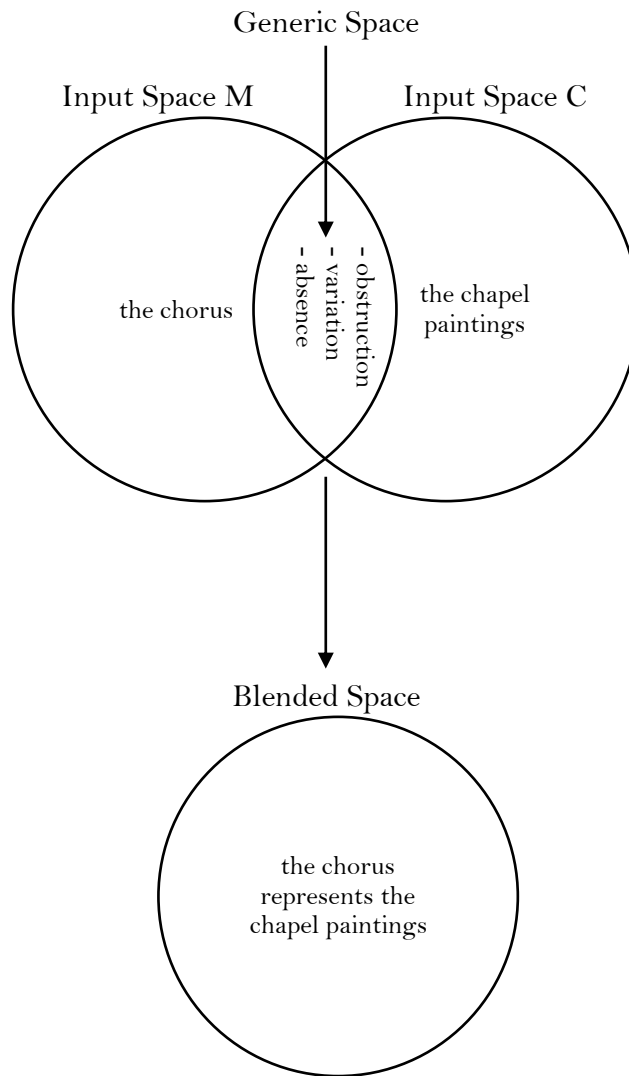


Figure 4.5: Contextual representation of the chapel's paintings

4.4.2 The Viola and Solo Soprano

If the chorus brings a musical expression of the chapel's paintings, then the viola, with its expressive melodies and warm, projecting tone, can be thought of as a voice. Heard before the appearance of the first choral "image," and returning in between as well as during the chorus's passages, the viola's voice introduces listeners to the piece and guides between the choral harmonies, serving as a familiar anchor that directs listeners' attention. The viola is subjected to

the most extreme changes in the piece—from expressive melodic declamations to repetitive static passages, and finally a lyric and modal melody. However, up to its final melody, the viola continuously contemplates its own material, repeating phrases and fragments as if meditating on a mantra.

For a perspective on the part of the viola in my interpretation of *Rothko Chapel*, the following compares its role to that of the different “Promenade” sections in Modest Mussorgsky’s *Pictures at an Exhibition* (1874). The promenade is customarily considered as expressing the protagonist of the exhibition, through whose perspective we are listening to the musical representations of the paintings. Following the musical viewings of the paintings, the manifestation of the promenade theme changes as if to reflect the change in mood that the painting just viewed affected on the musical protagonist.

One would be going too far, to say the least, in comparing the viola part in *Rothko Chapel* to Mussorgsky’s promenade theme. Avoiding simplification of *Rothko Chapel*, some points of comparison to *Pictures at an Exhibition* are revealing. Unlike the promenade in Mussorgsky’s piece, Feldman’s viola phrases have the sometimes singing, sometime speech-like quality of a voice, functioning as a musical persona in the piece. For instance, the opening viola phrases are shown in Example 4.2 below. While not quite an antecedent and consequent, the phrases have the quality of a presentation of an idea followed by a response. The first phrase starts slowly, as if originating in the long somber thirds of the timpani, and gains momentum as it rises to its climactic note A flat in m. 10, following which it quickly falls back in an ending gesture annotated in the figure. The temple blocks function as punctuation marks before the second phrase, in which the viola begins as if it has already gained momentum in the previous phrase, again rising to that high A flat, but this time the percussion interrupt the viola, which is

left hanging in space. More punctuation marks, this time from wood blocks, and then, in mm. 25–28 the viola is in full force, rising swiftly and passing the A flat, up to a high D, but then returning to A flat for a repeated ending gesture, replicating the ending of the first phrase.

The musical score for Example 4.2 (mm. 1–28) is arranged in a multi-staff format. The instruments and their parts are as follows:

- Bass Drum:** Shows a sequence of rhythmic patterns across various time signatures (2/2, 3/2, 5/2, 3/2, 2/2, 3/2, 2/4, 3/2).
- Timpani:** Features complex rhythmic patterns with triplets and four-note groups, often marked with accents.
- Viola:** The primary melodic line, starting with a *mp* dynamic. It includes a section from m. 15 to 22 marked *sempre mp*. A specific phrase is boxed and labeled "ending gesture" with dynamics *p subito* and *ppp*.
- Cel.** (Celesta): Features a melodic line with a *pp* dynamic and a fermata in m. 22.
- T. Bl.** (Trombone): Provides harmonic support with chords and triplets.
- Vib.** (Vibraphone): Plays chords with triplets.
- Vla.** (Violin): Features a melodic line with dynamics ranging from *molto* and *f* to *p subito* and *ppp*. A phrase is boxed and labeled "ending gesture" with dynamics *pp*, *mp*, *molto*, and *ppp*.
- T. Bl.** (Trombone): Continues with harmonic support.
- Vla.** (Violin): Continues with melodic support.
- Cel.** (Celesta): Continues with melodic support.
- W. Bl.** (Wood Block): Provides rhythmic punctuation with triplets.
- Vib.** (Vibraphone): Continues with harmonic support.
- Vla.** (Violin): Continues with melodic support, including a boxed phrase with dynamics *ppp*, *mp*, *molto*, and *ppp*.

Example 4.2: The opening phrases, mm. 1–28

In addition, like the way in which Mussorgsky’s promenade theme changes each time it is heard, as if the protagonist is reacting to the pictures, Feldman’s viola part changes after each harmonic progression, as if responding to the sonorous “image” presented by the chorus. For example, after one of the more intense choral passages, the viola repeats a harmonic in mm. 63–74, the heard pitch of which is A flat in the fifth octave—the same A flat that started the descending gesture in its opening phrases. The passage is shown in Example 4.3. Having heard that gesture a few times since the beginning of the piece, I expect the viola to complete its descent, but instead it continues to linger on A flat, repeating it continuously—first by itself, then with the addition of the celesta and vibraphone, and finally together with the chorus. Only after the next chorus phrase has been heard, in mm. 76–77, the viola completes the gesture, this time with A flat played as an ordinary note rather than an overtone. This passage conveys a moment of reflection in the piece, treating memory as a theme both for the viola and for us listeners who have heard the descending gesture several times by this moment, and are now experiencing the tension created as the gesture is implied but delayed.

The musical score for Example 4.3 consists of three staves. The top staff is for Celesta (Cel.), the middle for Percussion (Perc.), and the bottom for Viola (Via.). A circled measure number '65' is placed above the Celesta staff. The Celesta part shows a series of notes, with a circled measure 65 containing a specific note. The Percussion part includes T. Bk. (Tambourine) and Vib. (Vibraphone) parts. The Viola part is marked with *pp* (pianissimo) and shows a series of notes, including a circled measure 65. The score is in 4/4 time and features various rhythmic patterns and dynamics.

Example 4.3: Delay of the viola’s ending gesture, mm. 63–77 (continues on the next page)

The image displays a musical score for Example 4.3 (cont'd.), featuring vocal and instrumental parts. The score is divided into two systems. The first system covers measures 70 to 75, and the second system covers measure 80. The vocal parts (Soprano, Alto, Tenor, Bass) are written in four staves, each with a treble clef and a key signature of one flat. They feature triplets and dynamic markings such as *pp* and *ppp*. The instrumental parts include Cello (Cel), Viola (Vla), and Violin (Vibr). The Cello part has a treble clef and a key signature of one flat, with dynamic markings like *ppp*. The Viola part has a treble clef and a key signature of one flat, with dynamic markings like *mp* and *ppp*. The Violin part has a treble clef and a key signature of one flat, with dynamic markings like *ppp*. A box highlights an 'ending gesture' in the Viola part, which is a melodic phrase starting with a *mp* dynamic and ending with a *ppp* dynamic. The score also includes measure numbers 70, 75, and 80 in circles.

Example 4.3 (cont'd.)

Another consideration when comparing the perception of a musical “protagonist” in the two pieces is the way in which protagonist’s passages are distinguished from the musical

representations of images. Listening to the original solo piano version of *Pictures at an Exhibition*, the distinction between the protagonist and the paintings is thematic—in contrast to the changing episodes representing Viktor Hartmann’s paintings, the return of the “promenade” theme signifies the return of the character who narrates listeners’ experience through the exhibition. In *Rothko Chapel*, however, the distinction between the “episodes” of the chorus harmonies, that represent the chapel’s paintings, and the ongoing viola, the narrator of listeners’ musical visit in Rothko’s chapel, is conveyed by a change in timbre as well as the contrast made between the opaque tone of the chorus and the lively vocal quality of the viola.

However, in a fitting gesture for music that represents a work by Rothko, these boundaries are often blurred. While the musical narrator of *Pictures at an Exhibition* becomes, in a sense, transparent during each depiction of a painting, since the “promenade” theme gives its place to musical illustrations of the images, the viola in *Rothko Chapel* can join the chorus. For example, the first chorus phrases shown in Example 4.1 above are interrupted by a fragment played by the viola, shown below in Example 4.4. As though responding to the choir, the viola utters a transposed version of its descending gesture from the opening phrase. As the figure shows, its fragment leads to the jarring perfect octave heard from the chorus, which completes the viola’s descent with a long hum, half a step (in pitch class) below the viola’s lowest note. Following the choral harmonies, the viola produces a short phrase—presented here in Example 4.5—consisting of a varied and truncated version of its opening material. In a move that reminds us of the protagonist from *Pictures at an Exhibition*, the viola changes its tune as a result of its “meeting” with the abstract image depicted by the choral harmonies. However, the viola also participates in the image, responding to the chorus. The character in *Rothko Chapel* states its presence as part of the space instead of viewing the art as an outsider.

Example 4.4: Chorus completing the viola’s descent, mm. 33–34

Example 4.5: The viola part changing after the chorus phrases, mm. 38ff

The boundaries between the protagonist and the paintings are blurred in a different way later in the piece, when a solo soprano breaks away from the chorus and joins the viola soloist in its declamations—the score of the passage appears in Example 4.6. The soprano soloist crosses the boundaries drawn in the piece between the human “sounds” and the instrumental “voice.” According to Feldman, the soprano’s melody is one of the evocations in a piece full of references, composed on the day of Igor Stravinsky’s funeral.²⁴ Interestingly, the two soloists (the soprano and the viola) are never heard at the same time—even when they interact in the duet of sorts shown in Example 4.6, they are not heard simultaneously. One can assume, then, that the

²⁴ Feldman op. cit., 126.

viola and soprano function as a single voice, the solo voice heard all along, which is now divided between two instruments so that it changes its tone color from moment to moment. Such understanding of the two parts agrees with Feldman's characteristic style, which appeases differentiation between instruments' distinct timbral properties by means of avoiding, as Jonathan Bernard puts it, "characteristic figures or passageworks that often serve to identify them in 'normal' orchestrational situations."²⁵ In this case, the role of the soprano can be understood as marking a change in the musical protagonist in the course of its experience in the chapel, signifying another variation in tone color in addition to the variations in expression and articulation already heard in the piece.

²⁵ Bernard 2002, 196. Bernard is referring to the ensemble in *For Franz Kline*, consisting of a variety of orchestral instruments yet sounding surprisingly neutral. He specifies that, similarly to the solo soprano part in *Rothko Chapel*, "the soprano's temporally adjacent pitches are all separated by leaps, usually large ones." (Ibid.) In an interview, Feldman proclaimed: "My pieces fail if one can say: 'Ah, there's a trombone, there's a horn.' I like the instruments to play in the natural way; they become anonymous, but deal in marginal worlds; and so they are precarious in execution." (Griffiths 1972, 758.)

245

Solo Sopr.

Via.

pp *mp*

pizz. *sul G*

pp

250

255

Solo Sopr.

Timp.

Via.

pppp

arco

pp

260

Solo Sopr.

Via.

pp

ppp

265

Solo Sopr.

Via.

ppp

Example 4.6: The viola and the solo soprano, mm. 244ff

Edward Cone referred to the sensibility of a resonating presence in an instrumental composition as a “unitary virtual agent,” stating that “[w]hat makes a unitary virtual agent of an instrument is its assumption of a specific role in a musical context. [...] One obvious kind of personalization is invoked every time we refer to an instrument as ‘singing,’ and to its melody as a ‘voice.’”²⁶ While Cone equates virtual agents with an imaginary character assumed by the composer, Carolyn Abbate shifts the point of view to music’s performative and heard aspects and suggests that music has a voice of its own, separate from its composer.²⁷ Therefore, interpreting the viola as expressing a person in the chapel is considered descriptive musical representation of the chapel space. This may sound strange, since no people are depicted in Rothko’s chapel paintings. However, in designing not only the paintings, but the ideal space in which to present them, Rothko has already considered people as part of the space. As discussed above, he intended that visitors come to the chapel not only to observe the paintings, but to have a spiritual experience in which the paintings play a role. It is not surprising, then, that Feldman would feature a persona in the chapel’s musical expression. The diagram in Figure 4.6 visualizes the musical metaphor of the viola as a person in the chapel. As common to descriptive representation, the diagram denotes a shared topology network, because both input spaces—the viola part in Feldman’s piece as well as the chapel’s visitors—feature the organization of the generic space, which in this case is the traits of a person. However, interpreting the viola as a voice relies on another metaphor, whose diagram appears in Figure 4.6 in a smaller size and relates the qualities of the viola’s part to a voice according to Cone’s model. As descriptive representation, understanding the viola part as a voice would be shared by different listeners.

²⁶ Cone 1974, 96.

²⁷ Abbate 1996, 11.

Indeed, Johnson describes the viola part as “declamatory” and “melodic” even though he does not explicitly use the word “voice.”

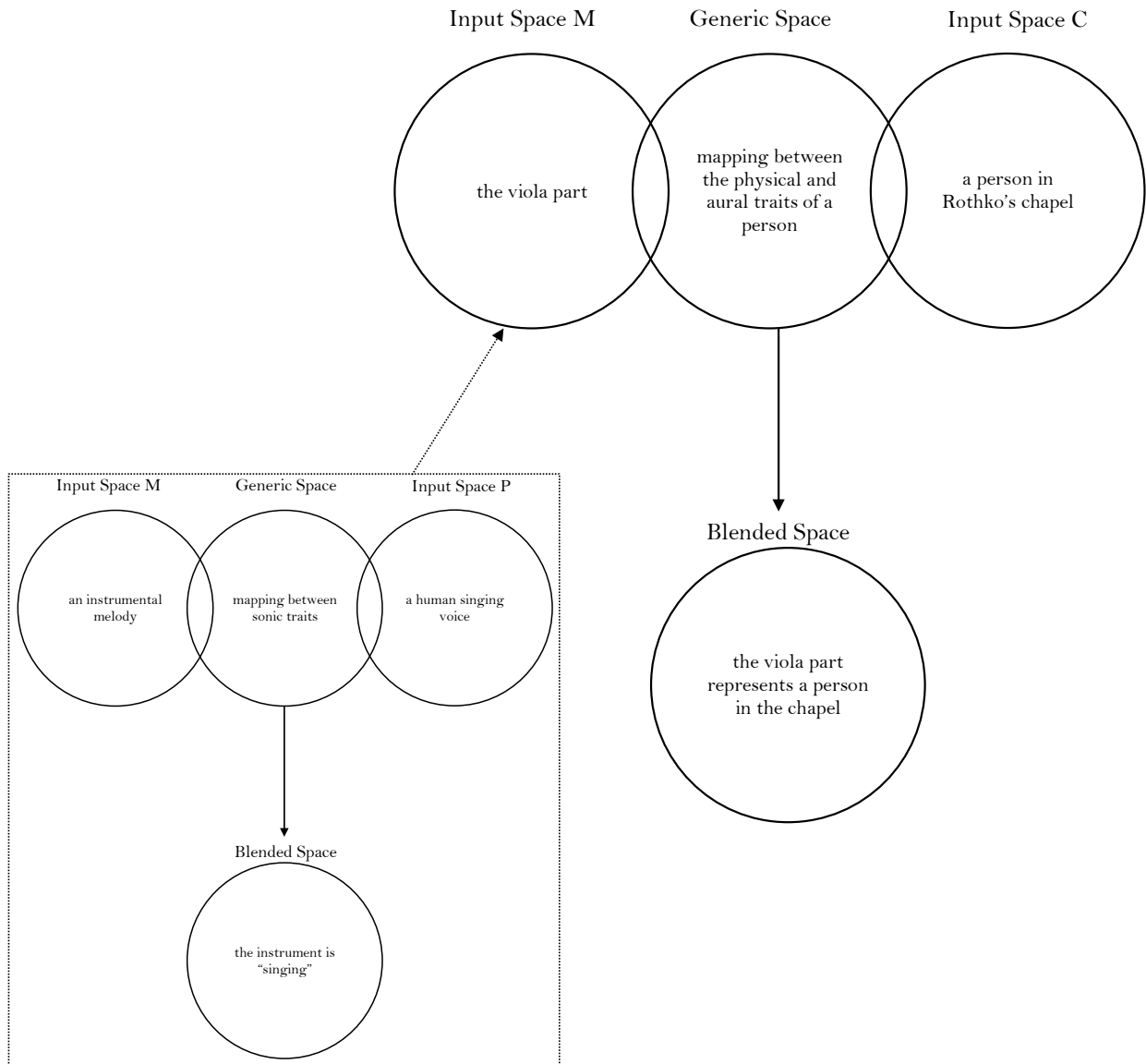


Figure 4.6: Descriptive representation of a person in the chapel

Perhaps the most radical change in the voice of the viola is heard towards the end of the piece, in the modal melody that Feldman characterized as “synagoguey.”²⁸ Its first iteration appears in Figure 4.7. For a piece that treats memory as a theme, it is fitting that the melody was composed when Feldman was fourteen years old; its tonality signifies an extreme shift in the character of the soloist. It is heard four times, each starting on a higher pitch level than its predecessor. In its first and third appearances, the melody is heard in E aeolian. In the second and fourth, it is transposed to A. As I listen to this passage, I wonder not only about the inclusion of the melody in the piece, but also about the echoing chorus harmony separating the two pairs of octave-related melodies. The key to understanding this passage, it seems, is in the vibraphone accompaniment that functions as a thread between the goal-directed viola melody and the static chorus.

The image displays two systems of musical notation. The first system, labeled with a circled '380' at the beginning, shows the Vibraphone (Vibr.) and Viola (Via.) parts. The Vibraphone part consists of a steady eighth-note pattern. The Viola part begins with a rest, followed by a melodic line starting on a low note, moving up stepwise, and then a triplet of eighth notes. The second system, labeled with circled '385' and '390', continues the Vibraphone part and the Viola part, which now features a long, sweeping melodic line with a fermata at the end.

Example 4.7: The viola’s final melody, mm. 320ff (continues in the next page)

²⁸ Feldman op. cit., 126.

The image displays a musical score for Example 4.7 (cont'd.), consisting of four systems of staves. Each system includes a Vibraphone (Vibr.) staff and a Viola (Vla.) staff. The measures are numbered 395, 400, 405, 410, and 415. The Vibraphone part consists of a continuous eighth-note accompaniment. The Viola part features a modal melody with various phrasings, including a triplet marked '3' and a dynamic marking of *pp* (pianissimo). A page number '37' is located to the right of the second system.

Example 4.7 (cont'd.)

The vibraphone's repetitive eighth-note accompaniment, doubled by the celesta during the choral harmonies, functions in a double role—first, it tames the directionality of the viola's modal melody, adding a harmonic character that, in the context of the melody, introduces stasis.

As a result, the viola melody sounds like a distant memory, floating on the waves of consistent (and not always related) broken harmonies. Second, as the choral harmony is heard, the vibraphone (and celesta) add a sense of motion to the chorus's stasis, introducing consistent rhythm to its sustained sounds. With every subsequent repetition of the viola melody, the sense of stasis intensifies, as if like a mantra being repeated to become more tangible.²⁹ The modal viola melody, intertwined with the repeated chorus harmony, is an autobiographical gesture, a juxtaposition of the composer as a child with his mature style. In this sense, the viola, whose voice has been functioning as listeners' guide to the space and images of Rothko's chapel, is responding to the chapel by supplying an image of its own to the series of impressions heard from the chorus.

4.4.3 The Percussion Parts

From the ceremonial timpani and bass drum that open the piece to the bead-curtains supplied by the vibraphone and celesta to obscure the ending viola melody and chorus harmonies, the percussion instruments in *Rothko Chapel* are significant not only for participating in the different musical images presented in the piece, but also for bestowing a sacred quality on the music that makes it especially suitable for the chapel.³⁰ The effect of the piece without

²⁹ Feldman once described *Rothko Chapel* as a photo montage, corresponding to Robert Rauschenberg's works (Gagne and Caras op. cit., 170, also cited in Bernard op. cit.). Bernard suggests that the ending viola melody is a less-than-successful application of this technique. However, as Feldman says in the interview, *Rothko Chapel* is a unique piece in his oeuvre, composed for a specific occasion, and as such he applied techniques unusual in his style but fitting the occasion. The viola melody joins the solo soprano declamations as two instances in which montage technique was used.

³⁰ Temple blocks, also known as "wooden fish," are used in Buddhist temples of East Asia—China, Japan, and Korea in particular—where they are still used in ceremonies (Ho 2006). The temple block is especially prominent in the North Korean Buddhist ceremony documented in the

percussion—if only the viola and the chorus were heard—would have been very different.

Adding a sense of motion to static parts at times, and on other occasions endowing stasis on what could have been perceived as musical motion, the percussion instruments complement the viola and the chorus. The varied functions of the percussion throughout the piece certainly deserve a focused discussion.

The interpretation has so far recognized the immense importance of tone color and timbre in creating a sense of change and progression, and in conveying the different musical “images” of the chorus. The viola became part of these images when its tone grew more distant and dispassionate, more similar to the chorus, but otherwise the viola was interpreted as a voice guiding listeners through the chapel on account of its expressive, human-like tone. None of the percussion instruments is heard from the beginning to the end of the piece as much as the viola and the chorus; it seems they have a different function in the piece. However, considering the different percussion instruments in *Rothko Chapel* as a single part—much in the same way that the solo soprano and the viola were considered here as a single voice—a great deal of variety is featured in their timbre, to which a listener could assign meaning.

To focus on role of the percussion instruments, the following is a last pass through the opening phrases of the piece, shown in Example 4.1 above. The timpani’s oscillation on B2 and D3, which becomes a returning motive in the piece, gives rise to the viola’s following minor third, transposed to start on C4.³¹ Characteristically of Feldman’s style, the timpani avoid a sense

following video, where it is used to mark the boundaries, as well as set the rhythm, to a prayer: https://www.youtube.com/watch?v=4nnNfsm_OFs.

³¹ Later on, in mm. 135ff, the timpani oscillate their pitches from the opening, B2 and D3, in a consistent pulse, conveying the ongoing and stable sensation one would expect in a ceremonial procession.

of pulse in the beginning using a variety of durations as well as frequently changing time signatures. The absence of pulse in the opening endows it with a pensive quality, marking the boundaries of the music as separate from mundane sounds; when the viola is heard, its tone sounds appropriately reflective. The meditative quality of the viola is further enhanced when, arriving at its climactic note in the phrase (A flat 5) through a crescendo in mm. 10–11, it suddenly softens its tone, and the vibraphone and celesta blanket the climax with a surreal-sounding harmony, distancing the expressive tone of the viola. The vibraphone and celesta return during the parallel moment in the viola's second phrase, generating a similar effect. As a result, the percussion parts help to contain the expressiveness of the solo viola, making it sound distant and subdued at its climactic moment by masking it with the celesta and vibraphone harmony, endowing it with a meditative character as if it expresses an inner voice.

Percussion instruments play a similar role in the choral passages, ornamenting the chorus harmonies in significant moments. For example, the first chorus entry in mm. 29ff is shown in Figure 4.8 below with a focus on the percussion instruments. The celesta, vibraphone, and timpani are heard sparsely, marking particular moments in the chorus phrases. Creating a semitone with the first soprano section, the celesta's D5 ornaments the chorus's crescendo and adds a dreamlike quality to the sound as the chorus intensifies its tone. The tension is relieved in the next measure, ornamented by the vibraphone, which in this context sounds like an extension, or an echo, of the voices, heard most prominently after they fade. When the chorus enters to complete the viola's fragment in m. 34 with a semitone below the viola's last note, its *messa di voce* is intensified by a soft but consistent tremolo on the timpani playing B flat 2 and adding to the sense of urgency generated by the dynamics; the timpani's B flat is later (in m. 54) also picked up by the chorus's bass section.

The image shows a musical score for Example 4.8, focusing on the chorus's first entry from measure 29 to 34. The score is arranged in a system with multiple staves. The top two staves are for Soprano + Alto and Tenor + Bass, both marked *pp*. The Celesta staff is marked *pp* and features a triplet of eighth notes in measure 30. The Percussion staff includes a vibraphone part with a single note in measure 30. The Viola staff is marked *mp* and has a note in measure 34. The S+A (Soprano + Alto) and T+B (Tenor + Bass) staves are marked *pp*. The Perc. (Timpani) staff is marked *ppp* and shows a rhythmic pattern starting in measure 34.

Example 4.8: The chorus's first entry, mm. 29ff (focusing on the percussion)

Apart for marking significant moments in phrases of the viola and the chorus, percussion instruments also play a role in conveying the chorus's musical images by supporting the changes in texture and tone color between the different choral "scenes." This is perceived especially in the timpani's contribution to the "processual" passage that starts in m. 135, the beginning of which is shown in Figure 4.9. Returning to its oscillated D3 and B2 from the opening phrase, however this time creating a consistent pulse, the timpani generates one of the unforgettable moments in the piece. In a composition characterized by its scattered use of percussion, in which the creation of a pulse is avoided for the most part, the pulsating timpani is perceived as a major event. Yet, oscillating its familiar dyad from the beginning, the timpani creates, together with the

chorus, another image that differs in texture from previously presented scenes, while at the same time consisting of a variation on familiar material heard earlier in the piece.

The musical score for Example 4.9 is divided into two systems. The first system covers measures 135 to 140. It includes staves for Chorus (Ch.), Tenor (T.), and Timpani (Timp.). The Chorus part has a 2/2 time signature in measure 135, which changes to 3/4 in measure 136. The Tenor and Timpani parts are marked *pppp*. The second system covers measures 145 to 150. It includes staves for Soprano (S.), Chorus (Ch.), Tenor (T.), Bass (B.), and Timpani (Timp.). The Soprano and Bass parts are marked *pppp*. The Timpani part continues with the same rhythmic pattern.

Example 4.9: Beginning of the timpani's "processual" passage, mm. 135ff

Lastly, the percussion is used to mark the end of the piece. Apart from the vibraphone's role accompanying the viola's modal melody, which continue into the final chorus harmony, the vibraphone finally ceases its ongoing accompaniment in the penultimate bar of the piece, leaving

the chorus harmony in its final diminuendo. The vibraphone accompaniment, in its pulsating ostinato consistency, provided a sense of progression to a repeating harmony that otherwise may have sounded utterly static; its disappearance in the final measure effectively halts the progression of the piece, signifying its end.

4.5 Conclusions

Edward Cone discussed the similarity of architecture to music, as opposed to painting:

We do not [...] inhabit the depicted space of a painting [...]. We do not occupy the actual space of a statue. [...] But music creates an environment that all share, for it surrounds and permeates all equally; it unifies characters, agents, and auditors in a single world of sound. That is why music, unlike poetry, can speak *to* us only as it speaks *through* us. (Architecture similarly creates an all-embracing environment, a space common to buildings and those who use them. It is for this reason, rather than for fancied similarities between architectural and musical form, that the art deserves its hackneyed sobriquet.)³²

In this final part of the chapter, I wish to perform several moves towards completing an ekphrastic interpretation of Feldman's *Rothko Chapel*. First, I will use the insights presented in the analytical section above to make comprehensive statements about *Rothko Chapel* as a musical expression of Rothko's chapel, examining which aspects of the chapel are highlighted by Feldman's musical representation, compared to those that remain obstructed in my hearing. I will then identify the types of representation found in my interpretation and discuss their differences (or similarities) to other cases of musical ekphrasis that focus on paintings, returning to the discussion of the possibilities each art form opens for musical representation. Lastly, I will return to the question of the difference between performance inside the chapel and listening to a recording of Feldman's piece outside of it.

³² Cone op. cit., 155.

4.5.1 *Rothko Chapel* as representing Rothko's chapel

In the analysis of Feldman's piece, I interpreted the passages of chorus harmonies as expressing Rothko's paintings in the chapel, while the ongoing viola declamations represented in my hearing a character in the chapel, experiencing the paintings in the space. Following Edward Cone's definition of a unitary virtual agent, I interpreted the viola as a voice that guides listeners' experience of the different musical "scenes." In the ongoing contemplation of its material (for example in its return to the ending gesture discussed above), the viola expresses self-reflection and memory, a repeating theme in Feldman's music that gains special significance in *Rothko Chapel*, since it expresses Rothko's goals in constructing the chapel—to create a space accommodating his paintings and the reflection and meditation that they inspire.

I found no musical representation of the octagonal shape of the chapel's space in Feldman's *Rothko Chapel*, nor did I find a musical parallel to the truncated pyramidal shape of the structure, however I heard the music as emphasizing other aspects of the space. First, the chapel's darkness is expressed in the opaque tone of the chorus and its lack of text, as well as in the harmonies of the vibraphone and celesta that accompanied climactic moments in the viola's and chorus's phrases. Second, the sacred character of the chapel's space, serving as a sort of temple for Rothko's art, is manifested in the orchestral colors of Feldman's piece, and especially in the chorus and some of the percussion instruments, such as the temple and wood blocks. The use of a four-part chorus, and later in the piece of an antiphonal chorus, also raises connotations of sacred music. Third, the relationships between the chapel's paintings, which Rothko described as "voices in an opera," are highlighted in the chorus passages, which relate to one another as variations on a common harmonic foundation, yet differ from one another in expression and intensity.

Compared to representing a painting, *Rothko Chapel* as a representation of a structure affords the addition of a character as part of its ekphrastic representation. Unlike *Pictures at an Exhibition*, in which the musical promenade “narrates,” in a sense, the different ekphrastic movements, but is not heard as representational, the musical protagonist in *Rothko Chapel* plays a role in the representational aspect of the piece. Apart from functioning as a mediator of the chorus images, the viola participates in chorus passages, becoming part (for listeners) of the images the chorus depicts similarly to the way in which I become part of my study space in the eyes of my carrel-mate.

While both descriptive and contextual representation play part in my hearing of the piece, I get the impression that *Rothko Chapel* intentionally foregoes expressing or demonstrating the physical characteristics of the chapel such as its octagonal shape, focusing instead on an interpretive approach. For Feldman, the piece is “autobiographical,” involving references to different moments in his life. It is not surprising, then, that I hear the piece as a highly personal and expressive work, which evokes the spiritual aspects of the chapel rather than portraying its appearance through musical imagery.

4.5.2 The Question of Performance

How does the listening experience to *Rothko Chapel* performed inside the chapel space vis-à-vis musical ekphrasis differ from listening to a recording of the piece? In an interview, Feldman revealed that he considered the division of the choir into an antiphonal chorus in the middle of the piece as a musical metaphor to the relationships created between paintings on opposite sides of the space and said that, for him, the first performance of *Rothko Chapel* inside

the chapel space was “the first and last performance.”³³ Indeed, in a performance inside the chapel space, listeners are enveloped in the chorus harmonies coming from both sides; the space of the chapel and its construction become part of the music no less than the music becomes part of the chapel’s soundscape. In his dissertation on Feldman, Ryan Dohoney emphasizes the relationship created between the music and the chapel’s paintings, writing that a performance in the chapel “afforded a chance to see Rothko’s paintings through Feldman’s music, as the concert presentation affords reflection on the paintings apart from any specifically religious use of the place.”³⁴

Shifting Dohoney’s concentration on the paintings to the chapel space, with the paintings part of its visual identity, I suggest that listening to Feldman’s piece in the chapel engenders a spiritual experience for which the music provides a temporal framework as well as guidance, with the viola’s voice serving as an anchor and a guide in the meditative process that the choral passages afford to listeners when heard inside the space, surrounded by Rothko’s paintings. In a sense, listening to Feldman’s *Rothko Chapel* performed inside the chapel allows one to use the space as Rothko intended—a place of meditation and contemplation, in which Rothko’s paintings serve as a religious, or spiritual component. As Leo Bersani and Ulysse Dutoit write: “There are no altars, no crosses, no torahs; there is only the art [...] In Christianity, the religion contains the art that serves it; in the Rothko chapel, the art creates the religion it serves.”³⁵ We could add Feldman’s music to the collection of elements generating the religious experience in the chapel.

³³ Orton and Bryars op. cit., 244.

³⁴ Dohoney 2009, 244–245.

³⁵ Bersani and Dutoit op. cit., 131–32.

Listening to a recording of Feldman's *Rothko Chapel* affords a different experience from a performance inside the chapel. Instead of supplying a temporal aspect to the chapel space, the music brings a metaphorical piece of the chapel to listeners, allowing the spiritual experience that the chapel wishes to evoke, an experience related to the creation and perception of art, remotely from the chapel space. Listeners can contemplate the concept of memory listening to the viola declamations and to their later fragmentation in the piece, and reflect on the ways in which music can be heard as similar to, yet different from, itself. Listeners can also contemplate the relationships between the different chorus passages, and the way in which each builds on previous passages to create a colorful assemblage of different variations and intensities. In this sense, Feldman's piece functions as a trace of the chapel, allowing Rothko's art to echo even far away from the chapel in Houston.

Chapter 5

Ekphrasis Within an Art Form: Luciano Berio's *Continuo for Orchestra* and *Ekphrasis (Continuo II)*

Jorge Luis Borges's short story *Pierre Menard, Author of the Quixote* tells of an author who challenged himself to write Miguel de Cervantes's *Don Quixote* 300 years after it had originally been written. Menard did not copy the novel or attempt to learn it by heart and write it out from memory; he wanted to *compose* the novel by himself, with every word identical to the novel by Cervantes. Setting aside the question of the motivation behind such a project, as well as the humoristic tone and implied critique of the issues of a Work and authorship within Borges's story, an interesting question for this project is whether one could consider Menard's *Don Quixote*, identical in all but the author's name, as ekphrasis of Cervantes's novel. On one hand, Menard's *Don Quixote* is a new novel—the narrator of Borges's story assures us that Menard arrived at a complete *Don Quixote* after dedicating years of work and numerous drafts—but, on the other hand, Menard's novel presents an existing work again. Anyone who knows *Don Quixote* by Cervantes would recognize the old novel when reading Menard's. However, as the narrator cleverly asserts, Menard's work is fascinating for the time and place in which it was written—for an author who lives in the present, it is an extraordinary endeavor to compose a book such as *Don Quixote*, even more than for Cervantes. Therefore, the two novels raise two questions about the limits of ekphrasis: whether ekphrasis is possible between two works of the same medium, and if so, then where the limits of ekphrasis

should be drawn—a reader can choose to dismiss Menard’s ekphrasis as merely a copy, or, like the narrator, view it as an ingenious, iconoclastic interpretation.

This chapter takes on a musical challenge, posed by Luciano Berio, to investigate the boundaries of ekphrasis. Berio’s 1996 composition *Ekphrasis (Continuo II for Orchestra)* raises the problem of ekphrasis *within* an art form by its relation to the composer’s earlier *Continuo for Orchestra* (1989–1991). *Ekphrasis* challenges the conception of ekphrasis as a relationship between different art forms, suggesting a new understanding of ekphrasis that does not necessitate medium distinctions between the works. While for Siglind Bruhn, who defines ekphrasis as “a representation in one medium of a text composed in another medium,”¹ Berio’s *Ekphrasis* could not be considered ekphrastic, Lydia Goehr proposes that the piece demonstrates the “work-to-work relation” that is at the basis of every ekphrastic artwork, yet without involving medium differences.² However, one wonders what distinguishes ekphrasis from other possible connections between artworks of the same medium. For instance, take an arrangement of a composition, such as Ravel’s 1922 arrangement of Mussorgsky’s *Pictures at an Exhibition* (1874). If we accept the possibility of ekphrasis within an art form, would Ravel’s arrangement be considered ekphrastic in relation to Mussorgsky’s piano piece? If so, how would descriptive and contextual representation play a part in interpreting the relationship between the two works?

The two pieces by Berio examined in this chapter provide a fitting case study for ekphrasis between works of the same art form—even without its inviting title, *Ekphrasis*

¹ Bruhn 2000, 8.

² Goehr 2010, 406.

stands in an odd relationship to its predecessor, *Continuo*. While *Ekphrasis* refers to and quotes *Continuo*, it differs from other referential pieces by Berio in containing no quotes from other works. The two compositions are almost identical, yet they were published under different titles, with a different beginning and ending in *Ekphrasis* preventing it from being considered just a newer, slightly altered version of *Continuo*. It is difficult to place the relationship between the two pieces in an already-established category.

Therefore, the pair deserves examination as a possible motivator for expanding the scope, or alternatively drawing the boundaries, of musical ekphrasis.

The examination of *Continuo* and *Ekphrasis* in this chapter will be situated in the context of Berio's broad use of musical quotations and his concept of musical "translation" as a form of interpretation. This chapter complements existing studies of Berio's music, focusing on pieces for which there are no published analyses, and which exhibit a unique relationship in his repertoire—one created as a commentary or response to the other. When it comes to the discourse on ekphrasis, the two pieces offer an unusual example that challenges the concept, thereby helping to sharpen the understanding of ekphrasis as a relationship between works.

This chapter begins with an overview of Berio's idiosyncratic approach to composition as musical translation or transcription—an activity that originates in Berio's preoccupation with existing music—and of how these notions may affect the composer's treatment of musical ekphrasis. An analysis of the object of ekphrasis, Berio's *Continuo for Orchestra*, follows. The analysis will explicate the piece's orchestration in the context of Berio's contemporaneous orchestral works, and examine the continuo line—a serial component that affects issues of structure and musical surface in the piece. Next, the

study will examine *Ekphrasis*, providing an analysis of the piece using *Continuo* as a context and concentrating on the challenges of considering *Ekphrasis* as an ekphrastic composition. The main difficulty I face in treating the piece as ekphrastic comes from the vast similarities it shows to *Continuo*, raising the question why Berio chose to publish *Ekphrasis* as a new opus rather than as a revision of the earlier piece. An ekphrastic work, like those investigated in previous chapters, has an existence separate from its object artwork, and ekphrasis has been commonly used as a conceptual tool for explicating the connection between two artworks that would otherwise remain unattached. However, when the relationship between the works can already be described without invoking ekphrasis, one wonders what value would be gained by thinking of the two pieces in terms of that category. While *Ekphrasis* does not repeat *Continuo* exactly as Pierre Menard's *Don Quixote* does Cervantes's, both *Ekphrasis* and *Continuo* are the works of the same composer. Therefore, the similarities between the two compositions might make it difficult to take the later piece as a self-standing artwork, separate from its predecessor.

5.1 The Arguments

In this chapter, I will argue that Berio's *Ekphrasis* is musical ekphrasis of *Continuo*. The similarity between *Ekphrasis* and its object composition calls for listeners to shift their attention from the clear and prominent musical structure to surface events in the piece, in order to hear it as a representation and interpretation of the earlier composition rather than a mere repetition. According to Goehr, considering Berio's *Ekphrasis* as merely an expression of *Continuo* would mean that every work could be titled *Ekphrasis* (since every artwork, and specifically every musical composition, could

be understood as an expression, for example, of the intention of its composer); Berio's piece is ekphrastic, rather, by being an expression of another, specific artwork.³

Furthermore, I argue that, without difference of art form, *Ekphrasis* represents *Continuo* through contextual representation, since *Continuo* is quoted within *Ekphrasis*. Within the same art form, it is possible to include the object of ekphrasis as part of the ekphrastic work. Therefore, Berio's *Ekphrasis* ensures that every moment of *Ekphrasis* represents a parallel moment in *Continuo*. If elements in *Ekphrasis* represented elements in *Continuo* through descriptive representation, a mediating space would have been created, one that listeners would identify in each of the pieces apart from its relation to the other. However, the analysis will show that connections between *Ekphrasis* and *Continuo* are and require no such mediating space. Consequently, these two pieces present an exceptional case in which contextual representation, although formed in the mind of listeners, was unquestionably created by the composer.

In creating musical representation of another composition, Berio's ekphrasis diverts our attention from similarity to difference, from presence to absence, helping achieve a renewed understanding of contextual representation.

5.2 Berio's Linguistic Approach to Music: Musical Quotations, and Composition as Translation

In the liner notes of the recording of *Ekphrasis*, quoted here in Appendix 5.2, Berio describes Ekphrasis as a "reserved and reflective commentary" on *Continuo*. Composing a piece in response to existing work is characteristic of Berio's style—his

³ Goehr op. cit., 406.

oeuvre includes pieces that incorporate quotations from other compositions and texts combined with original material. Well-known examples include *Sinfonia* (1968–1969) and *Rendering* (composed around the time Berio worked on *Continuo for Orchestra*), as well as new arrangements based on his own compositions, such as *Chemins* from 1967 that are based on *Sequenza VI* for viola from the same year. References to earlier works are also a recurring topic in Berio’s writings about music. He describes quotations as musical “translations” or “transcriptions,” explaining his references to works by other composers and re-compositions of his own pieces as products of his engagement with music—a form of analysis and commentary on his musical experiences.

Berio considered music to be different from language in its communicative possibilities; roughly, language is applied either in conversation for communication purposes, or in poetry and prose for artistic purposes. In each case, different rules govern the use and evaluation of language. Music, according to Berio, functions similarly to the artistic use of language, while lacking the conversational/communicative component.

The notion of translation is arguably the central concept Berio imported from the verbal to the musical art. In his definition of musical translation, Berio includes an array of activities that involve interpretation, such as performing music from a score. He also considers score copying an instance of translation, which he admires as the central means for composers to learn from the works of past masters and advance their own techniques, situating translation as a significant force that shaped the development of European and North American musical culture throughout history. In his writings, Berio used the words

“translation” and “transcription” interchangeably.⁴ Of his own transcriptions/translations he wrote: “I too have transcribed a great deal. Except when there are specific practical or personal reasons, my transcriptions are invariably prompted by analytical considerations. I have always thought that the best commentary on a symphony is another symphony, and I reckon that the third part of my *Sinfonia* is the best and deepest analysis that I could have hoped to make of the Scherzo from Mahler’s Second Symphony. The same is true for my *Rendering* for orchestra [...].”⁵ It seems that numerous compositions by Berio can be considered translations or transcriptions, since they originated in his analytical engagement with his works and other composers’. It is not unthinkable that Berio would understand musical ekphrasis as another form of translation/transcription, however not all activities that he considered as translations are ekphrastic—the product of copying a score, for example, would generally not be regarded as a new artwork. Therefore, while musical ekphrasis is contained in the notion of musical translation à la Berio, translation is not necessarily ekphrastic.

Berio’s discussion of the third movement of his *Sinfonia* as translation may prompt one to question whether it represents Mahler’s Scherzo as musical ekphrasis.

Berio himself said in an interview that the third movement of his *Sinfonia* “explores the

⁴ In using both terms to refer to the same activity, Berio highlights the process of transformation that generates translations as well as transcriptions. While translation transforms text from one language to another, transcription involves the transformation of musical texts between notational systems.

⁵ Berio 2006, 40. In his paper “Luciano Berio’s ‘Poetics of Analysis’” presented at the 2014 joint meeting of the American Musicological Society and the Society for Music Theory in Milwaukee, Christoph Neidhöfer pointed out that Berio distinguished in his writings between analysis made by a music scholar and that of a composer, claiming the latter does not need to justify the analytical methods used, since the activity is aimed at creating a new composition rather than writing an analysis paper.

Scherzo from the inside.”⁶ In addition, the entire Scherzo is heard throughout the movement, although in fragments interrupted by various other happenings. Therefore, if ekphrasis is possible between two artworks of the same medium, then listeners can take an ekphrastic approach to the third movement of *Sinfonia* and consider it a representation of the Scherzo.

Berio’s *Rendering* could also be considered a candidate for ekphrasis as a representation of Schubert’s sketches for his tenth symphony, in the sense that all sketches appear in the piece in the order originally conceived by Schubert (even though the composer never completed the piece), accompanied by Berio’s original material that “fills in the cracks” in Schubert’s sketches. However, in the case of *Rendering*, ekphrasis is conditioned by the status of Schubert’s symphony: rather than representing an existing composition, Berio’s piece presents a musical “ghost,” since Schubert’s symphony was never completed (the piece was performed after Schubert’s sketches were completed by Brian Newbould). As David Metzger persuasively argues, Berio’s newly inserted material in the original “cracks” in Schubert’s sketches preserves and enhances the gaps in the original sketches, bringing out the incomplete state of the original composition.⁷

Musical translations for Berio differ from verbal translations for resisting the separation, in verbal arts, between form and content. Berio remarks that musical translations cannot manifest duality between semantic meaning and meaning that arises from aesthetic considerations such as form. Therefore, Berio concludes, one could think

⁶ Berio 1985, 107. Quoted also in Metzger 2003, 130.

⁷ Metzger 2000, 95–97. Metzger suggests that, as a result of combining original material by Berio between the “cracks” of Schubert’s sketches in *Rendering*, the piece highlights a metaphorical deterioration of the past sketches, as if they are crumbling into pieces.

of a composition that refers in some way to another musical piece as a translation of a verbal work such as a poem, however one in which aesthetic integrity is the only determining factor.⁸ Like verbal translations, musical translations involve a mediating agent—the composer—whose interpretation of the original text influences the resulting product. Susanna Pasticci points out that, for Berio, “the act of translating, in music, is always a phenomenon wholly inside the music itself; more than a symptom of weakness, this self-sufficiency is an authentic sign of strength, because it confers on music an enormous semantic and associative openness, but one that cannot be encoded.”⁹

Given Berio’s fascination with the qualities of language and its relation to music, it is not surprising that much of the published scholarship on his compositions concentrates on issues of textual meaning, interpreting and contextualizing quotations in his music. In his interpretation of *Sinfonia*’s third movement, for example, David Metzger focuses on the intertextual relationships created by the different excerpts combined in the movement.¹⁰ Taking a different approach, Catherine Losada points out relationships of chromatic saturation in the movement between different musical quotations whose pitch contents complete the chromatic spectrum.¹¹ Although Berio was not the only composer to use collage techniques, his works—as Losada has shown—are remarkable in the

⁸ Berio 2006, 39–41.

⁹ Pasticci 2012, 470.

¹⁰ Metzger 2003. In his study, Metzger considers the quotations from Mahler’s movement and from Beckett’s *The Unnamable* equally important, interpreting the way each can be heard as commenting on the other.

¹¹ Losada 2009.

idiosyncratic manner in which quotations are combined, showing traces of serial techniques.

Translation for Berio is an inseparable part of his preoccupation with music: he produced music as a response to, or under the influence of, his engagement with existing musical works. Yet even in the multiple roles translation has occupied in Berio's compositions—a motivating activity, a tool for creating musical signification through reference, a device for excavating and commenting on the past—*Ekphrasis* is unique. First, it is based on a single piece by the composer, rather than drawing from different sources. In a similar way to *Rendering*, only one piece is heard quoted within *Ekphrasis*, yet the quotation, as well as additional material, is all the work of Berio. Moreover, *Continuo* is heard almost in its entirety within *Ekphrasis*, framed between a newly added short opening section and a new ending, setting it apart from numerous quotations in Berio's works that appear in fragments combined with his original material.

5.3 *Continuo for Orchestra*

Berio introduced *Continuo* (1989–1991) as a “continuous sound space”: sound is constantly heard in the piece, with no moments of silence.¹² Listening to *Continuo*, I take note of elements that guide my impressions.¹³ Texturally, each moment features a single pitch is continuously heard, passing through the piece as a thread in the background of musical events, and changing from one section to the next. The piece opens with a consistent echoing of D flat 4, passing between different instruments, which sustain it in

¹² Berio's liner notes on *Continuo* appear in Appendix 5.1.

¹³ I listened to the following recording: Chicago Symphony Orchestra, *Carter, Berio, Takemitsu*, conducted by Daniel Barenboim, Teldec Classic 4509 99596 2 (1995).

tremolo. The sustained pitch is part of a recurring pattern, which begins with a single note softly sustained by parts of the orchestra either in long notes or in pointillistic gestures—tremolos and trills—while fluctuating harmonies, long melodic lines or shorter fragments are heard from other instruments in the ensemble layered over the note. After a period in which the sustained note is heard from within the changing harmonies over it, short running figures are suddenly heard from some of the instruments, and the orchestra follows, abandoning the note for the short figures or, alternatively, for long sustained harmonies. These culminate in dynamics (and often also in tempo), becoming gradually more intense, loud, and chaotic, until dissolving into a new sustained pitch, which lasts until the following culmination. This pattern of sustained pitches and culminations is established at the beginning of the piece and remains prominent throughout, and I learn to expect it as the music progresses.

My impressions in listening resonate with Berio's liner note on the piece. In an uncharacteristic gesture for a composer who advocates the self-sufficiency of music and its resistance to meaning in the linguistic sense,¹⁴ Berio reveals that the piece is also related to some non-musical inspirations and implies that a reference to architecture is found in the formal features of *Continuo*, which he describes as "a completely impractical building with no doors and pathways."¹⁵ However, he explains, the form is open to "alternative extensions by added new wings, rooms and windows."¹⁶

¹⁴ According to Berio "music always puts up a considerable resistance to being 'translated' into words." He objects to writing about music for any aim other than creating a new musical composition, claiming that the product of an engagement with a musical piece should be another piece (Berio 1985, 33–34).

¹⁵ Ibid.

¹⁶ Ibid.

5.3.1 The Instrumentation of *Continuo*

Continuo's orchestration reflects Berio's contemporaneous interest in creating a large orchestra consisting of a collection of small chamber groups, arranged on stage according to instructions provided in the score. The handwritten diagram in the score (that appears here in Figure 5.1) divides the woodwind and brass sections into groups that surround the orchestra from all sides—the brass groups, B1 and B2, envelop the orchestra from the left and right, and the woodwind groups A1 and A2 are located in front of the first violins and at the back of the orchestra respectively. The spatial organization of the groups ensures that, in a live performance of the piece, the sustained pitches will be moving in space as they are exchanged between the woodwind and brass groups. Therefore, part of the effect of *Continuo* is found in the changing timbre and spatial qualities of unchanging pitch in live performance.

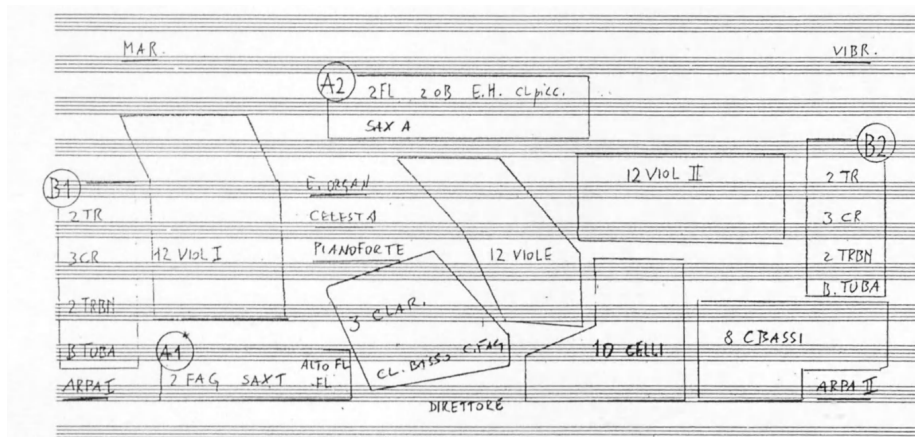
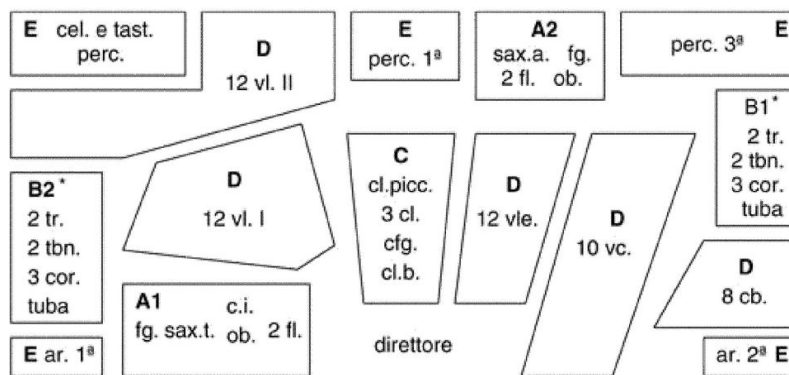


Figure 5.1: Berio's diagram of the orchestra arrangement in *Continuo for Orchestra* presented in the score

The orchestration of *Continuo* and the arrangement of the orchestra sections on the stage bear close resemblance to that of Berio's *Formazioni* ("Formations," 1985–1987),

whose diagram appears in Figure 5.2. In both compositions, the two brass ensembles envelop the orchestra from both sides. Both arrangements also include a group of woodwinds in front of the first violins, and another woodwind group in the back. However, the brass groups in *Formazioni* are provided a superior position to those of the other instruments, since the remark below *Formazioni*'s diagram reads: "Formations B1 and B2 must be clearly visible and therefore a bit higher than the rest of the orchestra."



*) le formazioni B1 e B2 devono essere ben visibili e quindi un po' elevate rispetto al resto dell'orchestra

Figure 5.2: Berio's diagram of the orchestra arrangement in *Formazioni* presented in the score

Similarities between *Formazioni* and *Continuo* go beyond issues of orchestration, and include also compositional technique. Although neither of the pieces can be considered serial in the traditional sense, *Formazioni* features serial characteristics in the aspects of pitch and rhythm,¹⁷ and *Continuo*, as the following shows, is based on a series

¹⁷ Hander-Powers showed in her analysis of *Formazioni* that when it comes to pitch, the work is generated by a fundamental harmony, and that different permutations of the harmony supply the material for each section in the piece. (Hander-Powers 1988, 316ff.). Decroupet's study of *Formazioni*'s manuscript and sketches revealed that rhythm in the piece is also dominated by a series—Berio devised a basic succession of proportions, which is then expanded to create melodic lines of differing lengths using duplicate fragments from the series appended to its end (Decroupet 2012, 136ff.).

of twelve pitches that guides the perception of musical structure and also supplies the pitch-class material to surface events. Christoph Neidhöfer has written about Berio’s complex relationship with serialism and explains that although, after embracing serialism for a few years in the 1950s, Berio objected in his writings to compositional formality, the compositions that followed Berio’s “serial period,” and throughout his career, show traces of serial techniques.¹⁸

5.3.2 The Continuo Line as a Series

Listening to *Continuo*, I realize that the succession of sustained notes, which divides the piece into sections, forms a pattern. The sustained notes altogether construct a succession of twelve pitches, which forms a series that repeats, as sustained notes, twice in the piece, dividing the music into sections. Each section concentrates on one of the pitches in the series, which I term the “continuo line,” that includes ten different pitch classes, two of which repeat. Figure 5.3 presents the series with the order numbers of its members indicated above the staff. The continuo line contains the entire pitch-class aggregate except for D and A flat, and repeats B and B flat.

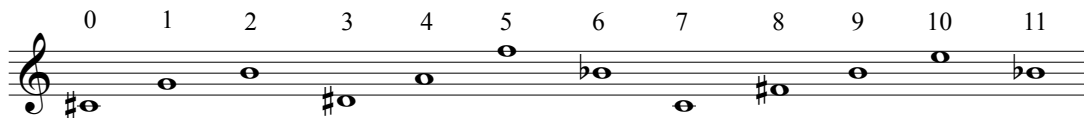


Figure 5.3: The continuo line

¹⁸ Neidhöfer 2012.

The sonorities created when changing groups of instruments play the sustained pitch from the continuo line in unison have a striking effect. The changing textures and tone colors, as the pitch is extended by a fluctuating assemblage of instruments, become a dominant feature of my experience listening to the piece. For example, Appendix 5.3 presents an annotated score excerpt of the section that prolongs the second pitch of the continuo line, G4.¹⁹ The parts participating in sustaining the continuo pitch are marked throughout the excerpt. When listening to the recording, I notice the distinct sound of the double-bass harmonics, which sustain G for the duration of the passage, and the trumpets in the two groups B1 and B2 exchanging the pitch, which they sustain in tremolo. Nevertheless, when listening to a recording rather than to a live performance, only little of the echoing effect of the continuo note can be heard as the pitch passes between the different areas on stage. At any moment in this passage, the continuo note is heard from at least one instrument in each of the groups A1, A2, B1, B2, clarinets, percussion, and strings. Within the strings (even without considering the double bass), as well as in the A2 group, there is at least one instrument playing the continuo note at each moment. However, the *weight* of the continuo pitch in each of the groups—the number of instruments sustaining G4 at any given moment—varies. In ensemble B2 (positioned on the extreme right), for example, the note is heard periodically only from the trumpet for the duration of the passage. Ensemble A2 and the strings are much “heavier” with the continuo note; the entire group plays it at one point or another, with up to four instruments in each of the groups sustaining G4 simultaneously. One can imagine the effect of the pitch moving between the sides of the stage as it is exchanged between the

¹⁹ Starting from rehearsal mark 2, in the last bar of p. 5 of the score; 1’12” in the recording.

groups, for instance at 1'15", when it passes between B1 and B2 trumpets (on p. 6 of the score), alternating between the right and left sides of the stage. The transition to the next section occurs in the first two bars of p. 8, before the double line (after which the instruments sustain B4, the third note in the continuo line). During the transition, the pitch is no longer prolonged by any of the instruments.

Figure 5.4 below presents a diagram of the sections of *Continuo* according to the sustained continuo-line pitches. The double lines indicate completed iterations of the series as sustained notes in sections of the piece. The third time that C sharp, the first note of the line, is prolonged occurs in 17'18" in the recording.²⁰ As the table shows, in this third iteration the continuo line is prolonged in an abbreviated form. The gray columns in the table indicate substantial periods in which no note of the continuo line is prolonged, all of which occur during the second iteration of the line.²¹ Each iteration of the continuo line differs from the others. In the first, individual sustained pitches follow one another in continuous and adjacent sections. The second contains all line members in order; however it introduces interruptions to the flow of sustained pitches, in which no note is sustained. The third iteration has no interruptions, but it is incomplete. However, the pitches of the line adhere to their original ordering in all iterations including the third. In the remainder of the piece, the order maintained during the first pass through the continuo line gradually dissipates.

²⁰ P. 73 in the score.

²¹ I already mentioned that, during the transition in each section, the continuo line member is no longer sustained. The gray columns stand for longer periods in which no note is prolonged—notice that the shortest of these periods lasts thirty seconds, and the longest over a minute and a half. The column at 19'12" shows the part of the *Continuo* recording that adheres to *Ekphrasis* rather than to the score of *Continuo*.

Time in recording	0'20"	1'12"	1'54"	2'31"	3'17"	3'47"	3'59"	4'32"	5'18"	5'59"	6'26"
Beginning page no.	2	6	8	11	14	16	17	19	23	26	28
Sustained note	C sharp	G	B	D sharp	A	F	B flat	C	F sharp	B	E

6'49"	7'25"	8'13"	8'50"	9'20"	10'10"	10'28"	10'51"	11'4"	11'30"	12'07"	13'01"
29	32	35	37	40	43	44	47	48	50	52	56
B flat	C sharp	G	B	D sharp	A		F	B flat	C		F sharp

13'31"	15'05"	15'25"	16'17"	16'47"	17'18"	18'10"	18'53"	19'12"		
58	64	66	69	71	73	77	80	*	82	82
	B		E	B flat	C sharp	G	A		F	B flat

* From this moment until the end of the piece, the recording is based on the score of *Ekphrasis* (Universal Edition, Studienpartitur UE 36 454).

Figure 5.4: Structural diagram of *Continuo* according to sectional sustained pitches of the continuo line

5.3.3 The Continuo Line on the Surface: Three Types of Relationships

The continuo line not only guides the large-scale structure of the piece, but also provides the small-scale material. When a part sustains the continuo note of the section, the note always appears in the same octave as is shown in Figure 5.3.²² Consistently with Berio's compositional preferences, small-scale melodic lines and harmonies are not

²² This is not the first time that register is a significant factor in Berio's compositions; Hander-Powers (1988) shows that in *Formazioni* Berio used octave-placement to differentiate between different manifestations of the fundamental harmony (Hander-Powers 1988, 337). In addition, Osmond-Smith shows the significance of range in Berio's earlier works, demonstrated in *Epifanie A* in the application of fixed fields of pitch that are then chromatically saturated (Osmond-Smith 1991, 25–26).

developed from the continuo line in a systematic manner, but explore its harmonic and melodic potentialities using the variety of instrumental colors and textures supplied by the ensemble.

The continuo line is explored within sections in three ways: segments from the line, or the entire line, can be quoted in melodies; sustained notes from the line in different parts can be used to create harmonies; melodies or harmonies, or parts of which, can depart from the continuo line. As an example of a section that quotes from the line directly, the following focuses on an excerpt, whose score is presented in Appendix 5.3, examining the parts *not* participating in the prolongation of the continuo note.²³ Example 5.1a shows the long melodic line shared between A1 flute, the violins, and the violas. The line is divided between the different parts in this section, at times doubled and ornamented. The following Example 5.1b presents a reduction of the parts into a single line, and the numbers above the brackets the figure identify order numbers of the participant notes in the continuo line as shown in Figure 5.3.²⁴ The melody does not completely keep the ordering of segments from the line: C and B flat, order numbers 7 and 6, are heard in reverse order.

²³ Heard starting at 1'12" in the recording.

²⁴ For example, the melody under the first bracket consists of the (unordered) second hexachord of the continuo line—order numbers 6 through 11 (unordered because of the first pair of notes, C and B flat).

Example 5.1a is a musical score for a 7/4 time signature. It features seven staves: A1 Flute, Violin I, Violin II, Fl., Vln. I, Vln. II, and Viola. The A1 Flute part begins with a dotted quarter note, followed by eighth notes, and includes triplets and a quintuplet. Violin I and Violin II parts also feature triplets. The Fl. part has a triplet of eighth notes. Vln. I and Vln. II parts have a triplet of eighth notes. The Viola part has a triplet of eighth notes. The score is divided into three measures by vertical bar lines.

Example 5.1a: The continuo line expressed locally in pp. 5–7

Example 5.1b is a reduction of the parts from Example 5.1a into a single line. It consists of two staves. The top staff is in treble clef and contains the A1 Flute part. The bottom staff is in bass clef and contains the Viola part. The top staff has three measures with a bracket above it labeled '6-11' spanning the first two measures, another bracket labeled '2-11' spanning the second and third measures, and a third bracket labeled '0, 2-11' spanning the third measure. The bottom staff has three measures with a bracket above it labeled '6-11' spanning the first two measures, another bracket labeled '2-11' spanning the second and third measures, and a third bracket labeled '0, 2-11' spanning the third measure. The score is divided into three measures by vertical bar lines.

Example 5.1b: Reduction of the parts from Example 5.1a into a Single Line

While the melody in Example 5.1b is clearly derived from the continuo line, the participating notes are not restricted to their register in the line. Even though the continuo line is used as a series of pitches when individual notes are sustained and define sections in the piece, it is treated as a series of pitch *classes* on the surface. The melody in Example 5.1b gradually includes more elements from the line until all of them appear in order, except for the second note, G, which is already sustained by other parts in this section. Throughout the first sustained pitch of the continuo line in sections of the piece, the sustained note in each section does not appear in local events in the section, but is only heard sustained in its continuo-line register. In the second iteration of the series, however, the sustained note of each section is sometimes heard in local events, in which case its register varies.

The following section, which provides another example for the first type of relationship, prolongs the last continuo-line pitch, B flat, during the second structural iteration of the line (on p. 29 of the score), and appears below in Example 5.2.²⁵ This passage includes all members of the continuo line except for B flat (the sustained pitch). The melodic line in this passage sounds familiar, since its ordering remains quite close to the continuo line, yet it does not repeat the melodic line shown in Example 5.1b.

²⁵ 6'49" in recording.

Example 5.2: The melodic line in p. 29ff

Other local variations of the line can be much briefer, such as the section that prolongs B flat as the seventh member of the line in the first iteration (beginning on p. 17 of the score), whose reduction appears in Example 5.3.²⁶ This section unfolds the first hexachord of the continuo line without keeping its order. Throughout the piece, the continuo line generates local melodies and harmonies; instead of transformations based on transposition and inversion, the line is explored in different ways, by changing the ordering and size of line segments, and by changes of register.

²⁶ 3'59" in recording.

A1 Fl.
 A2 Picc.
 A2 Oboe
 Vln. I
 Vln. II
 Bass Cl.
 A2 Fl. 3
 A2 Picc. Cl.
 A1 Bssn.
 B1 Tba.
 B2 Tba.
 Vcl.
 B1 Trp.
 B1 Hrn.
 A2 E.H.

1, 3-6, 8
 0, 5-7, 10-11

Example 5.4: Harmonies in p. 26

The second time G is sustained, during the second structural iteration of the continuo line, provides an example of the third type of local manifestation of the continuo line, in which melodies or harmonies become more distant from the line, quoting it only in part, or leaving it altogether. The reduction of local events of this section is shown in Example 5.5.²⁸ Contrary to the melody presented in Example 5.1b, which features complete segments of the continuo line more or less in order, the figure below includes a changing number of simultaneous contrapuntal lines heard at each moment, creating harmonies based on segments from the continuo line.

²⁸ Starting at 8'13" in the recording (p. 35ff in the score).

Example 5.5: Reduction of the parts from pp. 35–38

Contrasting the gradual unfolding of the continuo line in the passage shown in Examples 5.1a and 5.1b, the parallel section in Example 5.5 features the line in a looser way. The section opens with harmonies made of interwoven ordered line fragments, while the order begins to dissolve in the second system of the example, when the viola's C sharp is heard out of place. Later in the second system, the succession beginning in B flat and ending in G sharp in the last two bars also breaks the continuity of line

fragments. In addition, the passage features the sustained pitch as part of the local melody, and includes G sharp, which does not appear in the continuo line.²⁹

Lastly, an extreme example of the third kind of relationship, in which the parts shift away from a direct relation to the continuo line, is shown in Example 5.6. The section sustains B natural as the third line member in the second large-scale iteration (pp. 37ff in the score).³⁰ The contrapuntal lines include ten of the twelve notes of the continuo line, yet they contain no complete line segments. The passage also includes D and A flat, which are missing from the continuo line.

²⁹ At 8'43" of the recording.

³⁰ 8'58" in recording.

Vln. I
B1 Tr.
Cl. 2

Vln. I
A1 Fl.

Cl. 1
Cl. 2

A1 Bssn.
B1 Trbn.
Bass Cl. B2 Trbn.

Vln. I
A1 Fl.
Cl. 1

Vln. I
A1 Fl.
Cl. 1
Cl. 2

Bass Cl.
Cb.

Example 5.6: Local melodic line in p. 37ff

There seems to be little relationship between local transformations of the line across the different sections in the piece. Nonetheless, the sections are related texturally—they consist of layers, some sustaining the continuo pitch and others containing local events. Fragments from the continuo line also repeat between many of the sections, heard either as harmonies or melodies, like familiar shapes continually rearranged and reshaped, each time in a different way. The survey above was meant to

provide a sense of the different transformations the continuo line presents in its local manifestations.

The analysis so far can also clarify Berio's description of *Continuo* in his liner notes as a structure interrupted by windows that show an external landscape. If the continuo line is the structural element that holds the piece together, both on the large scale and in the local melodies and harmonies, the interruptions to the continuo line between sections, as the sustained pitch disappears before the orchestra turns to the next pitch in the series, represent the moments in which one stops to gaze out a window at an external landscape. The continuo line, which generates the material for the piece, can be conceived as the foundation for the construction, and each section of the piece adds another wing to the structure. As melodies repeat fragments of the line throughout *Continuo*, I am not always certain whether the melody I hear repeats another melodic line already heard earlier, or whether it is a new variation on a familiar melody. In the analogy to a structure, these moments express the disorientation one might feel when walking inside a structure designed by Escher—some rooms look familiar, but it is not clear whether they are indeed familiar or just closely resemble rooms one has already visited, and what is the logic guiding the way in which the rooms connect to one another.

Before discussing the truncated ending of *Continuo*, the following examines sections represented by gray columns in Figure 5.4, in which no note from the line is sustained. The first, at 10'28", lasts a little over twenty seconds, and will serve as a representative to examine in detail. At the end of this passage, a reduction of which is presented in Appendix 5.4, all parts converge in unison to the next note from the continuo line sustained in the following section (F5). This section supplies a sharp textural,

stylistic, and rhythmic contrast to the flow of prolongations heard so far—instead of the continuous multiplicity of voices produced by the orchestra, the ensembles unite in a sudden flurry of rhythmic harmonies, more intense and determined than anything heard in the piece until this moment. Even though this moment interrupts the structure established so far in the piece, the music is at the same time more organized than ever before, in the sense of united rhythms and gestures between the different ensembles.

A closer inspection of the harmonies in this section, whose first two measures are presented in Example 5.7, shows that there are only minor variations between chords at the beginning of the passage, some of which repeat several times. Rhythmically, the orchestra is divided into two ensembles—the first contains groups A1 and B1, and the second consists of groups A2, B2, and the second violins. The clarinets and first violins alternate between the two ensembles. There seems to be no strict system dominating the series of harmonies. However, many of the chords echo between the ensembles and repeat, either exactly or with slight variations of pitch or pitch-class, or of timbre. For example, in the first two bars, the chord marked with “1–6” repeats four times between the two ensembles. The pair in the first bar of the figure is identical in pitch, but orchestrated differently, with A5 in the first chord played by the second violin (a similar variation is also applied to the chord marked with “0–6” echoed between the ensembles in the first measure). The pair in the second bar contains the same pitch classes, but not pitches, as the last “0–6” chord in the first bar.

Example 5.7: Reduction of the rhythmic chords in the first two bars of the first interruption, pp. 44–45

Although the passage does not betray the continuo line to an unsuspecting listener, each chord is made of one or more groups of adjacent members from the line, indicated by the figures above the chords according to their order numbers. The line fragments are supplemented in some chords by one of the notes from the excluded dyad D/A flat. Therefore, the passage does represent the continuo line in another way, similar to the local melodic lines and harmonies heard throughout, even though it sounds like a sharp contrast to the established form and texture in the piece. This passage, as well as the other sections in *Continuo* marked with gray columns in Figure 5.4, are made from

the same building blocks as the rest of the piece, contrasting it only on the surface. Perhaps these are more of the window openings Berio mentions in his note, which interrupt the flow of the music, providing a new perspective on the same basic construction. The challenge for me as a listener is found in hearing the connections between the different points in the piece that on the surface sound the most distinct.

5.3.4 The Ending

I already mentioned that the pattern of sustained continuo-line pitches consists of two full iterations of the line, and the start of a third iteration that is never completed. This last attempted iteration is the focus of the following, examining what causes its “failure” to be realized, and how it brings to the end of the piece. However, in order to discuss the ending of *Continuo*, we will need to use our imagination rather than our ears. The only published recording of the piece includes an altered ending, taken from the score of *Ekphrasis*.³¹ While the inconsistency between the score and the recording is interesting and worthy of further exploration, this analysis focuses on Berio’s *Continuo* as it appears in its published score. *Continuo* in the recording is a hybrid between the scores of the two pieces, leading me to suspect, especially considering the year of recording, that the shaping of *Ekphrasis* out of *Continuo* happened gradually over the

³¹ This is a curious case that deserves further investigation perusing Berio’s manuscripts and sketches. The only existing recording of *Continuo*, made in 1993 by Daniel Barenboim and the Chicago Symphony Orchestra, follows the published score only through 19’12”. The ending of the piece, however, adheres to the score of *Ekphrasis*, beginning in p. 85, which contains an added part not included in the score of *Continuo* (which I discuss below in my study of the large-scale structure in *Ekphrasis*). Nevertheless, the score of *Ekphrasis* was published only in 1996, three years after the date of the Barenboim and CSO’s recording, and performed at a concert for the first time in 1997.

years, and instead of two distinct pieces, *Ekphrasis* may have been conceived as a later version of *Continuo*. For the sake of examining possible ekphrastic relations between the two works, I will treat the pieces as separate entities.

Continuo ends, as Figure 5.4 above shows, with a truncated iteration of the continuo line. Sections includes sustained C sharp and G, the first and second notes, pass over B and D sharp, and continue to A, F, and B flat before the piece ends. The ending changes the balance between the sustained continuo pitch and the local melodies and harmonies in each section; the continuo pitch is played for the first time in *mf* or *f*, while local melodies and harmonies are heard softly, as if from a distance. For example, Example 5.8 presents a reduction of local melodies heard during the last section that sustains G in the piece (Figures 6 and 10 above show the melodies in the first and second sections respectively).³² Listening to the passage, I can hear a version of the local melody from the first time G is sustained, shown in Example 5.1b above. However, as Example 5.8 shows, the melody is veiled by the parts shown in the lower staff of the example—the harmonies in the first measure, which bear no special relationship to the continuo line, and shorter melodic lines representing line segments.

³² At 18'10" of the recording (pp. 77–79 in the score).

2-11

Vln. 1

Vlc. DB.

Cel.

A2 Oboe

A2 EH

A2 Cl. Picc

A2 Sax Al.

A1 Fl.

A1 Al. Fl.

Cl. 1

0, 2-4, 6

3

3, 5-11

7-11

6-8, 10-11

3

3

Example 5.8: Reduction of the local melodies and harmonies heard the last time G is sustained

The ending of *Continuo*, to return to Berio's analogy from the liner notes, presents the piece as a complex structure guided by a system, which at the same time is breaking away from it. The two complete iterations of the continuo line encourage me, when listening to the piece, to consider the series as an important feature of the work. The

local melodies featuring segments of the line support my sense of structure, as I identified repetitions throughout. However, breaking away from its own system, the piece constantly resists the logic I am attempting to find in it; first, in its local events, which consistently break away, in a variety of ways, from the order of the line, and finally in the structure, which dissipates in the third iteration of the series. After two full iterations of the continuo line as sustained pitches, a third is no longer required for the line to become a dominant structural feature. However, it is the sense of breaking away from structure, rather than establishing it, that becomes my central impression from the piece.

This analysis of *Continuo* did not aim to be comprehensive; a futile endeavor, when it comes to accounting for each of the multitude of details in this complex piece. Instead, it followed an intention to provide a sense of the large-scale plan of the piece and explain the ways in which I understand its logic, showing relationships between different moments in the piece as well as moments in which new relationships are explored. The analysis also showed that similarly to other works by Berio, *Continuo* conceals beneath its surface the traces of a system, which is indeed found in the large-scale structure of the piece, and which, once identified, helps guide the way in listening through the continuous flow of transformations. Lastly, it provided the familiarity with *Continuo* required for identifying ekphrastic relationships with *Ekphrasis*.

The following discussion of *Ekphrasis* frames the piece in the context of *Continuo*. By way of comparison, it will start with an overview of the instrumentation of the piece, continue to the use of the continuo line in the structure and on the surface, and finally summarize the differences, on the large and small scales, between the two pieces. Following the analysis of *Ekphrasis*, I will consider the possibility of interpreting its

relationship to *Continuo* as ekphrastic and the implications the two pieces may have on the definition and boundaries of the term.

5.4 *Ekphrasis (Continuo II for Orchestra)*

In his review of *Ekphrasis*, Robert Kirzinger describes the piece as more introverted than its predecessor, “dimly” reflecting *Continuo*’s ideas.³³ After listening to *Continuo*, I find *Ekphrasis* striking for two reasons—first, for its close resemblance to *Continuo*: I hear *Continuo* playing throughout *Ekphrasis*, as if the later piece also contains the earlier within.³⁴ Second, *Ekphrasis* is striking for not being *Continuo*. Although the two compositions are almost identical, there are differences, that seem to me minor at first but become more significant over repeated listenings. *Ekphrasis* sounds to me like a dream of *Continuo*; I know how the music should unfold, how melodies and harmonies progress, and they fulfill my expectations for the most part, but at the same time something is not quite in place—a difference in timbre, a couple of harmonies added over *Continuo*, a brief unfamiliar melodic line, a part heard more loudly or softly than I expected. Clearly, it is a different piece. Like my discussion of *Continuo*, the following discussion of *Ekphrasis* examines aspects of instrumentation and the use of the continuo line. However, using *Continuo* as context, the analysis of *Ekphrasis* will focus on issues of similarity and difference as they might affect understanding of the ekphrasis between the two compositions.

³³ Robert Kirzinger, *All Music Guide*, <http://www.answers.com/topic/ekphrasis-for-orchestra-continuo-ii>. Cited in Goehr op. cit., 406.

³⁴ I listened to the following recording: RSO Frankfurt, *Luciano Berio: Ekphrasis (Continuo II)*, *Coro*, conducted by Lucas Vis, Col Legno WWE1CD20038 (2004).

5.4.1 The Instrumentation of *Ekphrasis*

Ekphrasis is orchestrated similarly to *Continuo*. The orchestra is also made of small groups arranged according to a diagram provided in the score, which appears here in Figure 5.5. Comparing Figures 1 and 14, it is apparent that groups A1, B1, and B2 are identical in the two pieces. They are also located in the same stage areas, with the brasses on the left and right sides of the orchestra, and the woodwinds in front of the first violin section. Both pieces also include the same number of strings, arranged similarly on stage, and a group of clarinets, bass clarinet, and contrabassoon in front of the conductor. While the orchestration of *Ekphrasis* creates a similar effect to *Continuo* in the sensation of sounds moving across the stage, *Ekphrasis* differs from *Continuo* vis-à-vis instrumentation in several significant aspects. There is only one harp, instead of two, and it is located near the piano. The electric organ from *Continuo* does not participate in *Ekphrasis*, and instead a marimba is added. The celesta is moved to the other side of stage, and an accordion is added and located right next to it. Group A2 is still located in the back, but moved right behind the second violins, and its instruments change—one of the flutes is replaced by a piccolo, and the English horn is replaced by a soprano saxophone.

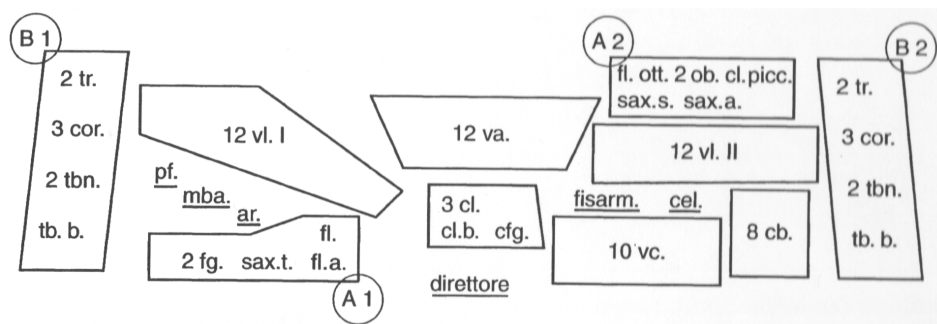


Figure 5.5: Berio's diagram of the orchestra arrangement in *Ekphrasis*

5.4.2 The Continuo Line as a Series

Figure 5.6 presents the progression of sustained continuo-line pitches in the sections of *Ekphrasis*. Comparing the diagram below to Figure 5.4 will help to see the similarities and differences in structure between the two pieces. When it comes to the series of sustained continuo-line pitches in *Ekphrasis*, Figure 5.6 shows that, like *Continuo*, *Ekphrasis* unfolds two complete iterations of the continuo line on the large scale, and an incomplete third iteration. The resemblance between Figure 5.4 and Figure 5.6 is striking in the constant difference of three pages between parallel sections in the two scores during the first and second iterations of the line. The difference is additional material at the beginning of *Ekphrasis*, so that it starts to sustain continuo-line pitches more than a minute into its duration, compared to 25 seconds in *Continuo*. *Ekphrasis* also presents a different variation of the continuo line in the incomplete third iteration.

Time in recording	1'05	1'48	2'23	2'51	3'30	3'55	4'06	4'36	5'15	5'49	6'14	6'32
Beginning page no.	5	9	11	14	17	19	20	22	26	28	30	32
Sustained note	C sharp	G	B	D sharp	A	F	B flat	C	F sharp	B	E	B flat

7'01	7'40	8'11	8'35	9'20	9'38	10'03	10'12	10'35	11'02	11'52	12'20
35	38	40	43	46	47	50	51	52	55	59	61
C sharp	G	B	D sharp	A		F	B flat	C		F sharp	

13'29	13'42	14'27	14'50
67	68	72	74
B		E	B flat

15'21	16'02	16'39	16'53	17'23	17'36	17'50	18'01	18'10	18'15
76	80	84	85	88	89	90	91	92	94
C sharp	G	A		G	B		F sharp	F (natural)	B flat

Figure 5.6: Large-scale sustained continuo line pitches in *Ekphrasis*

The two pieces differ in their beginnings. *Continuo* begins with an oscillating dyad, B flat and D flat, that accelerates at 14 seconds into the recording, when more instruments gradually concentrate on on the latter pitch, which becomes the focus of the orchestra by the time 25 seconds have passed. This gradual process, in which the orchestra turns to concentrate on a single pitch, sets the tone for the progression of large-scale sections in *Continuo*. In contrast, the beginning of *Ekphrasis* gives no clue that such a process is about to take place. While the opening melody in *Continuo* quickly “converges” into the first note of the continuo line, the opening of *Ekphrasis* manifests its melody in a scattered manner, as each note is echoed from one or more instruments for a varying period of time after it has been heard in the melody, creating harmonies with other sustained melody notes. While in both pieces the introduction material is based on the continuo line, the difference in presentation in *Ekphrasis* conceals the large-scale manifestation of the continuo line in the piece by brushing aside its most obvious and systematic representation as a series of focal points. When the introduction from *Continuo* finally arrives in *Ekphrasis*, at 50 seconds into the recording, it is heard in the context of the preceding sustained harmonies. Instead of being established as a rule, the large-scale series of prolongations becomes secondary to the local melodies and harmonies that manifest the continuo line throughout the piece, so that my perception of the underlying structure in *Ekphrasis* is weakened.

5.4.3 The Continuo Line on the Surface

One cannot mistake *Ekphrasis* for *Continuo* based on its beginning, which contains a newly added introduction. The first sound I hear in the piece, prior to the familiar dyad, is a chord played in staccato on the piano, the first in a series of sharp

staccato chords. It grabs my attention, since it was not heard in *Continuo*, and helps to establish *Ekphrasis* as a distinct piece.

While the added chords distinguish the new composition from the older one, it still originates in the continuo line. Figure 5.7 presents the series of staccato chords heard throughout the opening of *Ekphrasis*. Each chord occupies a single bar in the diagram, which is marked by the measure number from the score in which each of the chords is notated and the instrument or orchestral group playing it. For visual convenience, the notes are arranged as melodic lines rather than simultaneities, even though they sound together. The empty rectangular noteheads in the figure signify pitch classes that *repeat* from the previous chord, so that new pitch classes are denoted throughout by black round noteheads. The lines in the figure between different measures connect repeated appearances of the same chord, played by different ensembles in the orchestra. The chords demonstrate different degrees of relation to the continuo line—the first, for example, contains a hexachord from the continuo line (six out of its seven notes), order numbers 8–1 (F sharp, B, E, B flat, C sharp, G). The other prominent chord in the passage, which is heard twice in m. 6, is derived entirely from the line, consisting of two fragments—a pentachord, order numbers 7–11, and a trichord, order numbers 1–3 (if B natural is taken as serving a double role, as order numbers 2 and 9).

m. 1 PF
 m. 2 A1+A2
 m. 3 B1
 m. 4 B1
 m. 5 B2
 m. 6 B1
 m. 7 B1+Cl.
 m. 8 B2
 m. 9 B2
 m. 10 PF+harp
 m. 11 A1
 m. 12 B2
 m. 13 B2

Figure 5.7: Chords in the opening of *Ekphrasis*

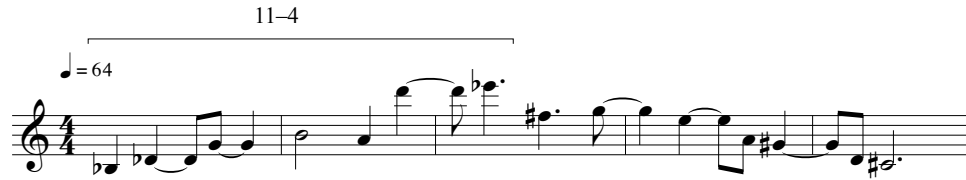
Except for focusing on one of the most prominent differences between *Continuo* and *Ekphrasis*, delving into the material that sets them apart, the detailed discussion of this passage provides an opportunity to show Berio's way of developing the material in the piece on a relatively small scale in order to connect it with the exploratory way in which he also worked, on a much larger scale, with the continuo line in the local melodies and fragments that appear throughout *Continuo* and *Ekphrasis*, with each melody or series of fragments derived from the continuo line to some degree, demonstrating differing levels of relation, and offering a new perspective on the line.

The staccato chords embellish a melody very similar to that at the opening of *Continuo*. The opening melody of *Continuo* appears in Example 5.9a below, compared to

the opening of *Ekphrasis* in Example 5.9b, showing that the two melodies are almost identical in pitch and durations, with the most notable differences found in their tempo and meter. When it comes to pitch, the melodies differ in the eighth note that leads to G sharp in the last bar of Example 5.9a and the penultimate measure of Example 5.9b—in *Continuo* the pitch is C5, and in *Ekphrasis* it is A4. Both melodies originate in the continuo line, as noted by the numbers above the brackets. However, fifty seconds into the recording, I realize that the opening of *Ekphrasis* is a newly added section, since the exact opening melodic lines of *Continuo* are heard in *Ekphrasis* at 50”, at which point *Continuo* begins to unfold within *Ekphrasis*; with this the preceding material can be recognized as an addition to the piece. In addition, while in the opening of *Continuo* echoes of the melody are heard from within layers of tremolos sounding from different parts of the orchestra, in the opening of *Ekphrasis* the melody, and the fragments from the line that follow, are heard among sustained harmonies created by doublings of melody notes that remain sustained for a while, as if they continue to echo, punctuated at times by the staccato chords from Figure 5.7.



Example 5.9a: *Continuo*'s opening melody



Example 5.9b: The opening melody of *Ekphrasis*

The following returns to some of the excerpts from *Continuo* discussed above, examining their representation in *Ekphrasis*. Figures 6 and 10 above present local melodic lines in the sections in *Continuo* that sustain G4 in the first and second continuo-line iterations respectively; examining the parallel sections in *Ekphrasis* demonstrates characteristic ways in which the piece differs from *Continuo*. Listening to the section of the first time G is sustained in *Ekphrasis*, whose a reduction shown here in Example 5.10,³⁵ I notice that the melodic lines repeat the parallel passage in *Continuo* (shown in Example 5.1b), however the chords played by the accordion and celesta throughout the passage interrupt the line's flow. These chords, however, originate in *Continuo* as well—they are a variation of the electric organ's harmonies from the parallel passage in *Continuo*, and of the celesta's harmonies heard during the last section of *Continuo* that sustains G (shown in Example 5.8 above). The change in instrument from the electric organ to the accordion results in the chords becoming louder and clearer; using the accordion in *Ekphrasis* moves the electric organ's part from *Continuo*, heard there in the background, to the sonic foreground of the piece. Moreover, during the transition into the

³⁵ Starting at 7'40" into the recording.

next section, the wind instruments are much more prominent in *Ekphrasis*, closing the section with a dynamic swelling.

A1 Fl.
A2 Fl.
Vln. I
Vln. II
Vla.
A2 Picc.
Cel.
Acc.

6-11
0, 2-11
0, 2-3
5-11

Example 5.10: Reduction of the melodies and harmonies heard in the first time G is sustained, pp. 8–10

The differences between *Continuo* and *Ekphrasis* when G is sustained during the second rotation of the line involve not only some re-orchestration of existing parts, but also new material added to *Ekphrasis* and heard over the progression of the familiar material from *Continuo*. The new additions consist, most notably, of a dramatically rising glissando in the bass clarinet on the downbeat that begins the section³⁶ and an added reinforcement from the percussion towards the end of the section, consisting of an ascending piano gesture and a chord in the accordion. Although the piano and accordion material did not appear in this section in *Continuo* (the electric organ is silent in the

³⁶ 7'41" in recording.

respective bar), it is taken from the first time G is sustained during the first iteration of the continuo line, which features the chords in both *Continuo* and *Ekphrasis* in the electric organ and accordion respectively.

These two examples demonstrate the characteristic ways in which *Ekphrasis* comments on *Continuo* in the body of the piece.³⁷ For the most part, the added material in *Ekphrasis* consists of chords or short fragments that take the attention away momentarily from the progression of events from *Continuo*, as well as changes in orchestration that give more prominence to the wind and brass instruments. Altogether, the changes in *Ekphrasis* generate in my hearing a different presentation of, or a commentary on, the experience of listening to *Continuo*.

5.4.4 The Ending

Ekphrasis parts ways from *Continuo* in p. 85 of the former's score, which should have been parallel to p. 82 of the *Continuo* score,³⁸ when the penultimate section of *Continuo* begins, sustaining F. However, *Ekphrasis* takes a detour of sorts and picks up the material from *Continuo*'s p. 82 (the moment of divergence) only in p. 92.³⁹ Between these two points, continuo pitches are sustained in *Ekphrasis* in a different order from their appearance in the continuo line.⁴⁰ *Ekphrasis*, therefore, surpasses *Continuo* in the

³⁷ In contrast to the new beginning and ending of *Ekphrasis*, which, as we have already noticed, affect the structure of the piece in the sense that they add new parts to the structure that did not exist in *Continuo*.

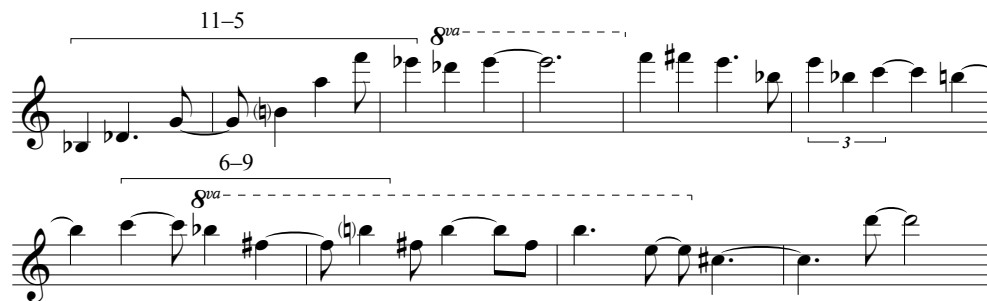
³⁸ 16'50" in the *Ekphrasis* recording.

³⁹ At 18'10" in the recording.

⁴⁰ After the prolongation of A (order number 4) on p. 84, G (order number 1) is prolonged on p. 86ff., and a prolongation of B (order number 2) follows. However,

distance it takes towards its end from the series established in the piece. Even more than *Continuo*, *Ekphrasis* breaks away from the system it presents.

One of the notable features of *Continuo*'s ending is the emergence of the opening melody for the last time in the piece on p. 82 of the score (that is not heard in the recording). However, the melody in *Continuo* is only hinted at, but never realized. In *Ekphrasis*, however, the melody clearly materializes at this moment, beginning in the lower strings and continuing into the violins, in a slightly varied form, shown in Example 5.11 below.⁴¹ While part of this melody is somewhat obscured in the recording by harmonies heard in the orchestra, one cannot miss its return and the reference to the continuo line, because by this point in the piece they have already been heard multiple times in numerous variations. Therefore, *Ekphrasis* realizes a potential at which *Continuo* only hints, adding, as Berio suggested, more parts to *Continuo*'s structure.



Example 5.11: Return of the opening melody at the end of *Ekphrasis*, pp. 85–87

instead of prolonging D sharp next (or E flat), F sharp (order number 8) is sustained on p. 91, followed by F natural (order number 5) on p. 92, when the material from *Continuo* returns, and finally B flat (order number 6) is prolonged.

⁴¹ 16'53" in the recording.

5.5 Issues of Representation in Berio's *Ekphrasis*

Ekphrasis is musical ekphrasis of *Continuo* because, trivially, *Continuo* is contained within *Ekphrasis* (apart from differences of instrumentation); ekphrasis between works of the same medium allows the ekphrastic piece to unequivocally present its object again. As a result, ekphrasis within an art form presents a special situation, manifested also in the representational relationship between the two pieces. *Ekphrasis* forms a direct relationship with *Continuo*, since the ekphrastic relationship depends only on contextual representation—each moment in *Ekphrasis* can be mapped onto a moment in *Continuo* using a single-scope network, since each moment in *Ekphrasis* can be reduced into a parallel moment in *Continuo*. The added material to *Ekphrasis* can also be mapped onto *Continuo*, because it consists of variations on *Continuo* material. For example, it was showed above that the beginning of *Ekphrasis* is a newly added section before *Continuo* begins within *Ekphrasis*. However, as Figures 17a and 17b demonstrated, the opening passage of *Ekphrasis* is a variation of the opening passage of *Continuo*. In this sense, *Ekphrasis* presents a new point of view on *Continuo* as it is being presented again with “added new wings, rooms and windows”—changes in balance between different parts, and material reworked from *Continuo* to form additional parts to an ever-changing structure.

While contextual representation dominated my interpretation of the relationships between the two pieces, it is created in *Ekphrasis* by the composer rather than by listeners. Since listeners can hear *Ekphrasis* as an interpretation of *Continuo*, as the analysis above has done, considering the differences in timbre and the added material as a new way to present *Continuo*, contextual representation is created in the minds of

listeners who know both pieces. Without knowing *Continuo*, one would not hear *Ekphrasis* as representation. However, staying within a medium makes it possible to remove the ambiguity from the relationship between the pieces. Therefore, unlike ekphrasis between different media, listening to *Ekphrasis* entails, rather than finding similarities between the ekphrastic work and its object, contemplating their difference. Instead of issues of presence, the challenge in listening is focusing on absence, on the way in which the gaps between *Continuo* and *Ekphrasis* are filled.

Chapter 6

Schoenberg on Film: A Cinematographic Approach to Schoenberg's

Begleitungsmusik zu einer Lichtspielszene, Op. 34

Music scholars find Schoenberg's *Begleitungsmusik zu einer Lichtspielszene*, Op. 34 (1929–1930) challenging. It is a piece of film music, yet it was not composed for a film. It has a program, but its program is particularly terse: “drohende Gefahr” [threatening danger], “Angst” [fear], and “Katastrophe” [catastrophe]. Op. 34 does not fit comfortably in either of its presumed categories—neither film music nor program music—as testified by the variety of approaches taken by scholars to analyzing the piece. For example, David Hush proposes that in Op. 34 Schoenberg attempted to work out the issue of continuity that occupied the composer at the time. Hush claimed that the piece “was never actually intended to accompany a film.”¹ His structural analysis finds unifying aspects in techniques such as sequences, common partitioning, texture, and range within sections of this episodic piece. However, as Hush admits at the conclusion of his comprehensive study, large-scale continuity in Op. 34 remains a problem, since the techniques he identified in the piece prevail *within* each of its constituent episodes, not *across* them. Instead, the seemingly-arbitrary list of connections he finds between different episodes becomes evidence of “the extraordinary incongruence between episodic successions of Opus 34.”² Consequently, the piece “would seem to suggest a multitude of compositional directions

¹ Hush 1984, 3.

² *Ibid.*, 30–31.

that Schoenberg apparently chose not to exploit in subsequent pieces.”³ Taking a different approach, David Neumeyer examines the piece through the lens of film music theory, subjecting the *Begleitungsmusik* to a series of “commutation tests” à-la-Gorbman, in which the music is paired with visuals taken from several film scenes dating around the time of its composition, in order to test its applicability as accompaniment to contemporaneous films.⁴ Needless to say, the *Begleitungsmusik* fails the tests miserably, if only due to the problem of synchronizing the already-recorded music and the film scenes. This problem, together with additional technical issues such as the difficulty of arriving at balanced dynamics, led the author to conclude with more than a whiff of despair that “the practical problems with the tests support an assertion that composing a *good* film score is not at all easy.”⁵

In this chapter I explore a different view, which considers the *Begleitungsmusik* as a potential critique of film music that can illuminate Schoenberg’s view of the genre. This analytical study argues that Op. 34 can indeed become the basis for a film scene showing threatening danger, fear, and catastrophe. What follows is a brief discussion of the history of the piece and its performance, enhanced with relevant information on Schoenberg’s interest in film music and his approach to programmatic music. My thesis statements that guide this study are presented next. The analysis of the piece will treat aspects of the music without considering its

³ Ibid., 34.

⁴ Neumeyer 1993; Gorbman 1987, 16–18.

⁵ Ibid., [18]. Emphasis by Neumeyer. In “practical problems” he is referring to issues related to the temporal compatibility of Op. 34 and the films with which it is paired. Issues include musical climaxes heard in the wrong moments in the film diegesis and repetition of musical themes and motives in moments that make no sense visually. In addition, it was a challenge to reach a balance in which the soft parts of the music are heard clearly while the loud parts are not too loud.

program, as well as the music in the context of its program. Throughout the analysis, I will refer to a film scene that I created for the piece in collaboration with artist Stephen Sewell to exemplify how one may apply the piece as accompaniment to a film scene.⁶

6.1 Historical Background

Heinrichshofen Verlag, a music publishing company that also published scores for silent film screenings, commissioned Schoenberg to compose Op. 34 for a special jubilee series celebrating the first appearance of talking films, according to Dika Newlin's account.⁷ Newlin remarks that Schoenberg was critical towards film music as a genre and composed Op. 34 "not really for the movies, but only symbolically."⁸ Schoenberg's extensive writings on music do not concern film music specifically (although he wrote about program music in general), and Op. 34 is not mentioned in his many published essays and notebooks. Nevertheless, letters that Schoenberg received from his pupil Alban Berg as well as from Otto Klemperer, who conducted the first performance of the piece, reveal that Newlin's description was quite accurate. In a letter to Schoenberg from May 8, 1930, Alban Berg writes: "Wie herrlich ist das bei Dir! Wieder ist ein Werk da: die Lichtspielbegleitmusik. Ich besitze es natürlich schon und bin - nach kurzem Studium schon - begeistert. Es ist natürlich auch ohne Film ein vollständiges Kunst-werk; aber wäre es nicht wunderbar, wenn diese Musik synchronistisch (oder wie das heißt!) zu einem von Dir erfundenen Film ertönte. Wenn Du dazu Lust hättest, müßte das doch in Berlin leicht

⁶ Our film is available on the following link: <https://vimeo.com/197440676>.

⁷ Newlin 1980, 207.

⁸ Ibid.

durchführbar sein!”⁹ It is not clear from Berg’s letter whether Schoenberg told him about Op. 34 and his intentions for the piece, or whether Berg found out about the publication of the score from another source. In any case, the letter makes it apparent that, for Berg, the *Begleitmusik* was a piece of film music with the potential to become the background to a film scene.

Otto Klemperer’s correspondence with Schoenberg provides more information on the composer’s intentions for Op. 34. On July 7, 1930, Klemperer writes: “Die Filmmusik haben mir angenommen. Ich glaube, das sie auch als seines Concertstück ihre Wirkung zum wird. Hielten sie es für möglich, dass ein Künstler (etwa Moholy) im Ihrer Musik einem abstrakten Film erfände, dem man vielleicht sogar im Concert in Ihrer Musik laufen liesse? Oder ist das gegen Ihre Meinung?”¹⁰ A carbon copy of Schoenberg’s reply, from July 18 of that year, is available as well:

Ihren Vorschlag mit dem abstrakten Film finde ich nach Hin- und Herüberlegen doch sehr bestechend da er das Problem dieser “Musik zu keinem Film” löst.
Nur eines: der Schrecken der Berliner Inszenierung meiner beiden Bühnenwerke, die Greuel die hier von Unglauben, Talentslosigkeit, Unwissenheit und [L]eicht Fertigkeit angerichtet wurden und die, trotz der musikalischen [Le]istungen, meine Werke aufs tiefste geschädigt haben, dieser Schrecken liegt mir noch zusehr in den Gliedern, als daß ich nicht sehr vorsichtig sein sollte. Wie soll ich mich gegen derlei schützen?

⁹ How magnificent for you! Once again a work is completed: the music for a film scene. I have it already, of course, and—after having studied it briefly—I am excited. It is obviously a complete artwork in itself without a film, however it would have been wonderful if you made a film for this piece to be synchronized with (or whatever it is called!). Such an undertaking, if you have any desire to do so, should be possible to accomplish quite easily in Berlin! [My translation]

¹⁰ I have received the film music. I believe it will have an effect even as a concert piece. Do you think it is possible that an artist (perhaps Moholy) could create an abstract film for your music, to show at the concert with your piece? Or is that against your opinion? [My translation]

Moholy is probably László Moholy-Nagy, an artist related to the Bauhaus school.

Ich kenne Herrn Moholy nicht. Aber wenn ich besonderes Unglück habe, dann vereinigt er in sich den lausbübischen, unwissenden Skeptizismus des Herrn Rabenalt mit der phantasielosen Anständigkeit des Herrn Schlemmer.

Es gäbe nur den einen Weg: dass Herr Moholy den Film mit mir zusammen arbeitet (da ist dann wenigstens einer dabei, dem was einfällt). Aber vielleicht ist das zu machen?¹¹

Schoenberg intended for the *Begleitungsmusik* to be performed in concert as a self-standing composition, yet he acknowledged the conundrum of a piece presented as accompaniment to a film scene, which has no film scene. Therefore, it seems that Schoenberg at least entertained the idea of the piece as film music—not music for a specific film, but a model of film music that depicts the three themes: threatening danger, fear, and catastrophe.

Further support for considering Op. 34 as film music comes from Eisler and Adorno, who mention the piece as an exemplar for film music depicting these three themes.¹² For Eisler, the piece successfully overcomes the challenges that most film music fails to meet—creating dramatic interest without falling into clichés, while at the same time retaining musical complexity. “New musical material,” according to Eisler, is more effective in avoiding the

¹¹ Contemplating your proposal with the abstract film to and fro, I find it very convincing in resolving the problem of ‘music for no film.’ There is only one thing: The horror of the two Berlin productions of my stage pieces, the atrocities originating in lack of faith, talent, and knowledge, as well as sheer recklessness, all undermined my pieces, despite their being performed. These horrors that I suffered taught me that I need to be more careful in the future. How can I protect myself against such a thing? I do not know Mr. Moholy. However, if I am especially unfortunate, he is the combination of the scalawag, ignorant skepticism of Mr. Rabenalt with the unimaginative propriety of Mr. Schlemmer. [Arthur Maria Rabenalt directed the performance of Schoenberg’s *Erwartung* and *Die glückliche Hand* at the Krolloper in Berlin on June 7, 1930, which Klemperer conducted, and Oskar Schlemmer was in charge of set design (Payette 2008, 212).] There is only one way: that Mr. Moholy would work with me on the film (it is, at the same time, the least of my worries). But perhaps this can be done? [My translation]

¹² Eisler and Adorno, 1947.

problems facing music in films, and the *Begleitungsmusik* communicates emotions using twelve-tone composition especially well.¹³

Lastly, there is evidence that Schoenberg was indeed interested in film music around that time. In his study of Schoenberg's programmatic pieces, Walter Bailey quotes a letter Schoenberg received from the German Association of Film Composers in November 1929, following up on the composer's request and agreeing to answer any questions he may have about "talking pictures."¹⁴ In addition, any account of Schoenberg's interest in films must mention the well-known story of his negotiations with Irving Thalberg, the legendary MGM producer, who wanted Schoenberg to compose music for the 1937 film *The Good Earth*. While numerous accounts of the two meetings Schoenberg had with Thalberg in 1935 are anecdotal, concentrating on the composer's supposed naïve and dismissive approach towards the project, Sabine Feisst writes that Schoenberg started reading Pearl S. Buck's novel (the basis for the film's plot), and his copy of the book was found heavily annotated, suggesting that the composer took the project seriously. Furthermore, Feisst found sketches of motives and themes for the film in Schoenberg's notebooks. In addition, she quotes a letter Schoenberg mailed to Thalberg, in which the composer asked about the producer's intentions after not hearing from him for a while, remarking that he has "great interest" in the project.¹⁵ Following the failed negotiations for *The Good Earth*, Schoenberg was contacted by Paramount Studios to compose music for the film *Souls at Sea* (1937); however these negotiations also came to nothing.¹⁶

¹³ Ibid., 24; Eisler 1941.

¹⁴ Bailey 1984, 21–22.

¹⁵ Feisst 1999, 93–94.

¹⁶ Ibid., 94.

6.2 The Program of Op. 34

It seems, then, that the *Begleitungsmusik* should be granted, at least provisionally, the unusual status of film music for a non-existing film. One wonders, however, about the type of film or narrative that Schoenberg had in mind. Did he create a detailed program yet decide to include only concise keywords in the laconic text on the published score while keeping the full program concealed?¹⁷ Of the attempts to create film scenes for Op. 34, the most well-known and readily available is by the filmmaker duo Jean-Marie Straub and Danièle Huillet in 1972. The film, entitled *Einleitung zu Arnold Schönbergs Begleitmusik [sic] zu einer Lichtspielszene*, begins with historical context on the piece and its composer, provided by a narrator. Frequently repeating the phrases “drohende Gefahr, Angst, Katastrophe,” between his sentences, the narrator tells of Schoenberg’s personal catastrophe, when he had to flee Nazi Germany and immigrate to the United States. The narrator then introduces Schoenberg’s relationship with Wassily Kandinsky, and the scene changes to a recording studio, in which a speaker reads Schoenberg’s 1923 letters to the painter, responding to the latter’s anti-Semitic remarks. The *Begleitungsmusik* starts playing in the background while the speaker is reading the letters, contextualizing the music in Schoenberg’s own sense of threatening danger that the letters

¹⁷ Schoenberg’s Piano Concerto Op. 42 (1942) has a comparably laconic program. Each of the four movements begins with a short text—“Life was so easy,” “Suddenly hatred broke out,” “A grave situation was created,” and “But life goes on.” Schoenberg composed the piece after immigrating to the U.S. to escape Nazi persecution, and it is generally assumed that the program is autobiographical. However, according to Josef Rufer, who had primary knowledge of the sketches for the piece, the program was not meant to be published, but was intended to serve as an aid in explaining the moods of the piece to pianist Oscar Levant, for whom it was composed. Bailey, however, claims that the program appears in the earliest sketches, showing that it was conceived together with the initial musical ideas for the piece even if it was not intended for publication (Bailey op. cit., 137). The Piano Concerto, then, differs from Op. 34 as a programmatic piece, since the latter’s program was never secret.

convey.¹⁸ The film ends with images of fighter jets dropping bombs, while the music plays its final notes. The documentary implies, then, that Schoenberg's program was much more specific and detailed than the score would lead us to believe.

However, it is doubtful whether Schoenberg assigned such specific meanings to musical compositions, as demonstrated in a quote from a letter he wrote to Mahler, in which Schoenberg reflected on his impression after listening to Mahler's Third Symphony for the first time:

It [Mahler's Third Symphony] was revealed to me as a stretch of wild and secret country, with eerie chasms and abysses neighbored by sunlit, smiling meadows, haunts of idyllic repose. I felt it as an event of nature, which after scourging us with its terrors puts a rainbow in the sky. What does it matter that what I was told afterwards of your 'programme' did not seem to correspond altogether with what I had felt? Whether I am a good or a bad indicator of the feelings an experience arouses in me is not the point. Must I have a correct understanding of what I have lived and felt? And I believe I felt your symphony. I shared in the battling for illusion; I suffered the pangs of disillusionment; I saw the forces of evil and good wrestling with each other; I saw a man in torment struggling towards inward harmony; I divined a personality, a drama, and *truthfulness*, the most uncompromising truthfulness [...]¹⁹

In addition, Schoenberg's writings on program music suggest that he considered the true poetic meaning of a text, or a program, as one that is *inevitably* recreated in the musical setting or realization during the work of composition without conscientious effort on part of the composer, and is then communicated to listeners without requiring familiarity with the program or reference. Schoenberg wrote on his approach to music and text: "I had composed many of my songs straight through to the end without troubling myself in the slightest about the continuation of the poetic events, without even looking back to see just what was the real poetic content of my song. It then turned out, to my greatest astonishment, that I had never done greater justice to the

¹⁸ Schoenberg expressed his fear of the effects that antisemitism will have on German society, mentioning Hitler as a threat already in these early letters.

¹⁹ Bailey 1984, 160. Emphasis by Schoenberg.

poem than when, guided by my first direct contact with the sound of the beginning, I divined everything that obviously had to follow this first sound with inevitability.”²⁰ Later in the essay Schoenberg states: “One has to hold to what a work of art intends to offer, and not to what is merely its intrinsic cause. Furthermore, in all music composed to poetry, the exactitude of the reproduction of events is as irrelevant to the artistic value as is the resemblance of a portrait to its model; after all, no one can check on this resemblance any longer after a hundred years, while the artistic effect still remains.”²¹ For Schoenberg, listeners need no program or poem to understand musical meaning and emotions, since these are not only embodied in the piece, but they are also enhanced by their new expression in the art. While the rise of antisemitism and violence in Europe and the great danger it posed to European Jewry may well have been on the composer’s mind as he was working on the piece in 1929–30, it seems contrary to his approach to programmatic music that he would have intended his music for film to carry such a specific meaning.

6.3 The Arguments

In this study, I propose the following. First, that Op. 34 can be interpreted as musical accompaniment for a film scene depicting threatening danger, fear, and catastrophe. This is because the film’s episodic form, shifting between thematic and fragmented or sequential textures, as well as the sparseness of large-scale motivic development, and the uncharacteristic applications of twelve-tone techniques—implying an underlying hierarchy of row-form relationships—all suggest possibilities for occurrences that could take place in a film that

²⁰ Schoenberg 1912/1975, 144.

²¹ *Ibid.*, 145.

represents the *Begleitungsmusik*'s program. Furthermore, I argue that the unusual structural and formal features of the piece are exactly the aspects that make Op. 34 an exemplar of serial film music. A filmmaker creating a scene based on the music can employ the broad spectrum of thematic, structural, temporal, and textural qualities of the piece.

Throughout the analysis, I will make references to a film scene I created in collaboration with artist Stephen Sewell. The scene consists of a montage of fragments taken from several contemporaneous films that Schoenberg may have known. The selection of fragments, as will be discussed in this paper, was directed by different aspects of the analysis.²² Admittedly, this is a special situation—most films probably do not start with the music, but add it over the visuals. However, it is not unprecedented.²³

Second, I will argue for the closeness of Schoenberg's conception of the aesthetics of film music, as demonstrated in Op. 34, to Hanns Eisler's approach as expressed in his film scores and writings. From Op. 34 it seems that Schoenberg agrees with Eisler in requiring an effective film score to combine new musical resources (such as twelve-tone composition) with dramatic expression, avoiding excessive development and leitmotifs. To compare the approaches of the two composers I will briefly consider the serial music Eisler composed for Joris Ivens's *The 400 Million* (1938). Apart from the closeness in time to Op. 34, there are also parallels between the

²² In contrast to Neumeyer's project, I used fragments of existing films edited to fit the music.

²³ I am referring to the special relationship between filmmaker Peter Greenaway and composer Michael Nyman, who worked with Greenaway on his films during the 1980s and early 1990s. When composing the scores, Nyman usually had a plot synopsis or a structural outline, so that the composer and filmmaker were working simultaneously on their components of the film, eventually putting them together. Instead of complimenting specific scenes or characters, Nyman's score "was introduced as a component in its own right, linked [...] to the intellectual structures of the film." (Sapiro, 152; quote brought from an interview published in Woods 1996, 203).

program of the *Begleitungsmusik* and *The 400 Million*, making the two scores appropriate for comparison. This propaganda film on the Japanese invasion of China during the Second World War was meant to raise public opinion in the US to help the Chinese in their struggle against the Japanese occupation. Visuals in the film depict air strikes on Chinese villages, the fearful reactions of civilians, and the breadth of the consequent destruction. As we shall see, Eisler's score has more than a passing similarity to Schoenberg's Op. 34.

6.4 Analysis

The score of the *Begleitungsmusik* does not specify whether “threatening danger,” “fear,” and “catastrophe” are represented in separate sections of the piece, or whether the three situations are expressed in the music in a different way. Without indication in the score, it is left to performers and listeners to interpret the piece for themselves. This ambiguity is indicative of the programmatic interpretation afforded by the piece in general—we are required to become filmmakers of sorts and imagine a scene unfurling with the music in order to hear it as expressing its program.

Figure 6.1 consolidates the different views of the episodic and programmatic structure of Op. 34 that appear in the analyses by Neumeyer, Hush, and Haimo. The leftmost column indicates large-scale programmatic sections in the piece. Below the name of each section, the name of the analyst (or analysts) who identifies the section appears in parenthesis. The next column shows Hush's labels for each episode in the piece, determined according to changes in tempo in the score; the list of tempi appears in another column in the table. Haimo adds two more episodes to Hush's labels and alters some of Hush's episode indications in his analysis. His episode labels and short descriptions appear in a separate column.

SECTION NAME	EPISODES (HUSH)	MEASURES	HAIMO'S EPISODE LABELS AND DESCRIPTIONS	TEMPO	COMMENTS	
THREATENING DANGER (Neumeyer)	I	1-8	Introduction	$\text{♩} = 60$	Neumeyer identifies the introduction as part of "Threatening Danger"; Hush does not identify "Fear"	
	II	9-17	Twelve-tone theme	$\text{♩} = 72$		
	III	18-43	Hexachordal themes; song form	$\text{♩} = 96$		
FEAR (Neumeyer; Haimo)	IV	44-81	Rhythmic ostinato; further hexachordal partitions	$\text{♩} = 168$	Hush does not identify the episodes of "Fear"	
	V	82-103	Adjacent elements, no segments	$\text{♩} = 90$		
	VI	104-116	Further adjacent elements, no segments	$\text{♩} = 90$		
	VII	117-122	Similar to Episode III	$\text{♩} = 90$		
	VIII	123-155	125-132	Similar to Episode II		$\text{♩} = 72$
			IX 133-144	Tetrachordal partitions		
			X 145-155	Initial approach to the climactic point		
	CATASTROPHE (Neumeyer)	IX	156-169	XI 156-171		Ultimate approach to the climactic point
CATASTROPHE (Hush; Haimo [mm. 170-171])	X	170-177	XII 172-199	Epilogue, part I: Similar to II	$\text{♩} = 100$	
EPILOGUE (Hush)	XI	178-199	XIII 200-219	Epilogue, part II: Similar to I	$\text{♩} = 60$	
						Hush identifies XI and XII as a single episode; Neumeyer identifies them as part of the "Catastrophe" section.

Figure 6.1: the episodes of Op. 34, segmented according to Hush's, Haimo's, and Neumeyer's analyses

Neumeyer divides the piece into three large-scale sections, each expressing one part of the program. Haimo and Hush, however, avoid assigning specific labels to any section apart from "catastrophe," even though they presume that such division guided Schoenberg's work on the piece.²⁴ Neumeyer's three large-scale sections are differentiated by their textural, structural,

²⁴ Without identifying large-scale sections in the score, Hush divides the piece into its individual episodes. His analysis identifies only the beginning of the catastrophe section and the final

and temporal features, and express the three parts of the program in the order in which they appear in Schoenberg's title—"threatening danger," followed by "fear," and finally "catastrophe." The three analysts agree that "fear" begins in m. 44, and that "catastrophe" encompasses the climax of mm. 170–171. However, the leftmost column indicates that the three analysts disagree on the section expressing catastrophe, testifying to the obscurity of the way in which the program is expressed in the piece: Neumeyer identifies it in mm. 156–219, Hush suggests it occurs in mm. 170–177, and Haimo proposes a short section in mm. 170–171. In my discussion, I will follow the episode labels used by Hush and discuss each section of the piece in order. When it comes to the programmatic sections, my discussion follows Neumeyer's labels for the most part. I chose to consider the catastrophe section as starting in m. 156, at the beginning of the episode that contains the climax, because I hold the gradual intensification, as well as the arrival at the moment of catastrophe, to be parts of the event.

epilogue as programmatic. He implies that the piece could be divided into either two or three large-scale sections expressing the program when he writes: "In Opus 34 the journey from threatening danger **and** fear to catastrophe is emphasised by an increased compression of musical events." (Hush 1984, 3; emphasis added).

Haimo discusses the difficulty of identifying the programmatic sections. He writes that, while it is certainly possible to argue that "threatening danger" is expressed in the opening, one would find it difficult to assign exact sections for "fear" and "catastrophe." Yet he suggests that "fear" starts on m. 44, and "catastrophe" is compressed to the climax in mm. 170–71:

Sicherlich liesse sich behaupten, dass der einleitende Teil des Werkes die "Drohende Gefahr" darstellt. Wo jedoch dieser Teil endet und wo "Angst" beginnt, bleibt offen. Vielleicht ist Takt 44 der logische Ansatzpunkt für den Beginn des "Angst" Teiles. Es finden sich jedoch mehrere zusätzliche Momente, wo das Tempo, die Textur und die Intensität in ebenso entscheidender Weise verändert werden. Noch schwieriger wäre es, einen Teil der Musik zu wählen, welcher der "Katastrophe" des Untertitels entsprechen würde. Der gewaltige Höhepunkt in den Takten 170–171 klingt zwar wie eine Katastrophe, ist jedoch keineswegs ein eigenständiger Abschnitt. Ausserdem folgt auf diesen Höhepunkt eine ausführliche Passage, welche zum ursprünglichen Tempo zurückkehrt und einige motivische Ideen der Einleitung erneut aufgreift, ohne jedoch mit dem Untertitel in irgendeinem Zusammenhang zu stehen. (Haimo 2002, 512)

6.4.1 “Threatening Danger”: mm. 1–43

The three episodes contained within “Threatening Danger” are differentiated by their textures and melodies, in which the row forms can be clearly recognized, since all the melodies in this section consist of either a complete iteration of a row or a succession of hexachords. The range of twelve-tone row relationships used in this section gradually grows between episodes: Episode I contains only the prime row P_3 , Episode II also adds its inversion around the first note, and Episode III adds additional row forms related by inversional-hexachordal combinatoriality which, composed with first-note inversion, produce T_5/T_7 . Therefore, “Threatening Danger” starts with a closed system of row forms, which opens up to a space that contains all row forms through the addition of inversional-hexachordal combinatoriality. The discussion of this section starts with a focus on motivic and structural links between and within episodes, and continues to the possible effects that motives, melodies, and row form structures have on the program, and therefore on the possibilities they raised when creating a film scene.

Successive phrases within each of the two episodes in this section are related by rhythmic similarities. For instance, Example 6.1 shows the melody that begins Episode II, consisting of a phrase played by the oboe in mm. 9–12, and an ensuing consequent-like phrase played by the first violins in mm. 13–16. The melodies of both phrases are similar in rhythm, consisting of successive alternations of long and short durations; however the melody of the second phrase inverts the order of the rhythms of the first, starting on a short duration instead of long. In addition, both melodies are divided into hexachordal groups—rests divide the oboe’s theme into hexachords, and an agogic accent followed by a rhythmic change (from double to triple division

of the beat) does the same in the violin phrase.²⁵ The phrases differ, however, in their expressive effect—while the oboe theme remains in the range of a single octave for the most part, the violin melody is more dramatic, reaching the instrument’s higher register, as well as its lowest, combining more accents and a broader range of dynamics. Therefore, the high invariance between row forms related by first-note inversion is expressed by related phrases on the foreground in a periodic form.

The image shows two staves of musical notation. The top staff is for Oboe, starting at measure 9 and ending at measure 12. It is labeled 'P₃' and begins with a dynamic marking of *p* (piano). The melody consists of eighth notes and quarter notes, with a dynamic shift to *sf* (sforzando) at the end. The bottom staff is for Violin I, starting at measure 13 and ending at measure 16. It is labeled 'I₃' and begins with a dynamic marking of *mf* (mezzo-forte). The melody features a wide range of dynamics, including *ff p* (fortissimo piano) and *ff* (fortissimo), and includes triplet markings over the final two measures.

Example 6.1: A melody and its variant in episode II

Example 6.2 compares the melodies in episode III: the woodwinds’ phrase in mm. 18–26, its variant in the violins in mm. 27–30, and the following variant in the first violins in mm. 36–39. Like the melodies of Episode II, the phrase and its two variants feature similar rhythmic profiles—the rhythm in each phrase consists of two pairs of eighth notes, the first starting on an

²⁵ The two hexachords in the violin phrase are differentiated in additional aspects. The first hexachord’s last pair of pitch classes, F and G flat, is accented in four ways. First, through repetition in the triplets. Second, in contour, through an ascending leap from F5 to G flat 6, and back down from F6 to G flat 5. Third, rhythmically, by an agogic accent in the first triplet. Fourth, harmonically, through added “harmonizations” in the second violin and viola sections, forming trichords from the row form. In addition, the triplets are accompanied by *poco pesante*, an instruction to articulate “a little heavy.”

unaccented beat following a rest and the second on the downbeat, followed by two dotted quarter notes. Each of the three phrases contains hexachords taken from two row forms. The first phrase alternates two pairs of hexachords belonging to a row form and its inversion around the first note, with each of the pairs sharing five common tones. The following phrases, however, consist of just one pair of hexachords each, taken from hexachordally combinatorial row forms, so that each phrase contains a complete aggregate. While the melodies in Episode II (shown above) consist of aggregates made by complete row forms, and the melodies that begin in m. 27 and m. 36 (below) contain aggregates that combine hexachords from combinatorial row forms, the period-like phrase in mm. 18–26 is created from the intercutting of hexachords (alternating I_8 and P_8) belonging to row forms related by inversions around the first note. In addition, the hexachords in mm. 18–21 feature a stronger connection than the hexachords forming other melodies in Episodes II and III, since they are not only inverted in row form, but also in melodic contour. Furthermore, the pairs of hexachords in mm. 18–26 contain invariant pitch-classes, while the hexachords of the other melodies complete one another to the aggregate. Therefore, the phrases in the episode present a development in the use of row-form relationships, in which melodic continuity differs from row-form continuity.

The image displays a musical score for Example 6.2, consisting of four staves of music. The notation is in treble clef with a key signature of one flat (B-flat). The score is divided into four systems, each starting with a measure number: 18, 23, 27, and 36. Above the first staff, the hexachordal forms I_8 , P_8 , and I_8 are indicated, with phrase variants a and b spanning across them. The second staff begins with P_8 and includes phrase variant a' . The third staff features P_t and I_3 , with phrase variants a' and b' . The fourth staff shows P_3 and I_8 , with phrase variants a'' and b'' . The music consists of eighth and sixteenth notes, often beamed together, with various articulations like accents and slurs.

Example 6.2: A phrase and its variants in episode III

Rhythmic similarities and invariance between successive hexachords lead to hearing period-like relationships between phrases in Episodes II and III. While they are not remarkable in themselves, they lead to two conclusions—one is structural, and the other has to do with the possibilities that “Threatening Danger” makes available when creating a film scene.

Structurally, episodes I and II concentrate on the prime row form and its first-note inversion—mm. 1–17 contain (in this order) P_3 , I_3 , RI_3 , and R_3 —while hexachordal combinatoriality first appears only in episode III. In general, I hear P_3 , I_3 , and their retrogrades as the “prime complex” of the piece, not just for being the only row forms featured in the opening two episodes of the piece, but also because connections between them are continually formed across episodes, as will become evident in the discussion of the “fear” and “catastrophe” sections. Uncharacteristically for Schoenberg, inversion around the first note is established in the

first part of the piece as a relationship no less significant than inversive hexachordal combinatoriality (IH-combinatoriality, to use Haimo's term). IH-combinatoriality is prevalent in Schoenberg's twelve-tone works, where it is often used to relate row forms melodically.²⁶ Inversion around the first note, however, has not been identified as an important component of Schoenberg's twelve-tone technique. In the row of Op. 34, these two transformation types allow the highest degree of invariance between row forms, yet in different ways: While IH-combinatoriality keeps the contents of *opposite* hexachords invariant, inversion around the first note keeps five elements in each pair of counterpart hexachords invariant, the most that the hexachord's structure permits. Therefore, the structure of the row's hexachord allows greater invariance in first-note inversion than most hexachords. Still, Op. 34 is not the first piece in which such inversion is employed in a significant way—in the Suite for Piano, Op. 25, inversion around the first note is heard melodically in the left-hand part of mm. 1–5, and later vertically in mm. 7–9.²⁷ The third movement of the Woodwind Quintet, Op. 26, is another example— P_3 and I_3 are played simultaneously in mm. 15–19. In addition, in Schoenberg's Violin Concerto, Op. 36, the first and second themes are related by inversion around the first note.²⁸ However, these cases do not permit such near-invariance as Op. 34.

²⁶ As, for example, in the variants of the phrase in Episode III in the violins in mm. 27–30 and mm. 36–39—the melody consists of a hexachord from each IH-combinatorial row form. Haimo codified the technique as an important characteristic of Schoenberg's mature style (Haimo 1990, 8–11). Notably, the row of String Quartet no. 4, Op. 37, which Haimo presents as an example, has the same IH-combinatorial relation between row forms as the row of Op. 34—each transformation of the form P_n is combinatorial with the transformation I_{n+5} .

²⁷ According to Jack Boss, the palindromic dyads created when P_4 and I_4 are combined in Op. 25 function as the driving force for the movement (Boss 2014, 45).

²⁸ The row forms of Op. 36 also feature the same IH-combinatoriality relation, and each of the thematic areas features a distinct IH-combinatorial row complex—the second thematic area contains the inversions of the first. However, the row of Op. 36 contains a higher degree of

The high invariance between row forms related by first-note inversion, and the use of such transformation as a central relationship in the piece, can have different implications on the program. For example, one could interpret the opening of the row-form space—from inversion around the first note to all row forms—as depicting an intensification of the threatening danger. While intensification can have many forms, Stephen Sewell and I decided to present it as a change from a psychological danger, which involves the interior world of a single person, to danger that threatens populations, so that the process of opening the structural space is complemented by the opening of the world presented in the film.

First-note inversion remains prevalent in the horizontal dimension (relating successive musical events) in Episode III, while combinatorially-related row forms are used both horizontally and vertically. The diagram in Figure 6.2 presents row forms throughout this section. It highlights relationships between the melodies discussed above. We already know that the row form of the violin melody in mm. 13–16 is related to that of the oboe melody from mm. 9–12 through inversion, and that the hexachords in the woodwinds in mm. 18–26 alternate I_8 and P_8 , bringing out the invariance that inversion around the first note makes possible.²⁹ While the violins in mm. 27–30 and 36–39 sound like a rhythmic variation of the woodwinds, they forego inversion for IH-combinatorially, which is presented on an equal footing with inversion around the first note, as the variations of the melody in Example 6.2 demonstrate—while the melody in mm. 18–21 contains hexachords from a row form and its inversion, the following variants consist

symmetry than that of Op. 34 in comprising of segmental trichordal invariance between row forms inverted in this way (Babbitt 2003, 222–226).

²⁹ Inverted row forms are partitioned in the same way, so that counterpart hexachords (which have maximal invariance) compose the *Hauptstimme*. Their hexachords that complete the aggregate constitute the other parts.

of complete aggregates made of IH-combinatorial row forms. Figure 6.2 also shows that episode II concentrates on P_3 (which all analysts agree is the prime row of the piece) and I_3 . In episode III, IH-combinatoriality and inversion around the first note broaden the variety of row forms used, which include P_8 , P_t , P_5 , and their first-note inversions.

Episode	I	II			III	
Measures (beat)	1–8	9–12	13–16(2)	16(3)–17	18–26	27–30(2)
Hauptstimme (H) row form(s)	P_3	P_3	I_3	RI_3+R_3	$I_8+P_8+I_8+P_8$	$P_{10}+I_3$
Nebenstimme (N) row form(s)						$R_{10}+RI_3$
Accompaniment row form(s)	P_3	P_3	I_3	RI_3+R_3	$P_3+I_1+P_8+I_1$	RI_3+R_{10}
comments	H also implies R_t , I_4 , RI_1 , and RI_9			Aggregate-completing hexachords in H except for PC 1 (missing from first, completed in second)	IH-combinatoriality between H and accompaniment	Linear IH-combinatoriality in H and N; Vertical IH-combinatoriality between N and accompaniment

Episode	(III)					
Measures (beat)	30(3)–31	32–33	34–35	36–39(2)	39(3)–40	41–43
H row form(s)	P_{10}	RI_{10}	R_5	P_3+I_8	RI_8	R_8+RI_1
N row form(s)	I_3					
Accompaniment row form(s)	RI_3	RI_{10}	P_5	P_3, I_8	I_8	R_8, RI_1
comments	Vertical IH-combinatoriality between H and N			Linear IH-combinatoriality in H		Hexachordal invariance generated by IH-related row forms in H

Figure 6.2: Structural diagram of “Threatening Danger,” mm. 9–43

The row-form relationships established in mm. 1–43 of first-note inversion and hexachordal combinatoriality create a two-dimensional space, shown in Figure 6.3 below. The

rectangle in the Figure surrounds all row forms used in mm. 1–43. One can read the space as a collection of imaginary 90-degree triangles, the central vertex of each related to one of the other vertices by first-note inversion and to the other by IH-combinatoriality. For example, P_8 at the top left of the rectangle is the central vertex of the triangle that also includes I_8 and I_1 ; P_8 is related to I_8 through first-note inversion, and to I_1 through IH-combinatoriality. I_8 is also the central vertex of such a triangle, which includes P_8 and P_3 . The space involves all row forms, because it connects forms related by T_5 or T_7 . The way to move in the space, as the music does according to the row-form diagram above, is by alternating horizontal and vertical motion.

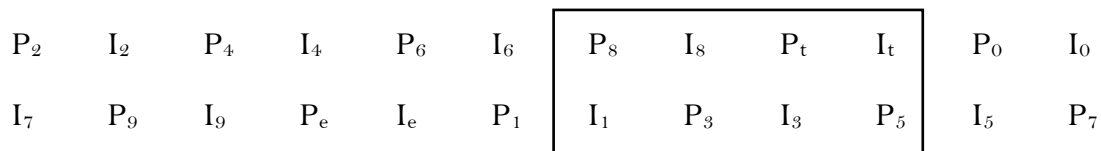


Figure 6.3: Row forms used in “Threatening Danger” defining a two-dimensional space

One does not need a program to interpret relationships between melodies and phrases and the twelve-tone structure of “Threatening Danger.” However, listeners are encouraged to make such interpretations, since the piece was conceived as programmatic and presented as possible accompaniment to a film scene. One possibility for treating the piece as programmatic is creating a film scene for it; the following explains how components in the music affected the realization of its program in a film.

Adhering to the program, the first part of the film Sewell and I made focuses on a looming danger. The narrative is left abstract, in the sense that the danger is not tangible, in order to avoid assigning specific meanings to Schoenberg’s program. Cuts between scenes adhere to the musical phrases and to changes between row forms. We treated Episode I as an introduction,

and chose images of scenery that imply a sense of calm before the storm, including waves breaking on cliffs, fields of wheat moving in the wind, and an aerial view of clouds from above. However, their distorted colors give an impression that something out of the ordinary is about to happen. As the music begins to accelerate in mm. 7–8 towards the first melodic phrase in m. 9, we used an image of a clock (which will return in later transitional moments), with the hands moving in the wrong direction. What follows are abstract insinuations of threatening danger—a branch losing its leaves and disappearing (connecting the nature theme from Episode I and the smaller-scale situations presented in the following), a woman in danger, either real or imagined, and a close-up on a man’s face, with his disturbed facial expression implying that he has lost his mind. The scenes shown in this section take place in closed rooms, with only one person or thing to concentrate on, expressing the musical concentration on limited material (the prime row and its first-note inversion). After the clock image returns in the transition, new ideas are presented in Episode III. Images of heavy artillery relate the melody of mm. 18ff with its variation that starts in m. 36. Between them, the violins’ theme in mm. 27–30 features contrasting images of a crowd, shot using a low angle. Apart from the rhythm of visual changes in the scene, that represents contextually the rhythm of changes between phrases and row forms, connections between the imagetrack and music include a change from private and psychological scenes in Episodes I and II to public and military scenes in Episode III, contextually representing the gradual opening of musical structure. The notion of a threatening danger, embedded in the imagetrack, connects it to the musical program.

Lastly, the end of this first part of the piece includes “stingers.” A stinger in film music jargon refers to a sudden and loud chord or a short phrase, usually played by the full orchestra,

that either marks a surprising or shocking moment, or prepares for an upcoming climax.³⁰ Op. 34 includes numerous stingers; the first, in mm. 41–43, ends the “threatening danger” section. In the film scene, the stingers were used to “freeze” the motion during a dramatic, intense moment. For example, for the stinger that ends this programmatic section, shown in mm. 42–43 of Example 6.3, the scene returns to the character of the woman, abruptly turning around and opening her mouth in an expression of terror from an unseen danger.

³⁰ Neumeyer op. cit., [13].

6.4.2 “Fear”: mm. 44–155

It is not surprising that both Neumeyer and Haimo stipulate that the section expressing “fear” starts in m. 44, since this moment marks a change in the musical texture. Musical events pass by more quickly and the texture becomes more fragmented, including multiple stingers that contrast the heightened sense of motion. Episodes IV–VIII, which constitute “fear,” differ from one another in tempo, rhythmic features, structure, and texture. Compared to “threatening danger,” which is characterized throughout by a melody in the *Hauptstimme* with contrapuntal accompaniment, the episodes of “fear” feature more diverse textures, such as melodies with harmonic accompaniment (in mm. 89–93), multiple parts in unison accompanied by sustained chords (mm. 109–112), and short repetitive fragments, such as the sequences in mm. 44–59, 82–88, and 117–122. The tempo in this section, as Figure 6.1 above shows, accelerates gradually between episodes. “Fear” starts with the row-form space established in Episode III, but introduces new and more distant row-form relationships in Episode VI, fracturing the sense of musical organization.

The table in Figure 6.4 presents the row forms used in this section. Fitting its fragmented quality, “fear” features a greater variety of row-form relationships—starting in m. 104, relationships are no longer limited to inversion around the first note and IH-combinatoriality.³¹ Admittedly, one would not necessarily notice the change when listening to the piece, but instead detect the disjunct quality of the musical surface. Noticing the strict adherence to particular kinds of relationships between row forms throughout the piece, and then identifying a moment in

³¹ Haimo found that, in his “mature” works (starting in Op. 32), Schoenberg used hexachordal levels (employing multiple IH-combinatorial complexes) to distinguish formal areas in compositions. The initial complex was treated as a referential region, receiving more durational stability and emphasis than secondary complexes. It seems unusual to Schoenberg’s technique, then, that diverse types of row-form relationships are employed. (Haimo 1990, 29–30).

which new relationships are introduced, is significant for the potential to add to our understanding of the way in which the program is expressed in the music.³²

³² Boss identifies particular row partitions that function as Leitmotifs in *Moses und Aron* (1926–1932). For example, a division of the row into two trichords from its extremities, heard as harmonies, while the middle hexachord is used in the melody, is dubbed “Depths of God” by Boss as a connotation to its use in the piece (Boss 2014, 333). It is not impossible that use of particular row relationships—limited to two types for the most part, but broadened in m. 104 to include other types—are related in the *Begleitungsmusik* to its program.

IV				V						
Episode	Measures (beat)	60-67	95-99	100-103	68-73(2)	73(3)-77	78-81	82-84	85-88	89-94
Hauptstimme (H) row form(s)	P_8+RI_1 ; P_1+RI_6	R_6+RI_{11}	R_6	R_8+RI_1	R_8, P_8	RI_1+I_1	P_6+R_6	I_{11}	P_6	RI_6
Nebenstimme (N) row form(s)										
Accompaniment row form(s)	P_8+RI_1 ; P_1+RI_6	R_6+RI_{11}	RI_{11}	R_8, RI_1	P_8	RI_1+I_1	P_6	I_{11}	P_6	I_6
comments	Hexachordal invariance generated by IH-related row forms in H	IH-combinatorial line in H	Vertical IH-combinatoriality	Hexachordal invariance generated IH-related row forms in H				IH-combinatoriality between P_6 and I_{11} not used for melodic connections		

VI				VII				VIII					
Episode	Measures (beat)	104-108	109-110	111-112	113-114	115-116	117-119	120-122	123-124	125-127			
H row form(s)	R_{10}	I_4	R_9+P_9	R_9+P_9	RI_8	R_1	P_6	I_9	RI_3	RI_3			
N row form(s)													
Accompaniment row form(s)	R_{10}	I_4	R_9+P_9	I_8	I_8	P_1	P_6	I_9	I_3	I_3			
comments										Theme in woodwinds, hexachords in reverse order			

Figure 6.4: Structural diagram of mm. 44-155

Episode (VIII)										
Measures (beat)	128–130	131–133(3)	133(4)–135(2)	135(3)–136(2)	136(3)–137	138–139(2)	139(3)–140(2)	140(3)–141(1)	141(2)–141(5)	
H row form(s)	R ₁₀	RI ₁	R ₆	I ₈	R ₂	RI ₇	R ₇	RI ₀	R ₉	
N row form(s)										
Accompaniment row form(s)	R ₁₀ , RI ₃	R ₁₀ , I ₁	P ₆		RI ₇	R ₂	RI ₀	R ₇	P ₉	
comments	Vertical IH-combinatoriality		8 P ₆ elements (vla., vc) completed by interweaved tetrachord from R ₆		Vertical IH-combinatoriality					Acceleration; H partitioned into tetrachords between strings and piano

Episode (VIII)									
Measures (beat)	141(6)–142	143(1)–143(3)	143(4)–144	145–146	147–148	149–153(1)	153(2)–155		
H row form(s)	RI ₂	R ₈	RI ₁	P ₆	I ₁₁	I ₃	I ₁₁		
N row form(s)									
Accompaniment row form(s)	RI ₂	R ₈							
comments	Acceleration; H partitioned into tetrachords between strings and piano	Acceleration; H partitioned into tetrachords between strings and winds		Stingers; No H ; H ; row partitioned between all parts, each part sustains a note	Stingers; No H ; row partitioned between all parts, each part sustains a note	Stingers; No H ; row partitioned between all parts, each part sustains a note; E flat/G flat dyad in low strings repeats P ₃ dyad from introduction	Stingers; No H ; row partitioned between all parts, each part sustains a note; E flat/G flat dyad in low strings repeats P ₃ dyad from introduction		

Figure 6.4 (cont'd.)

The sequential passage introduced in m. 44 recalls mm. 18ff in the intercutting of hexachords from different row forms.³³ However, the hexachords this time belong to hexachordally combinatorial row forms rather than to rows related by first-note inversion, so that greater invariance is afforded. Isomorphic partitioning of the four row forms, each occupying a stretch of four bars, creates the sense of variations on a motive. The score excerpt, as well as a reduction of these measures, appears in Example 6.4. Each measure in the reduction equals four bars in the piece, so that the example includes pitch and instrument information, without reference to rhythm. The two row forms in each pair of four-bar stretches, P_8/RI_1 and P_1/RI_6 , are related by IH-combinatoriality. So far in the piece, IH-combinatorial row forms have been expressed locally using aggregate completion—for instance, in melodies made of complementary hexachords from each combinatorial row form—however here, following the phrase in mm. 18ff, invariance is emphasized by using the invariant hexachords (rather than the complementary hexachords) in the same parts. Moreover, the non-consecutive hexachord pairs, P_8/P_1 and RI_1/RI_6 , have five pitch classes in common (because of the inversion around the first note between RI_1 and P_1), so that they are closely related as well.

³³ The term “sequence” is drawn from Hush (1984) and used in a broader meaning than a set of repeating harmonic or melodic iterations, referring here to rhythmic repetition of melodic variants.

44 *Sehr rasch* (♩=168) 45 46 47

Ob

I.2.Kl

Fg *H* *ad libitum bis*[♯]

Klav *H* *p*

I.Gg *Sehr rasch* (♩=168)
44 *p* (D)
45 *pizz.*
46 *p*
47

II.Gg

Br

Vcl

Kbs *H* *pizz.*
p

48 49 50 51

Ob *fp*

I.2.Kl *fp*

Fg *mf*

Klav *mf*

I.Gg *p*

II.Gg *p*

Br *p*

Vcl *p*

Kbs *mf*

Example 6.4a: “Fear,” the sequence in mm. 44–59

52 53 54 55

Ob

1.2.Kl

Fg

Klav

I.Gg

II.Gg

Br

Vcl

Kbs

56 57 58 59

Ob

1.2.Kl

Fg

Klav

I.Gg

II.Gg

Br

Vcl

Kbs

Example 6.4a (cont'd.)

P₈ **RI₁** **P₁** **RI₆**
 44-47 48-51 52-55 56-59

Oboe

Clarinet

Bassoon

Violin

Cello

reordered variants reordered variants

Example 6.4b: Set partitions in “Fear,” mm. 44–59; each measure in the figure equals four bars in the score

I have discussed this excerpt in detail to demonstrate how row-form relationships are used in a different way beginning in m. 44, making a case for considering “fear” as beginning at that moment, which is also marked by rhythmic and textural changes. However, in the context of our discussion, it is perhaps more important to discuss the visual potential of such a scene. The program calls to change the focus of the visuals from the threatening danger to fearful reactions. The sequence in mm. 44–59 suggests quick editorial cuts, shifting the camera between different events or places. In the film scene, the quick unfolding of musical events is visualized using images of crowds escaping from a threat. Two kinds of “visual pulse-streams” are suggested by the music—the prominent measure-long figures that repeat in the strings and piano, as well as the four-bar units occupied by each row form. In the film, the rhythm of scene cuts matches the

four-bar stretches, while the repetitive images of swarming crowds express the repeating measure-long figures.

After m. 109, pairs of row forms whose hexachords are *not* related by five or six common pitch classes in common are used for the first time. For example, mm. 109–112, shown here in Example 6.5, unfold a short rhythmic and timbral sequence consisting of a wave-like rise and fall from the low to the high register of the orchestra and back to the low. While the two iterations of this sequence are similar in texture, rhythm, and articulation, their row forms have the potential to be related by non-segmental pitch-class invariance, which also preserves the orders of pitch classes (as in Figure 6.5c)—a more distant relationship than those used so far in the piece: IH-combinatorial row forms involve, of course, segmental pitch-class invariance within opposing hexachords (Figure 6.5a). Inversion around the first note of Op. 34's row generates non-segmental invariance, in which two row forms contain a common collection at a given collection of order positions (Figure 6.5b).³⁴ However, the potentially close relationship is hidden on the surface, because each row's hexachords appear in the order shown in Figure 6.5d. As a result, a weaker relationship is created between row forms than row-form relationships featured so far in the piece. The invariant pitch-class pairs marked with asterisks in Figure 6.5d share their registral placement on the surface, while other invariant segments are more difficult to discern in listening. At the same time, the trombone part throughout these four bars unfolds {012347}, made of trichords—{472} and {130}—of corresponding order positions in the two row forms. The hexachord has five pitch classes in common with {012346}, the hexachord that opens the prime row P₃.

³⁴ Such invariance corresponds to Mead's (1985, 126) Figure 2a.

108 109 110

Fl

Ob

1.2.Kl

Fg

1.2.Hr

1.2.Trp

Pos

Pk

Xyl

Klav

108 109 110

I.Gg

II.Gg

Br

Vcl

Kbs

Example 6.5: Sequence featuring a new type of row-form relationship, mm. 109–112 (continues on next page)

Musical score for Example 6.5 (cont'd.), measures 111, 112, and 113. The score is arranged in two systems. The first system includes: Flute (Fl), Oboe (Ob), Clarinet 1 (1.Kl), Clarinet 2 (2.Kl), Bassoon (Fg), Horn 1 & 2 (1.2.Hr), Trumpet 1 (1.Trp), Trumpet 2 (2.Trp), Trombone (Pos), Piano (Pk), Xylophone (Xyl), Grand Trampoline (grTr), and Keyboard (Klav). The second system includes: Violin 1 (I.Gr), Violin 2 (II.Gr), Viola (Br), Violoncello (Vcl), and Double Bass (Kbs).

Measure 111 features a piano introduction with a *sempre ff* marking. Measures 112 and 113 show a transition to a more active texture with various dynamics such as *fp*, *f*, and *p*. The score includes numerous triplets and slurs across all instruments.

Example 6.5 (cont'd.)

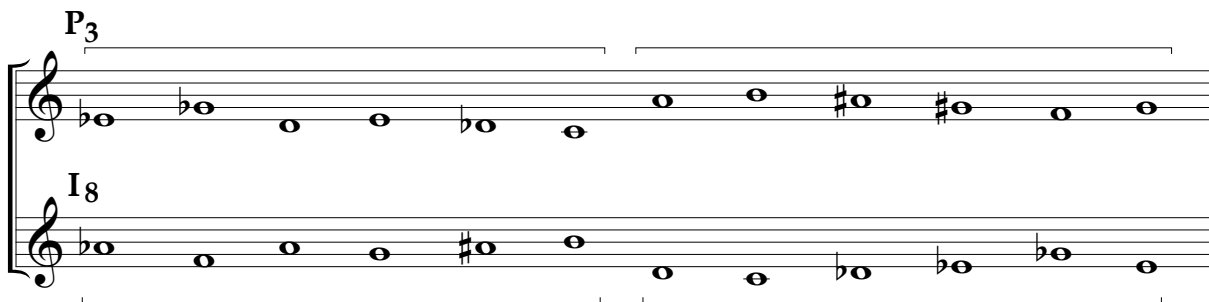


Figure 6.5a: Inversionally hexachordal combinatoriality in the row of Op. 34

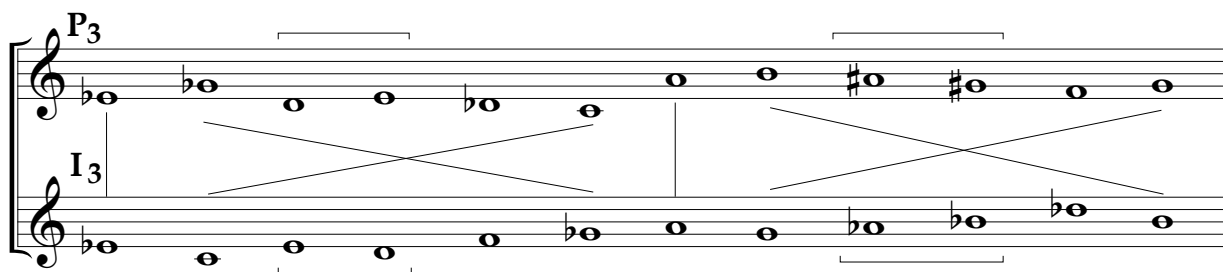


Figure 6.5b: Invariance created between a row form and its inversion around the first note

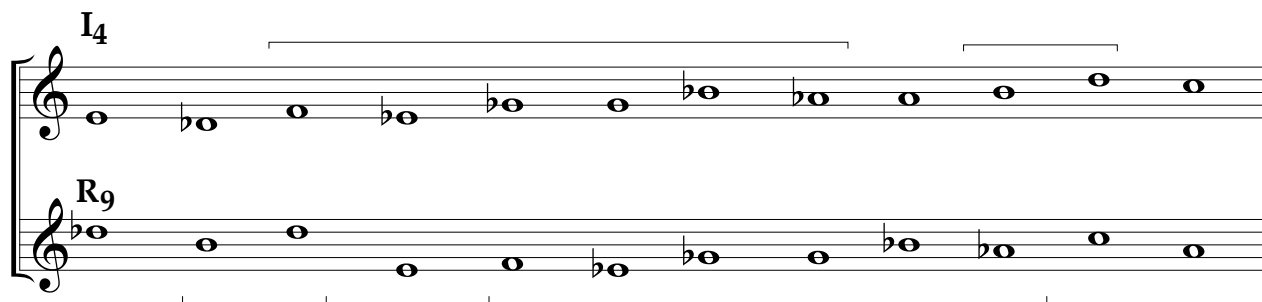


Figure 6.5c: Invariance created between the row forms used in mm. 109–112 in their original order

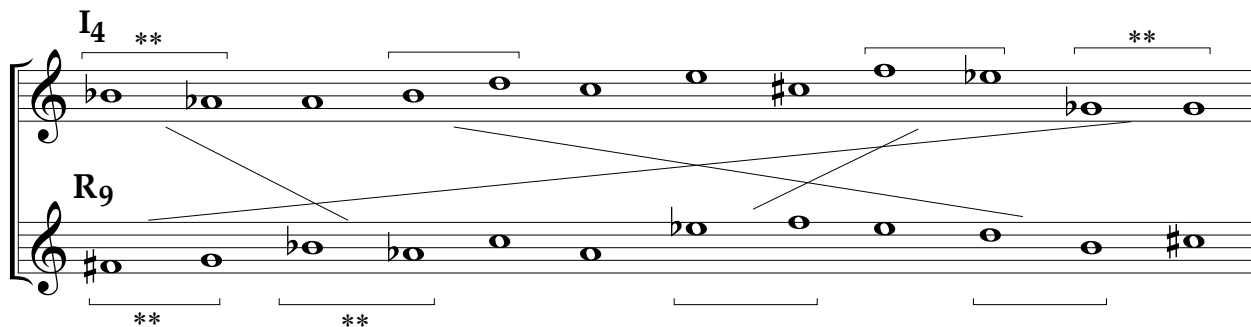


Figure 6.5d: Invariance created between the row forms used in mm. 109–112 as reordered in the piece

Another example of weaker row-form relationship is in mm. 117–122, shown in Example 6.6 below. These measures unfold another short, broadly sequential passage, consisting of a gradually rising tremolo in the violins that erupts into a full-blown stinger, followed by another rise that ends in another stinger. The row forms used for the two rises— P_6 and I_9 —are related, as Figure 6.6a shows, through segmental invariance, however their counterpart (and opposing) hexachords have only three pitch classes in common. In their realization in mm. 117–119 and 120–122, as indicated by the asterisks in the figure, only the invariant opening dyads are emphasized. The common opening dyad is sustained by the viola and cello (with the piano doubling) in mm. 120–121, thereby creating a rhythmic accent that reminds of the accent on P_3 's opening dyad in the beginning of the piece, in mm. 1–5, when it is sustained by the cello and viola sections. Furthermore, the first violins preserve the invariant dyad of the second hexachord of each row form, in mm. 117 and 120. The violins also preserve that entire chromatic trichord, playing the two inversions in mm. 117 and 120. However, these two latter invariances are less noticeable to me in listening.

The two stingers feature a different type of row-form relationship. In both stingers in m. 119 and m. 122, row forms— I_3 and R_{11} —are similarly partitioned (see again Figure 6.5a), with the second through the fifth row elements realized as eighth notes, the sixth through the tenth elements suspended in the brass instruments, and the tenth and eleventh elements suspended first in the strings, and then in the winds. The first element of each row form, E flat in both cases, is notably realized as a repeating triplet.

P₆ 99

The musical score is for measures 114 through 122, with a key signature of one flat and a 6/4 time signature. The instruments listed on the left are Flute (Fl), Oboe (Ob), Clarinets 1 and 2 (1.2.Kl), Bassoon (Fg), Horns 1 and 2 (1.2.Hr), Trumpets 1 and 2 (1.2.Trp), Trombones (2.Trp), Percussion (Pos), Piano (Pk), Grand Trombone (grTr), Piano (Klav), Violin 1 (I.Gg), Violin 2 (II.Gg), Bass (Br), Violoncello (Vcl), and Double Bass (Kbs). The score includes various dynamics such as *fp*, *f*, *pp*, and *p*, as well as articulations like *sempre f*, *pizz.*, and *Ham Steg.*. A circled section in the string parts at the end of the page highlights a specific rhythmic pattern.

Example 6.6: Invariance in the sequence of mm. 117–122

118 119 120

Fl
Ob
I.2.Kl
Fr
I.2.Hr
I.2.Trp
Pos
Pk
Xyl
grTr
Beck
Tamb
Klav

118 119 120

I.Gg
II.Gg
Br
Vcl
Kbs

Handwritten annotations: I_3 , I_9 , f , pp , ppp , $arco$, (D) , f , pp , f , f .

Example 6.6 (cont'd)

rit. E

Re 123 (d)

The musical score is arranged in a standard orchestral format. The instruments listed on the left are: Fl (Flute), Ob (Oboe), 1.Kl (1st Clarinet), 2.Kl (2nd Clarinet), Fg (Bassoon), 1.2.Hr (1st and 2nd Horns), 1.2.Trp (1st and 2nd Trumpets), Pos (Trombone), Tam (Tam-tam), Tamb (Tambourine), Klav (Piano), I.Gg (1st Violin), II.Gg (2nd Violin), Br (Bassoon), Vcl (Violin), and Kbs (Cello/Double Bass). The score spans measures 121, 122, and 123. A 'rit.' (ritardando) marking is present above measure 122. A section labeled 'Re' is indicated above measure 123. A circle highlights a specific passage in the Violin and Double Bass parts in measure 123, which consists of a triplet of eighth notes.

Example 6.6 (cont'd)

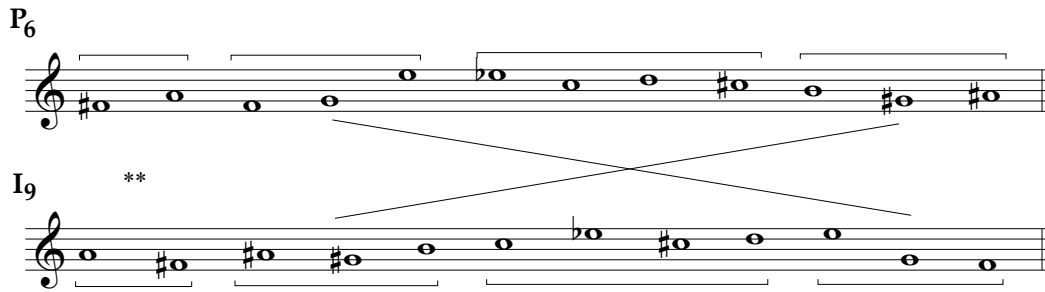


Figure 6.6a: Invariance in the rising figures' row forms, mm. 117–119, 120–122

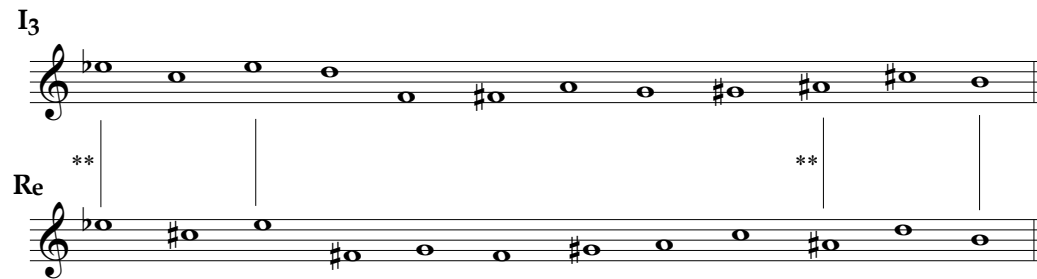


Figure 6.6b: Invariance in the stingers' row forms, m. 119 and m. 122

The discussion of these short excerpts, in mm. 109–112 and 117–121, provides an example of the way in which row-form relationships change in the “fear” section. Overall, this section implies the possibility of a hierarchy of row-form relationships—“threatening danger” concentrates on first-note inversion and and IH-combinatoriality, which are positioned in this context as relationships between closely related row forms, and “fear” features diversification, in which row forms are not always closely organized on the surface. The possibility of a hierarchy will be discussed more fully after exploring the “catastrophe” section.

As a last remark on the “fear” section, I would like to suggest two more points for consideration. First, mm. 125ff introduce the only melodic moment in the section—brought here in Example 6.7. Appropriately, it is created by first-note inversion of the opening row form, thus connecting it to earlier melodies from “Threatening Danger.” It is a striking moment in the music—the theme marks a calm moment after an abundance of climaxes and stingers. In the film scene, the visual rhythm slows down, and a moment of juxtaposition between a woman in a

room, looking worried and afraid, and two men, perhaps the people she is worried about, attempting to climb a mountain during a snowstorm. Reflecting the change in the music, the film returns to the juxtaposition of closed spaces and nature introduced in “Threatening Danger.”

In addition, the “Fear” section features multiple stingers, especially towards the end of the section (see again Figure 6.4), which work to freeze the otherwise relentless musical motion. In the film scene they are used for their shock value, paired with grotesque images of, for example, people dancing around an open fire, in which stacked furniture is being burnt. As local climaxes, the stingers prepare for the ultimate freezing of musical (and possibly visual) motion in the “Catastrophe” section.

Example 6.7: Return of the “prime complex” in the melody in mm. 125–127

6.4.3 “Catastrophe”: mm. 156–177

Hush identifies the catastrophe section in mm. 170–177.³⁵ Haimo notes that the climax in mm. 170–171 “sounds like a catastrophe”; rather than a complete section, he considers the catastrophe as a brief moment—the climax of the piece and, locally, of episode IX.³⁶ While the

³⁵ Hush 1984, 4.

³⁶ “Der gewaltige Höhepunkt in den Takten 170–171 klingt zwar eine Katastrophe, ist jedoch keineswegs ein eigenständiger Abschnitt.” (Haimo 2002, 2)

three analyses agree on the moment in the piece that expresses catastrophe, I concur with Neumeyer and consider the catastrophe as a complete section. I found it difficult to disconnect the freezing of motion in mm. 170–171 as a separate highpoint from mm. 164ff, since the tempo already slows down in these measures, which are played fortissimo and sound climactic in themselves, towards the complete halt in mm. 170–171. Therefore, the moment of catastrophe in my interpretation is extended to include mm. 164–169. The first part of this episode, in mm. 156–163, features a rollercoaster-like intensification towards the climax. The tempo is accelerated (see again Figure 1), dynamics quickly rise from *pianissimo* to *fortissimo*, the register becomes higher, and more instruments gradually join until the beginning of the climax in m. 164. The moment in which one identifies the catastrophe has repercussions when creating a visual scene for the music—in identifying the climax as beginning in m. 164, I allowed the visual scene of the catastrophe to develop for a longer stretch of time.

Examining row forms in this section provides another reason for considering m. 156 as the beginning of the “catastrophe” section. While towards the end of the “fear” section IH-combinatoriality again becomes prominent (as Figure 6.4 shows), more distant row forms—in which either the opposing or corresponding hexachords of each consecutive pair have four pitch-classes in common—are used in m. 156, yet they are related by non-segmental invariance, which is brought out on the surface—see Figure 6.7 below. Note that the dyad {47}, played by the oboe, is common to all four row forms in mm. 156–159. In addition, each pair of non-consecutive row forms has an invariant ordered trichord, which passes between high and low registers in the two violin sections. These non-consecutive pairs also share another dyad, which is played in the flute part in tremolo, so that it accommodates both possible orderings of the dyad’s members.

The image shows a musical score for five instruments: Flute, Oboe, Violin I, Violin II, and Cello. The music is in 3/4 time. The Flute part is divided into four measures, each with a boxed segment labeled P4, I7, P6, and I5. The Oboe part has a melodic line with slurs. Violin I and II parts have boxed segments corresponding to the Flute's partitions. The Cello part has a rhythmic accompaniment.

Figure 6.7: Set partitions in “Catastrophe,” mm. 156–159

Starting in m. 160, the threatening danger returns to the scene, because I_3 (the prime row’s inversion) foreshadows the return of the prime row in mm. 164–170, the climax of the piece, with its first pentachord sustained as a harmony in the brasses, and the remaining elements divided between the woodwinds (and doubled in the strings), repeated continuously in dramatic peaks and falls of the melody’s contour. See the row-form diagram of this section in Figure 6.8 below.³⁷ The return of the prime row is difficult to discern when listening to the piece not only because of its unique partitioning, but also as a result of its distinct expression; it would be hard

³⁷ Corrections of typos in the score offered by Hush, op. cit., who studied Schoenberg’s sketches for the piece. In mm. 160–163, the first and second violins should play E flat and C respectively for I_3 to be complete.

to find a sharper contrast in the piece than between the oboe melody in m. 9 and the shrieks sounding from the violins in in the climax. Knowing the relationship to the beginning, however, connects the two moments as distinct sonic embodiments of the threatening danger, hinting that it is indeed the danger from the beginning that transformed into a full-blown catastrophe.

Episode	IX						X
Measures (beat)	156	157	158	159	160–163	164–169	170–177
Hauptstimme (H) row form(s)	P ₄	I ₄	P ₆	I ₅	I ₃	P ₃	P ₃
comments	Invariant dyads and trichords brought out on surface.						

Figure 6.8: Structural diagram of “Catastrophe,” mm. 156–77

The film depicts the catastrophe as a climax of visual motion and disarray. Beginning in m. 156, as tensions begin to rise towards the catastrophe, the scene becomes more disoriented, depicting masses of people escaping in a frenzy. People are crushed under the crowd, violence erupts, and the pace of visual changes becomes faster and faster, until the moment of catastrophe, which features fast-changing images meant to communicate a sense of disaster—a man shooting his pistols, the body of a dead deer lying on a piano, a hand digging in the snow, trying to clutch a rock, people stomping on a body lying on the ground. The moment of repose after the catastrophe returns to the two men climbing the mountain in the snowstorm—one is hanging on the edge of a cliff while the storm is in full force, trying to hang on to the rope to save his life, as listeners are left hanging at the moment in the music, which follows the climax of the piece with a sudden silence.

6.4.4 The Ending: mm. 178–219

The ending provides us with the opportunity to discuss the opening of the piece in detail as well. From the viewpoint of a filmmaker, the ending is challenging because of its close similarity to the introduction. After the catastrophe has happened, the epilogue might suggest that our film scene ends with a return to the beginning state, as if nothing has changed; it reverses the fragmented introduction, which slowly builds up into a melody, so that a soft and slow melody opens the epilogue in the lower strings and then intensifies to include the violins, until it dies down, and a fragmented melody, divided between the wind instruments in a manner that revives the introduction, brings the piece to a close.

However, a more detailed comparison between the introduction and the ending helps identify difference in what appears, at first, as a varied repetition. The melody in the first part of the epilogue, mm. 178–199, is similar in rhythm to the theme that emerged in the “Fear” section, in mm. 125–131. However, it follows the succession of row forms in mm. 18–25, as well as their partitioning—the same hexachords are used in the melody and the accompaniment respectively. Its tempo brings back the opening of the piece, and the viola dyads in mm. 193–199 further imply a return of the introduction. Example 6.8 presents the melody and viola tremolos in mm. 178–199 as a sort of hybrid of the “threatening danger” theme in its different variations. Therefore, the melody that emerges after the catastrophe implies, programmatically, that the opening situation has changed following the events of the piece. In the film scene, we presented this change as a destruction of the landscapes shown in the beginning—the mountains from the beginning are blowing up, and heavy snow and darkness pervade the scene.

Fl. 125
Ob.
Cl.

Vla. 178
Vln. I
Vln. II
Vlc.
Cb.

Vln. I 185
Vln. II
Cb.

Vln. I 192
Vln. II
Vla.

Fl. 199
Ob.
Cl.

Vla. 201
Vln.

a *b* *a* *b* *a* *b* *c* *c*

Example 6.8: The first part of the epilogue, mm. 178–199, and its origins

The second part of the ending, in mm. 200–219, brings back a variation of the introduction, which Rognoni identified as an instance of *Klangfarbenmelodie*.³⁸ The fragments in

³⁸ Rognoni 1977, 279.

sequences, accelerated rhythms, and variety of row-form relationships in mm. 44–155 (“fear”), and the climactic “catastrophe” in mm. 156–178, which brings back the prime row—generate possibilities for a film scene. The episodic form of the piece sets the pace for the progression of visual events in a film, marking points of editorial cuts and changes of scene, demanding moments of heightened visual motion and contrasting frozen shots, and including numerous climactic moments.

Early in this study I proposed that Op. 34 could become the basis for a film scene that realizes its abstract program. I also posed that Schoenberg’s piece adheres to Hanns Eisler’s guidelines on film music, and that it is similar in some aspects to Eisler’s film score for *The 400 Million*, composed around that time. This final part of the chapter will harness the discussion up to now and complete the arguments. This last section is divided into four parts, each of which concentrates on a different aspect of the early arguments.

6.5.1 Form

The episodic form of Op. 34 sets it apart from other compositions by Schoenberg. It also poses a difficulty for Hush, who struggles to find aspects of continuity between the episodes. However, I argue for the suitability of episodic form to film music. First, such form allows sudden changes and lack of continuity between its episodes. Eisler argues against the common notion that music should be unnoticeable in film, and claims that it can serve an important dramatic role, so that the degree to which it should be noticed varies between films and between moments of a single film.³⁹ In Schoenberg’s score, the sudden changes of tempo and texture between episodes, together with other musical devices such as stingers, allow for quick

³⁹ Eisler 1947, 5–6.

fluctuations in a film scene, such as musical shifts and peaks that counterpart scene cuts and climactic moments in the imagery, while in other moments the music can be smoothly absorbed into the happenings on the screen.

Schoenberg is not an outlier in using episodic form for a piece of film music—it is common to find film music scores in the form of orchestral suites, consisting of a succession of episodic movements, each one fitting a different scene in the film.⁴⁰ Such scores feature a variety of musical atmospheres appropriate to the variety of scenes in a film. The cuts between the scenes and the scene changes often call for changes in the musical accompaniment, which is readily available in episodic form.⁴¹

6.5.2 Structure: Modes of Twelve-Tone Composition

We saw that the twelve-tone technique in the *Begleitungsmusik* is quite unusual when compared to other contemporaneous works by Schoenberg. Hypothesizing the reason for what he considered the uncharacteristic significance of inversion around the first note in the piece, Haimo

⁴⁰ Numerous examples include Alan Silvestri's score of *The Avengers* (2012), Michael Giacchino's score for Pixar's *UP* (2009), John Williams' scores of *The Book Thief* (2013), the *Star Wars* trilogy (1977, 1980, 1983), *War Horse* (2011), and many more. It is common for film composers to consolidate scores for the different scenes in an orchestral suite. While Schoenberg's Op. 34 is not a suite, but consists of a succession of short episodes, one could potentially expand the score for a longer film scene, building on the material the episodes.

⁴¹ Another strategy used in films consists of a soundtrack incorporating a collection of preexisting songs, each accompanying a different scene. Numerous films by Martin Scorsese incorporate songs—*Mean Streets* (1972), *Taxi Driver* (1976), and *Goodfellas* (1990) are just a few examples. In addition, some soundtracks consist exclusively of preexisting songs. Examples include Quentin Tarantino's *Pulp Fiction* (1994), Danny Boyle's *Trainspotting* (1996), and Oliver Stone's *Natural Born Killers* (1994). A special case is Robert Zemeckis's *Forrest Gump* (1994), which incorporates in its soundtrack popular songs contemporaneous with the historical moments depicted in the film. Such strategy achieves goals similar to episodic form when it comes to sudden shifts and breaks between different parts of the score.

stipulates that Schoenberg aimed to avoid excessive repetition in order to create developing variation. To support his supposition, he cites Schoenberg's notebooks, in which the composer claims that unmodified repetition is "primitive" and could degenerate to monotony, while modified repetition is preferred.⁴² However, the extent to which Schoenberg used IH-combinatoriality supports a contradictory claim that modified repetition is possible using such a relationship—after all, the change in order of row elements creates such variation.⁴³ For example, in the "periodic" theme of the Variations for Orchestra, Op. 31 (see Example 6.10), the IH-combinatorial row forms P_t and RI_7 (Figure 6.9a) are used for a periodic phrase that features developing variation.⁴⁴ If IH-combinatoriality posed a danger of monotony, Schoenberg could instead have used P_t and its inversion around the first note (Figure 6.9b), which have two invariant dyads in each of their counterpart hexachords. Such application of IH-combinatoriality in an antecedent and consequent of a period, where in a similar case in Op. 34 (the oboe in mm. 9–12 and the violins in mm. 13–16) inversion around the first note was used, suggests that Schoenberg probably had reasons other than fear of monotony to make inversion around the first note a dominant row-form relationship in Op. 34.

⁴² Haimo 2002, 517. See Schoenberg 1994, 24–25 and 36–37. While first-note inversion keeps a high degree of repetition between row forms (five notes per hexachords), it is less repetitive than IH-combinatoriality.

⁴³ Schoenberg wrote that a motive can be varied by rhythmic, intervallic, harmonic, instrumental, and dynamic means. All such means may be used for developing variation, which he defined as changes on a given motive for the purpose of allowing new ideas to arise (Schoenberg 1994, 36–45).

⁴⁴ Zovko 2007, 41. Schoenberg was the first to use the terms "antecedent" and "consequent" in his discussion of the theme (Schoenberg 1976, 260).

P_t
34

RI₇
39

Detailed description: This figure shows two staves of musical notation. The top staff is labeled **P_t** and starts at measure 34. It features a treble clef, a key signature of one flat (B-flat), and a 3/4 time signature. The melody consists of eighth and quarter notes with various accidentals. The bottom staff is labeled **RI₇** and starts at measure 39. It also has a treble clef, one flat key signature, and 3/4 time signature, with a similar melodic structure to the top staff.

Example 6.10: The theme melody, Variations for Orchestra op. 31, mm. 34–44

P_t

RI₇

Detailed description: This figure illustrates the IH-combinatorial row forms in the theme melody. The top staff, labeled **P_t**, shows a sequence of notes with brackets above it labeled *a* and *b*. The bottom staff, labeled **RI₇**, shows the same sequence of notes with brackets below it labeled *a'* and *b'*. The notes are half notes in a one-flat key signature.

Figure 6.9a: IH-combinatorial row forms in the theme melody

P_t

I_t

Detailed description: This figure illustrates PC invariance between **P_t** and **I_t**. The top staff, labeled **P_t**, shows a sequence of notes with brackets underneath. The bottom staff, labeled **I_t**, shows the same sequence of notes with brackets underneath. A large 'X' is drawn over the right side of the **I_t** staff, indicating a specific relationship or invariance between the two rows.

Figure 6.9b: PC invariance between **P_t** and **I_t**

What rules the use of row forms in Op. 34 is a hierarchy of row-form relationships, featuring differing levels of closeness between row forms. Changes in the types of relationships used correspond to programmatic events that would be featured in a film scene. We already

know that inversion around the first note is the first relationship presented in the piece, and that IH-combinatoriality appears for the first time in the third episode, introduced in the relationship between a melody that features first-note inversion and its accompaniment. A group that I termed the “prime complex” is presented in the first two episodes, consisting of P_3 , I_3 , and their retrogrades. In several points later in the piece, when row forms belonging to the complex return (such as the melody that suspends the continual forward motion of the “fear” section in mm. 125ff), the return marks an important moment that can also function as a significant shift in the visual scene.

The importance of inversion around the first note is demonstrated in Schoenberg’s list of row forms he created for the piece, presented below in Figure 6.10. In the middle of the page, Schoenberg lists the prime form and its inversion around the first note. Above the prime form, he lists its eleven transpositions, while below the inversion appear the corresponding inverted forms around the first note of each transposed form. For example, the transposition that begins on the note F (marked +2 for a major second from the prime transposition) is listed in the second line above the prime form, while the inversion that begins on the same note (marked -7 for a minor seventh below the prime transposition) is listed in the second line below the prime form’s inversion. Note also that each row form on the list is divided into two hexachords, further demonstrating the importance of partitioning into hexachord that was already noticed in the piece.

000

Handwritten musical notation for Schoenberg's list of row forms for op. 34. The page contains 24 staves of music, each with a numerical label on the left. The labels are: +7, -7, +6, -6, 5, +4, 4, +3, -3, +2, -2, **T**, **U**₈, +7, -7, +6, -6, 5, +4, 4, +3, -3, +2, -2. The notation consists of rhythmic patterns and intervals on a staff, representing the transformations of a 12-tone row.

Figure 6.10: Schoenberg's list of row forms for op. 34

Jack Boss examines Schoenberg's view of developing variation as expressed in a radio interview from 1932, in which the composer discussed examples from his own music. Boss points to what could be a reason for Schoenberg's use of inversion around the first note as a leading relationship in Op. 34.⁴⁵ Based on the radio talk and a variety of Schoenberg's writings on developing variation, Boss posits that intervals, rather than pitch, constitute Schoenberg's notion of the concept.⁴⁶ Returning to Op. 34, while IH-complementary row forms, like every row form and its inversion, consist of a series of equally sized interval classes, they are used in the piece, first and foremost, to form aggregates using their corresponding hexachords.⁴⁷ However, inversion around the first note is used for drawing connections between phrases in periodic form, for example, or between themes in different moments of the piece, taking advantage of the common interval structure and the common note that begins each hexachord.

Apart from inversion around the first note and inversional-hexachordal combinatoriality, which occupy the top positions in this emerging hierarchy of row-form relationships, a third type of relationship is presented after m. 104, which I call a *suspended invariant set*. This relationship differs from the previous two, since it is a family of associations rather than a single bijection. It includes different levels of invariance that feature fewer than five common elements per hexachord (either counterpart or opposing). The potential significance of this relationship is implied in the introduction, in mm. 1–8, when the first dyad of the prime row is suspended in tremolo in the viola and cello, while the other prime-form members unfold twice. In addition, the

⁴⁵ The interview is discussed in Boss 1992.

⁴⁶ See especially *Ibid.*, 130–132.

⁴⁷ As we saw in Figures 4 and 7, hexachords from IH-combinatorial row forms are used to form aggregates both horizontally, as melodies, and vertically, as a combination of a melody and accompaniment.

partitioning of the row leads the *Hauptstimme* to imply four other row forms, before the oboe melody in m. 9 clarifies the prime row of the piece. The following traces all instances of invariant suspensions in the piece, surveying all row-form relationships in the piece other than inversion around the first note or IH-combinatoriality.

First, invariant suspended set is featured in the short sequence of mm. 109–112, shown in Example 6.5 above. The order of the hexachords of I_4 and R_9 is changed so that the last dyad of the first row form starts the second, and the first dyad of the first row form is the second dyad in the second row form (see again the brackets marked with asterisks in Figure 6.5d). In the original ordering of the hexachords (in Figure 6.5c), common segments are positioned in the middle of the rows. When the order of the hexachords is reversed, however, the last dyad in the low register in m. 110 repeats in the same register on the downbeat of m. 111.

Mm. 117–122, already discussed earlier in this chapter (see Figure 11 above), also feature this relationship between the two rising figures that precede each of the stingers. In the second rise, the common dyad (marked with asterisks in Figure 6.6a and shown using an arrow in Example 6.6) is accented by suspension in the lower strings and the piano in m. 120.

The liquidation of the phrase that starts in m. 125 (the phrase melody appears in Example 6.7) brings out common trichords between R_i , in mm. 128–130, and RI_1 , in mm. 131–133, shown in Example 6.11 and 19b. These two row forms feature segmental invariance, however only one of the invariant segments (marked with asterisks in Figure 6.11) is highlighted on the musical surface. Later in the process of liquidation, the “major second” ending the invariant trichords becomes a motive in itself in mm. 135–137, shown in Example 6.12. The last dyad of I_8 in the violins is immediately repeated and oscillated in the following passage in the vivacious

Prokofiev-like piano part that unfolds R_2 —see the row forms in Figure 6.12 and the dyad marked with asterisks.

The image shows a musical score for three woodwind instruments: Flute, Oboe, and Clarinet 1/2. The score is in 4/4 time and covers measures 128 to 133. Measures 128-129 are labeled R_t , and measures 130-131 are labeled RI_1 . Measures 132-133 show the liquidation of the set. Asterisks mark specific dyads in the piano part.

Example 6.11: Suspended invariant set in the melodic interlude's liquidation

The image shows two musical staves. The top staff is labeled R_t and the bottom staff is labeled RI_1 . Both staves show a sequence of notes with asterisks marking specific dyads.

Figure 6.11: Segmental invariance in the sets of mm. 128–133

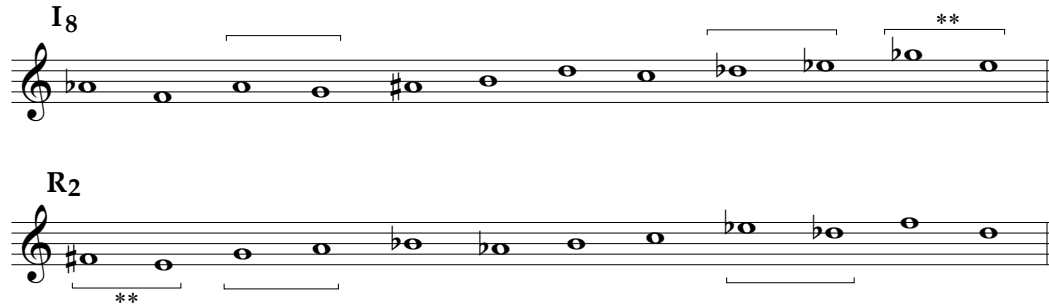


Figure 6.12: Segmental invariance in the sets of mm. 135–137

Example 6.12: Suspended invariant set connecting the liquidation to a new intensification

Lastly, a suspended invariant set appears in mm. 156–159 (see again Figure 6.7), where the first two row forms, P_4 and I_7 , share their first dyad, which is suspended in the oboe part. The following two row forms feature the same dyad as consecutive pitch classes as well, so that it continues to be extended by the oboe, forming a link between the four row forms.

These instances in which row-form associations change from the two dominant relationships established earlier in the piece occur in key moments that mark climax or change. We already know that mm. 109–112 are a moment of climax towards the end of episode VI. The next use of common suspended segment is in mm. 117–122, in the two dramatic ascents towards the stingers. Later, the return of the prime complex in the melody of m. 125 is followed by a suspended invariant segment in its liquidation, generating the Prokofiev-like piano passage. Lastly, the invariant segment in mm. 156–159 begins the ultimate approach to the climactic point of the “catastrophe.”

6.5.3 The Connection to Eisler

Op. 34 calls to be compared with Eisler’s film music for several reasons. First, Eisler was Schoenberg’s student and started composing for commercial films in 1938, when he finally settled in the United States after years of travel in exile following the rise of the Nazis.⁴⁸ Eisler’s film music involved twelve-tone techniques despite the common notion at the time that composing with twelve tones was too “sophisticated” for commercial music. He opined that the visual aspect of films makes twelve-tone music more communicative to broad audiences.⁴⁹ Second, as was already mentioned, Eisler considered Schoenberg’s *Begleitungsmusik* exemplary of an effective twelve-tone film score. Consequently, we may expect that Eisler’s own film scores would bear resemblance to Schoenberg’s in some ways. Lastly, because Eisler was successful as a film composer, using serial techniques, any similarities we find to Schoenberg’s Op. 34 in Eisler’s film scores would support the argument that Schoenberg’s piece is indeed

⁴⁸ Wierzbicki 2008, 11.

⁴⁹ Eisler 1941, 591–592.

appropriate as music for film. If we find stark differences, we can consider how they would affect the feasibility of Schoenberg's score for film as well.

I chose to concentrate on Eisler's score for Joris Ivens' 1938 film *The 400 Million* because of its closeness in time to Op. 34, as one of Eisler's first film scores.⁵⁰ In addition, the beginning of the film—showing images of aerial bombings of Chinese coastal cities at the start of the Second Sino-Japanese War (1937–1945) and the following destruction—includes scenes that feature threatening danger, fear, and catastrophe, relating the piece further to the *Begleitungsmusik*'s program, making the comparison especially appropriate. Eisler later published a version of the film score titled *Fünf Orchesterstücke*, which I use for discussing the film music. In general, different movements in Eisler's piece were used for different scenes (in a different order from the published score), with visible visual cuts between them. I focus on two movements from the score—the Finale (“Improvisation”), used in the opening scene of the film that depicts aerial bombings followed by images of destruction and casualties, and the Passacaglia (the third movement), which accompanies the next scene, depicting masses of refugees escaping the coastal area of China and heading inland, a moment not dissimilar to the depiction of “fear” in the scene Sewell and I made for Op. 34. We can consider the first part of the film as depicting threatening danger, and the following part, showing the escaping refugees, as depicting fear. As such, we can compare the score used in these two parts to the first two sections of Op. 34.⁵¹

⁵⁰ The film is available on <https://www.youtube.com/watch?v=LhPayi1HDhM>. A recording of *Fünf Orchesterstücke*, by Hanns Zimmer and the Berlin Philharmonic, is available on <http://columbia128k.naxosmusiclibrary.com/streamw.asp?ver=2.0&s=7828%2Fcolumbia128k12%2F273918>.

⁵¹ We could, of course, consider either of these scenes as catastrophe, but a comparison to the two longer sections of Schoenberg's score, rather than its short climax, would be more pertinent.

In agreement with ideas from Eisler's writings iterated earlier, his film score combines new musical resources (twelve-tone composition) with dramatic expression, enhancing the emotional effect of the visual scenes while at the same time avoiding clichés. Like Schoenberg, the score employs episodic form throughout—movements are either divided into episodes using double barlines, or, in the case of the *Passacaglia*, employing a sectional form. As a result, large-scale motivic development and Leitmotifs are avoided. However, Eisler's piece differs from Op. 34 in comprising five independent movements, as its title implies, since each movement employs a different row, and there is no repetition of themes or motives between movements. Consequently, a film that uses Eisler's score would accent differences between scenes, while a film based on Schoenberg's piece could take advantage of moments such as variations of themes for repetition in the visual aspect. The use of twelve-tone techniques poses another difference from Op. 34—Eisler employs a much simpler, more transparent technique, not involving set invariance and combinatoriality. While a hexachordal partition of the row dominates the *Passacaglia*, other movements feature successive linear presentations of row forms.

The first scene of the film depicts Japanese war aircraft flying over the Chinese landscape and releasing bombs. Featuring the music of the *Finale*, this scene is accompanied by short violin runs over suspended wind and string harmonies, an excerpt of which is shown in Example 6.13. The movement is in binary form, featuring two exactly repeating sections followed by a coda. Each section consists of a series of short episodes, separated in the score with a double barline. The violin runs in first part of each of the repetitions accompany images of aerial bombings, while the moments between the runs focus on the people on the ground looking on or trying to flee the area. Following the climactic moment of m. 34, when the musical intensity winds down,

the visuals concentrate on the destruction on the ground, showing rubble and survivors trying to save their lives, find their belongings, or mourn their dead.

The image shows a page of a musical score for the film *The 400 Million*, starting at measure 70. The score is arranged in two systems. The first system includes the woodwinds and percussion: Gr. Fl., Ob., Kl. B, Fag., Horn. F, Trp. B, Pos., Pauk., and Schlagz. The second system includes the strings: Viol. I, Viol. II, Vla., Vca., and Kb. The woodwinds and percussion parts feature sustained notes and chords, while the strings play a rhythmic, melodic pattern. The key signature has one sharp (F#) and the time signature is 3/4. The page number 70 is written at the top left, and a rehearsal mark '5' is written above the first measure of the woodwind section.

Example 6.13: The opening violin runs in *The 400 Million*; m. 6 is heard 2'35" into the film

In its second part, the film depicts refugees escaping the war-ridden areas by the coast and joining masses of people heading west towards the interior. The passacaglia's repeating ostinato, an excerpt of which is shown in Example 6.14 below, supports the images on screen that show a growing number of people joining the general stream of refugees. The steady triple meter accompanies the constant motion of the images. A slight *ritardando* followed by a return to the original tempo occurs with each ending of a passacaglia section and beginning of another. Together with the gradual joining of more instruments to the group, the music creates a sense of gradual intensification that compliments the continual flow of refugees on screen. Like Op. 34, the finale and the passacaglia feature contrasting dynamics and textures, moments of climax and relaxation, that are paired, in *The 400 Million*, with moments of visual climax and restraint.

III.
Kleine Passacaglia

The musical score for 'Kleine Passacaglia' is presented in two systems. The first system (measures 1-9) includes parts for Große Flöte, Oboe, Klarinette in B, Horn in F, Trompete in B, Schlagzeug, Violine I, Violine II, Viola, Violoncello, and Kontrabaß. The second system (measures 10-14) includes parts for Viol. I, Viol. II, Vla., Vco., Kb., Hrn. F, Trp. B, and Schlagz. The tempo is marked 'Unruhig, ganze Takte (♩.)'. Dynamics range from p to ff.

Example 6.14: Accompaniment to the escape of the refugees; starts in 5'45" into the film (continues on the next page)

15

Hrn. F *subito p*

Trp. B *con sord.*

Schlagz. *ppp*

Viol. I *subito p*

Viol. II

Vla. *pizz.*

Vco. *pizz.*

Kb. *pizz.*

20 *etwas Zeit lassen (quasi ritenuto)*

Hrn. F

Trp. B

Viol. I *p*

Vla.

Vco.

Kb.

Example 6.14 (cont'd.)

6.5.4 Representation in Op. 34

The beginning of the analysis surveyed different analysts' opinions on the programmatic sections of Op. 34. This final section of the chapter further explores representation, comparing the *Begleitungs*musik to ekphrastic compositions. As discussed earlier, different analysts considered the programmatic sections of the piece as unfolding in succession—first “threatening danger,” then “fear,” and finally “catastrophe.” While it is logical that the three parts of the program succeed one another even without considering the music—focusing only on the potential unfolding of events in the cinematographic scene—some things in the music prompted

the analysts to stipulate that the “fear” section begins in m. 44, and that the “catastrophe” takes place in the climax around m. 170. I propose that a metaphor of motion generates the interpretation of the “fear” section, and a combination of metaphors—motion and intensity (loudness)—bring about the catastrophe interpretation.

It was already mentioned that the piece features a gradual process of acceleration, which only stops in the climax of m. 170. However, going back to Figure 6.1 and examining the tempo markings of each episode reveals that the first significant rhythmic “bump” occurs in episode IV, m. 44, when a quarter note becomes faster by 175%. The meter remains steady on three quarter notes per measure, so that each bar is also 175% faster. Since the sensation of fear is physically related to higher heart rate, it makes sense that the sudden acceleration would be interpreted as the beginning of the “fear” section.⁵² Such interpretation of fear in music is descriptive rather than contextual, because it employs a metaphor related to the program and realized in the music. We can stipulate that the musical metaphor was set by the composer, and as a result it is shared by the different analysts of the piece, who disagree on other parts of the programmatic interpretation.⁵³ The blended space of the metaphor, in which sharp musical acceleration expresses fear, inherits on one hand its causal structure from the programmatic text—it is the program that leads us to associate the accelerating passage in the music with the sensation of fear. On the other hand, it employs the external metaphor of motion.

⁵² While we can intuitively suppose that fear is characterized by higher heart rate, a 2012 study in which participants were shown a scary film found that their heart rate raised by an average of 19.25 beats per minute when they did not expect the film to be scary (Schmitz et al., 2012).

⁵³ Unlike other parts of this chapter, by “the composer” here I mean a virtual persona, such as described in Cone 1974.

Figure 6.13 below shows the CIN created by the musical metaphor of fear. The difference from examples of descriptive representation in ekphrastic compositions is apparent when comparing, for instance, the descriptive representation of “fear” in Op. 34 to the descriptive representation of birds in Gunther Schuller’s “Die Zwitschermaschine.” Schuller’s piece provides a musical event that listeners interpret as a metaphor of the characters in Klee’s painting through a mediating space (bird) whose visual characteristics are seen in Klee’s painting and aural characteristics are heard in Schuller’s movement. However, the mediating space in Figure 6.13 is the programmatic text itself. While listeners to Schuller’s movement relate the musical birdcalls to the characters in Klee’s painting, Schoenberg’s piece requires a film scene for listeners to relate the temporal change in the music to specific imagery. While both Schuller’s and Schoenberg’s representations are descriptive for using a mediating notion for the construction of the metaphor, they differ in the specificity of their input spaces—Schuller’s piece does not illustrate some generic birds, but the specific creatures from Klee’s painting. Schoenberg’s piece, however, illustrates a general sense of fear, which could be attributed to multiple scenarios. Had the program of Op. 34 consisted of a poem or a story depicting fear, it would have allowed a specific interpretation as well—instead of the general sensation, listeners could hear the music as expressing the situation depicted in the text.

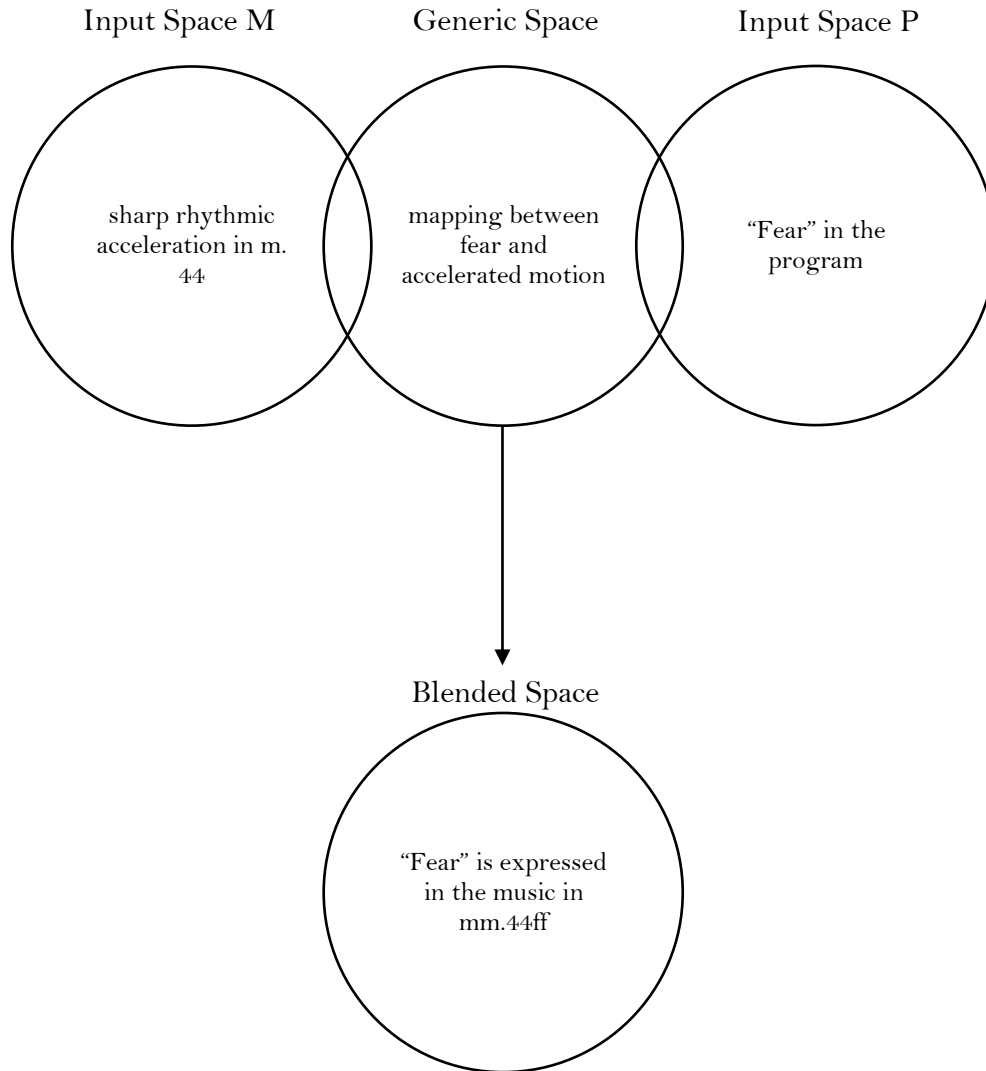


Figure 6.13: CIN of the musical metaphor of “Fear”

A similar type of metaphor is constructed for the musical expression of the moment of “catastrophe.” The metaphor of motion is engaged again, however instead of acceleration the motion decelerates and finally comes to rest on the downbeat of m. 171, marking a moment of arrival. In addition, dynamics arrive at a peak in this moment, which is the loudest in the piece. The Oxford English Dictionary defines catastrophe as “a disastrous end, finish-up, conclusion, upshot; overthrow, ruin, calamitous fate” and, in its colloquial application, as “a sudden disaster,

wide-spread, very fatal.”⁵⁴ The musical deceleration, combined with the loud dynamics, ends the consistent process of striving that started in the sudden acceleration in m. 44. As a result, it is not surprising that analysts agree on this moment as expressing the programmatic catastrophe. Like “fear,” catastrophe is represented descriptively as a musical conclusion of the accumulated tension.

Lastly, let us consider a situation in which a piece of music can involve contextual representation of text. As already defined in previous chapters, contextual representation refers to an activity performed by a listener or analyst who hears something in the music as an interpretation of an ambiguous aspect in the other artwork. For example, when I interpreted the chorus harmonies in Morton Feldman’s *Rothko Chapel* as expressions of the paintings hanging in the chapel space, I allowed the music to comment on difference and similarity between the paintings, and as a result I heard the music as interpreting an element in the space. When it comes to programmatic works like the *Begleitungsmusik*, in which the program was created as a sort of “blueprint” for the piece, I have little motivation to consider how the music comments on ambiguous aspects of the text, since I do not consider the text as a piece of writing that exists separately from the composition for which it was written. However, contextual representation is certainly possible if a programmatic piece depicts a text that already exists as poem or prose (such as Schoenberg’s *Pierrot Lunaire* or Rimsky-Korsakov’s *Scheherazade*), in which case listeners would use the music to interpret the text.⁵⁵

⁵⁴ “catastrophe.” OED Online. June 2016. Oxford University Press.
<http://www.oed.com/view/Entry/28794?redirectedFrom=catastrophe> (accessed August 23, 2016).

⁵⁵ As, for example, Richard Kurth does in his sensitive analysis of *Pierrot Lunaire* (Kurth 2010).

I performed a different type of interpretation when considering the ways in which the piece can be used for creating a film scene. We treated specific events in the piece, such as the stingers, as cues for visual happenings in the scene. In this sense, the music was used as a sort of “program” for a possible film. In such a film scene, we can certainly discuss contextual representation of musical elements as some moments in the discussion above did, for example, when it comes to the relationship between the introduction and the epilogue that is represented contextually in the imagetrack. Although the *Begleitungsmusik* can be appreciated as an independent piece, it calls for a film scene in order to fully realize its representational possibilities and fulfill the promise in its title.

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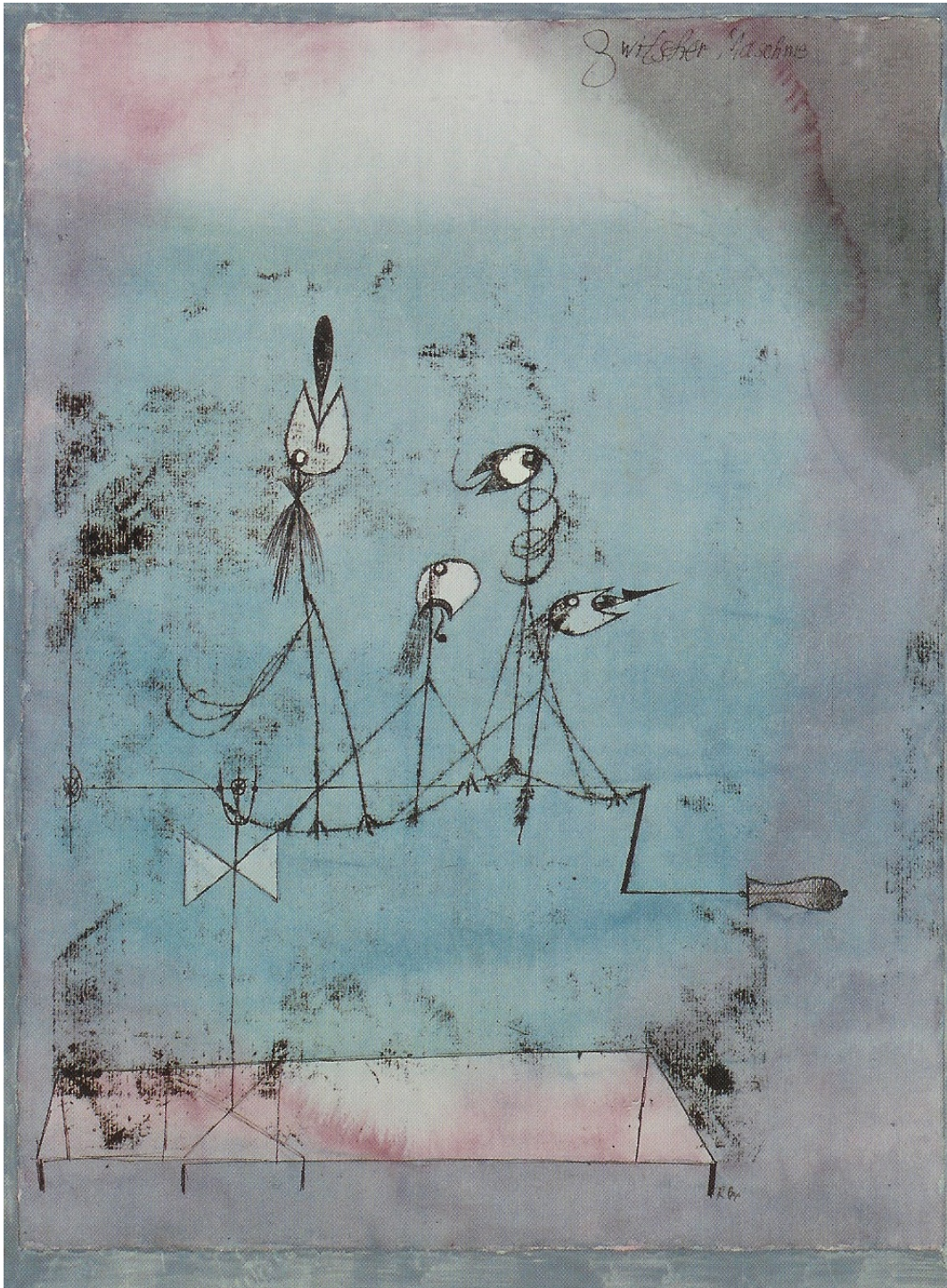
Appendix 2.1

John Keats, “On Seeing the Elgin Marbles for the First Time” (1817)

My spirit is too weak—mortality
Weighs heavily on me like unwilling sleep,
And each imagined pinnacle and steep
Of godlike hardship tells me I must die
Like a sick eagle looking at the sky.
Yet 'tis a gentle luxury to weep
That I have not the cloudy winds to keep
Fresh for the opening of the morning's eye.
Such dim-conceived glories of the brain
Bring round the heart an undescribable feud;
So do these wonders a most dizzy pain,
That mingles Grecian grandeur with the rude
Wasting of old time—with a billowy main—
A sun—a shadow of a magnitude.

Appendix 3.1

Paul Klee's *Die Zwitschermaschine* (1922)



Appendix 3.2

Musical Ekphrasis after Paul Klee's *Die Zwitschermaschine*

Available in printed score:

- Wingate, Jason Wright. 2009. "Die Zwitschermaschine." In Symphony No. 2: *Kleetiden*. New York: Éditions Daimôn.
- Sanchez-Gutierrez, Carlos. 2008. "The Twittering Machine." In ...*Ex Machina*. Published by composer.
- Torp, Martin. 2008. "Die Zwitschermaschine." In *Klee-Blätter*. Published by composer.
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- Avni, Zvi. 2000. "Die Zwitschermaschine." In *Apropos Klee*. Tel Aviv: Israel Music Institute.
- Tymoczko, Dmitri. 1998. "Twittering Machine." In *This Picture Seems to Move*. Published by composer.
- May, Andrew. 1996. *The Twittering Machine (after Paul Klee)*. Published by composer.
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- Maxwell Davies, Peter. 1959. "The Twittering Machine." In *Five Klee Pictures*. London: Boosey and Hawkes.
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- Klebe, Giselher. 1950. *Die Zwitschermaschine*, Op. 7. Berlin: Bote and Bock.

Available in Recording:

- Yojo. Piano Sonata No. 1 ("Twittering Machine"). In *Yojo, 15*. TYX Art TXA12001, 2012, compact disc.
- Scene. "*Epica della creazione*." Smoothnotes, 2010, MP3 album.
- Henning Sieverts Symmetry. *Blackbird*. Pirouet PIT3040, 2009, compact disc.
- Snow, Julian. "*Doodle*." Warble 5637351849, 2008, compact disc.
- The Hungry Ants. *Myrmidons*. Babel BDV2133, 2006, compact disc.
- Didkovsky, Nick. *Flies in the Face of Logic*. Pogus 21008-2, 1994, compact disc.
- Catley, Marc, and Geoff Mann. *The Off the End of the Pier Show*. Plankton PCDN130, 1991, compact disc.

Appendix 5.1

Berio's Liner Notes for *Continuo for Orchestra*

Continuo is an Adagio, “distant and descriptive.” Its texture is rather light and airy and its structure is based upon a grid of recurrent modules. A continuous sound space—like a homogeneous surface—unfolds and is sporadically interrupted by large or small “windows” overlooking an every-changing landscape.

While at work on *Continuo*, I was not consciously planning to create an architectural metaphor nor to pay musical homage to Chicago's great masters: L. Sullivan, F. L. Wright and Mies van der Rohe. Nor was I aware of a direct reference to the airy yet solid constructions of Renzo Piano, to whose work I feel particularly close. Yet, as the work progressed, I realized this was actually happening. The internal musical processes of *Continuo* are indeed architectural, but the shape—the “form” some would say—is not. The modular criteria implicit in this work make *Continuo* a hardly habitable, a non-permanent, contradictory building: one that is virtually open to a continuous addition of new wings, rooms, and windows...¹

¹ “Universal Edition: Luciano Berio—Continuo,” last accessed February 10, 2017, <http://www.universaledition.com/composers-and-works/Luciano-Berio/composer/54/work/1734>.

Appendix 5.2

Berio's Liner Notes for *Ekphrasis (Continuo II)*

Ekphrasis (Continuo II) is a reserved and reflective commentary on an adagio which I wrote in 1990. It is a commentary on the continuous and ever changing soundscape formed from a lace of repeated patterns.

I had no intention of composing a musical metaphor for architecture while I was working on *Continuo*. Nor did I want to write a musical homage to the famous architects from Chicago such as Sullivan, Wright or Mies van der Rohe. Neither did I want to engineer any direct reference to the amusing yet reasonable constructions by Renzo Piano whose work I greatly admire. During the course of composition, however, I realized that this was exactly what happened. The musical processes within the fabric of *Continuo* do indeed have similarities to architectural principles, in abstract form if not in static shape. The musical patterns result in a completely impractical building with no doors or pathways. Its expressive attraction, nonetheless, lies in the contradiction of being thus uninhabitable yet open at any one time for alternative extensions by added new wings, rooms and windows.²

² “Universal Edition: Luciano Berio—Ekphrasis,” last accessed February 15, 2017, <http://www.universaledition.com/Luciano-Berio/composers-and-works/composer/54/work/2275>.

Appendix 5.3

G Sustained in the First Continuo-Line Iteration, pp. 5–8

5

Handwritten musical score for a full orchestra, showing various instruments and their parts. The score is divided into sections A1, A2, B1, and B2. It includes parts for Flute (FL), Oboe (OB), Clarinet (CL), Bassoon (BASSOON), Trumpet (TR), Trombone (TRBN), Percussion (PERC), and Strings (STR). The score is annotated with tempo markings (♩=84 ACC, ♩=112, ♩=64) and dynamic markings (p, mp, mf, f, pp, mf, f, pp). A vertical line with a circled '2' indicates a second iteration of a section. Yellow highlights are present in several staves, particularly in the woodwind and string sections.

UE 19 899

A1
FL
AFL
SAX T
FAG

A2
FL
OBT
OBS
E.H
CL
SAX A

B1
TR
CR
TRBN
BTBN

B2
TR
CR
TRBN
BT

CL
CL BASSO
C.F.

VIOR
VIAR
CEL
PF
E.ORG
ARPA I
ARPA II

I
II
VIOL
CELL
CB

Handwritten musical score for a large ensemble, featuring various instruments and sections. The score is organized into several groups, each marked with a circled letter:

- A1:** FL, AEL, SWT, FAG.
- A2:** Fl, OT., OD 1, OD 2, EH, CLFC, SAX A.
- B1:** TR, CR, TRBN, B.T.
- B2:** TR, CR, TRBN, BT.
- CL:** CL 1, CL 2, CL 3, CL BASS, C.F.
- VIDR:** VIDR, MAR, CEL, PF, E-ORG., ARPA I, ARPA II.
- I, II, VIDE, CELL, CB:** String and other instrumental parts.

The score includes numerous musical notations such as notes, rests, and dynamic markings. Several measures are highlighted in yellow. A circled number '3' appears in three different locations, likely indicating a specific measure or section. Handwritten annotations include '2nd time - SOOP STRAIGHTY' and '2nd SOOP W/ A CA'.

Handwritten musical score for a symphony orchestra, page 8. The score includes parts for Flute (FL), Flute Alto (AFL), Saxophone (SAXT), Flute Alto (FA), Trumpet (TR), Trombone (TRB), Clarinet (CL), Saxophone Alto (SAXA), Trumpet (TR), Trombone (TRB), Clarinet (CL), Clarinet Bass (CLB), Bassoon (B), Violin I (VIOL I), Violin II (VIOL II), Viola (VLA), Cello (CEL), and Double Bass (CB). The score features complex rhythmic patterns, including triplets and sixteenth notes, and dynamic markings such as *pp*, *mf*, *mp*, and *ppp*. There are handwritten annotations in blue ink, including circled letters A1, A2, B1, and B2, and various tempo and performance instructions like "1- SOLO STRAIGHT" and "2- SOLO STRAIGHT". The score is divided into sections by these circled letters. The bottom of the page has the number 8 and the text "4 ACC" with arrows pointing to "3 1=104" and "5 1=64".

Appendix 5.4

Interruption to the Pattern of Sustained Pitches in *Continuo*, pp. 44–46

The musical score is arranged in three systems. The first system includes staves A1, B1, and a bass staff. The second system includes staves A2, B2, Vln. II, and a bass staff. The third system includes Cl. and Vln. I. Fingerings are indicated above notes: 8-3, 1-6, 0-6, 5-10, 0-6, 1, 5-7, 1-6, 11-1 in the first system; 1-6, 0-6, 5-10, 1,3-7, 1-2, 5-7, 1-6 in the second system. Triplets are marked with a '3' and a bracket under groups of notes.

8-6 8-3 1-6 (1-6) 0-6 8-3 1-6 0-6 5-11

A1
B1

A2
B2
Vln. II

Cl.
Vln. I

0-3, 5-6 3-7 0-2, 4-6 0-3, 7-10

A1
B1

A2
B2
Vln. II

Cl.
Vln. I

7-10 10-1 1-5 0-1, 3-6

A1
B1

7-10, 0-1 7-11 10-1 1-5 0-6 8-10

A2
B2
Vln. II

Cl.
Vln. I

3-7 10-2 9-2 11-2 8-4

A1
B1

0-6 5-7 1-2, 4-6

A2
B2
Vln. II

Cl.
Vln. I

0-3, 8-9 3-6 5-7, 9-11 5-7, 10-11 (5-7, 10-11)

A1
B1

8-3 1-6 11-5 5-11 0-7 3-7 9-11

A2
B2
Vln. II

Cl.
Vln. I