BEGLEITUNGSMUSIK ZU EINER LICHTSPIELSZENE, Op. 34: EVIDENCE OF ARNOLD SCHOENBERG’S MUSIKALISCHE GEDANKE

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Dissertation Prepared for the Degree of

DOCTOR OF PHILOSOPHY

UNIVERSITY OF NORTH TEXAS

May 2004

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Composition for Arnold Schoenberg is a comprehensible presentation of a musical idea (musikalische Gedanke); the totality of a piece represents the idea. For tonal works, he defines Gedanke as a process of resolving the “tonal relation” or “tonal problem.” Contrary to the numerous tonal examples illustrating the notion of Gedanke, Schoenberg hardly expounds on the Gedanke principle for his atonal and twelve-tone repertoires. This study reevaluates Schoenberg’s compositional philosophy and aesthetics including Gedanke, comprehensibility, Grundgestalt, and developing variation in light of his compositional practices in *Begleitungsmusik zu einer Lichtspielszene, Op. 34*.

Although Schoenberg denies the existence of a tonal problem and hierarchy among pitches in twelve-tone compositions, the registral placement found in Op. 34 indicates certain functionality assigned to each pitch-class, producing a sense of “departure and return.” The approach here elucidates the “idea” of Op. 34, in which the large-scale formal organization unfolds through contextually emphasized tonal relations.

This study also explores Schoenberg’s concept of the multi-dimensional presentation of a musical idea. Even though Schoenberg’s discussion of musical coherence is usually limited to the immediate musical surface, I believe that he was also aware of an extended realization of foreground motives in the sense of Heinrich Schenker’s “concealed motivic repetition.” This analysis of Op. 34 demonstrates how the enlargement of a surface motive facilitates an understanding of the relation between the parts and the whole, which is perceived as the totality of Gedanke.
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ACKNOWLEDGMENTS

I would like to express my deep gratitude to Dr. Graham H. Phipps, my major professor, for his encouragement and careful and wise guidance of my project. His expertise and breadth of knowledge helped with my understanding of Schoenberg’s philosophy. My other committee members, Dr. Margaret Notley and Dr. Thomas Sovik, offered invaluable comments and suggestions. I am also indebted to Dr. Timothy Jackson for his thoughtful advice for the development of my ideas.

I am grateful to Cynthia Beard for her useful editorial suggestions. Colleen Conlon also spent many hours discussing various aspects of this study with me.

Special gratitude is extended to my wife, Mei, who assisted me by creating all the figures in this study. She has been supportive in ways too numerous to list here. Finally, I owe a great deal to my parents for always believing in me and encouraging me to achieve my goals.

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*Begleitmusik zu einer Lichtspielszene*, Op. 34
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CHAPTER 1

INTRODUCTION

“Music is not merely another kind of amusement, but a musical poet’s, a musical thinker’s representation of musical ideas.”1 Throughout his lifetime, Arnold Schoenberg maintained a consistent underlying aesthetic despite the fact that his compositional style and method changed or evolved from tonal2 to atonal (or pantonal) to a twelve-tone idiom. Composition for him is a comprehensible presentation of a musical idea; the totality of a piece represents the idea.3 For tonal works, Schoenberg defines Gedanke as a process of resolving the “tonal relation” or “tonal problem.” For him it is: “a state of unrest, of imbalance which grows throughout most of the piece, and is enforced further by similar functions of the rhythm. The method by which balance is restored seems to [him] the real idea (eigentliche Gedanke) of the composition.”4

Contrary to the numerous tonal examples illustrating the notion of Gedanke as a realization and resolution of tonal problems presented at the beginning of a piece, Schoenberg hardly expounds on the Gedanke principle for his atonal and twelve-tone repertoires.5 His statements on the twelve-tone method are mostly limited to general

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2 Here, I refer to the term tonal as the style in eighteenth- and nineteenth-century literature. I discuss Schoenberg’s inconsistent use of the term “tonal” and “tonality” in the next chapter.


4 Ibid., 123.
descriptions regarding the various ways of realizing the basic row. Even modern scholars on Schoenberg’s compositional theories are primarily concerned with applying the concepts to tonal music. However, the present study proposes to explore the ways in which Schoenberg’s notion of \textit{Gedanke} and his other compositional aesthetics are manifested in twelve-tone music, with particular application in his \textit{Begleitungsmusik zu einer Lichtspielszene} [Accompaniment to a Film Scene], Op. 34.\footnote{There are variants of the title. For example, the first English language score uses \textit{Begleitmusik zu einer Lichtspielscene} (New York: Heinrichshofen, 1979).}

Although his copious writings reveal the vital role that \textit{Gedanke} played in his compositional thought, Schoenberg always finds it difficult to articulate the essence of \textit{Gedanke}. Especially for twelve-tone music, Schoenberg is less explicit on this subject. Indeed, in at least one source he denies the existence of a tonal problem in twelve-tone music by saying:

\begin{quote}
Composition with 12 tones related only to one another \ldots \textit{presupposes the knowledge of these relationships}, does not perceive in them a problem still to be solved and worked out, and in this sense works with entire complexes similar to the way in which language works with comprehensive concepts whose range and meaning are assumed generally to be known.\footnote{Schoenberg, \textit{zu: Darstellung d. Gedankens} [On: Presentation of the Idea], 12 November 1925, in \textit{The Musical Idea}, 395.}
\end{quote}

Despite this last statement and the fact that Schoenberg never discusses how the compositional realization of the row affects the hierarchical or functional relations among...
pitch-classes, the tonal relationships\(^9\) found in his Op. 34 are presented contextually through such non-pitch parameters as register, dynamics, and rhythm. This study focuses on the ways that Schoenberg forges tonal connections within the abstract row form through registral placement and partitioning of the row. Even though Schoenberg states that there is no hierarchy among pitches of a twelve-tone composition, the registral placement found in Op. 34 indicates certain functionality assigned to each pitch-class, producing a sense of “departure and return.” The approach here elucidates the “idea” of Op. 34, in which the large-scale formal organization unfolds through contextually emphasized tonal relations.

This study also explores Schoenberg’s concept of the multi-dimensional presentation of a musical idea. Although Schoenberg’s discussion of musical coherence is usually limited to the immediate musical surface, I believe that he was also aware of an extended realization of foreground motives in the sense of Heinrich Schenker’s “concealed motivic repetition.”\(^10\) The ensuing chapters show how the enlargement\(^11\) of a surface motive facilitates an understanding of the relation between the parts and the whole, which is perceived as the totality of *Gedanke*.

The second chapter lays a theoretical groundwork by examining Schoenberg’s compositional philosophy and aesthetics, with special attention to his concepts of

\(^9\) Here, I refer the tonal relationships as any relationship established among tones.


\(^11\) According to Brian Alegant and Donald Mclean: “Enlargement occurs when a surface (or near-surface) object (usually an ordered string of notes) is subsequently ‘enlarged,’ or re-presented in temporally expanded form.” See “On the Nature of Enlargement,” *Journal of Music Theory* 45/1 (Spring 2001): 31.
Gedanke, comprehensibility, Grundgestalt, “developing variation,” and aspects of program music provided throughout his writings and documented with musical examples. Then, these principles are assessed and interpreted in order to be applied to the ideas of Op. 34. In Chapter 3, I summarize and evaluate current scholarship on Schoenberg’s twelve-tone works in general, followed by my own methodology, which applies, integrates, and extends the existing research based on my interpretation of Schoenberg’s aesthetics and my observations regarding Op. 34. Chapters 4, 5, and 6 demonstrate how Schoenberg’s aesthetic ideas are manifested in musical composition through an analysis of Op. 34. Emphasis is placed upon Schoenberg’s presentation of musikalische Gedanke through the unifying concepts of Grundgestalt and developing variation and the ways that the row properties enhance the comprehensibility of Gedanke.

The last chapter synthesizes the musical structure and emotional content of the piece. Although the work was composed to accompany a film scene, it stands as an autonomous composition with a clear musical structure as found in Schoenberg’s non-programmatic works. The emotional trajectory described by the subtitle coincides with the structural divisions, which correspond to a three-part sonata form. Thus, the three progressive emotional states suggested by the subtitle mold the outer form of the work, in which each section depicts an imaginary film scene, while the musical structure grows from the Grundgestalt. The last chapter shows how Schoenberg integrates these two notions of form by observing the musical discourse and the programmatic progression.

Throughout this study, I consider non-pitch materials of the piece such as rhythm, tempo, register, instrumentation, and dynamics to illustrate 1) how they emphasize
certain pitches, and 2) how the emotional aesthetics are depicted through these parameters. The primary purpose of this study is to examine how Schoenberg’s concepts of *Gedanke* and multiple dimensions are manifested in his twelve-tone piece, *Begleitungsmusik zu einer Lichtspielszene*, Op. 34, through the observation of both micro-and macro-structures of the piece. The study covers both the technical and emotional content of the piece based on Schoenberg’s aesthetic philosophy, leading to a more complete musical evaluation of the work. It is hoped that this will make a significant contribution to the knowledge of Schoenberg’s aesthetic philosophy and its application to Op. 34.

**Compositional Background of Op. 34**

Arnold Schoenberg declared, “If it is art, it is not for all, and if it is for all, it is not art.”

Throughout his creative career, Schoenberg maintained an esoteric attitude toward art and was deeply concerned with the progress of the German musical tradition. With regard to this view, Schoenberg’s involvement with popular music through *Zeitoper* and film music raises the intriguing question of his relationship to society and his view of popular culture. Although he claimed that art is not intended for a mass audience, he made two attempts to compose for film.

In 1930, *Begleitungsmusik zu einer Lichtspielszene* [Accompaniment to a Film Scene], Op. 34 was conceived for an imaginary film scene. Because it does not

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13 *Von Heute auf Morgen*, Op. 32 (1929)

14 The second attempt is music for Pearl S. Buck’s *The Good Earth* (1935), which Schoenberg never completed.
accompany an actual scene, the piece is typically classified as a symphonic poem with
the specific emotional content indicated by the subtitle “threatening danger, fear,
catastrophe.”

Schoenberg composed Op. 34 in the winter of 1929-1930 while he was a
professor of composition at the Prussian Academy of the Arts in Berlin. Despite the
brevity of the work, Schoenberg spent four complete months, from October 15, 1929, to
February 14, 1930 (the dates shown at the beginning and the end of the manuscript)
completing the work. This is understandable because of his tight workload at that time.
Besides teaching at the Academy, he was busy preparing for the première of the Von
Heute auf Morgen, Op. 32 (1929), which took place on February 1, 1930. In the
beginning of January, he was active as a conductor in London.15

The work was premiered on November 6, 1930, at the Kroll Opera under Otto
Klemperer. This was preceded by a radio broadcast with the Frankfurt Symphony under
Hans Rosbaud on April 28, 1930. Contrary to the usual negative reception, the work was
received favorably at the première. Ironically, Schoenberg was quite surprised by the
positive public reaction to the early performances. As he wrote to his pupil, Heinrich
Jalowetz, who had conducted it in 1931: “What you told me about the performance
pleases me very much. . . . People do seem to like the piece: ought I to draw any

conclusion from that as to its quality? I mean: the public apparently likes it.” 16 Carl Dahlhaus attributes this success to the comprehensibility of the program.17

Even though the piece was commissioned by the Heinrichshofen publishing house, specialists in music for German silent films, it had not been used to accompany any particular film until the 1970s, when several filmmakers attempted to put some scenes to it. In 1972, Jean-Marie Straub and Danièle Huillet made a short film entitled 

_Einleitung zu Arnold Schoenbergs “Begleitmusik zu einer Lichtspielscene”_18

[Introduction to Arnold Schoenberg’s _Accompaniment to a Film Scene_.] Straub/Huillet interpreted the program of the piece, “threatening danger, fear, catastrophe,” as Schoenberg’s personal fear concerning anti-Semitism that would be realized as the world crisis leading to World War II. Barton Byg describes the content of this sixteen-minute film as following:

The film is a collage of the following elements: a short introduction by Straub, showing him [Straub] on a balcony in Rome and then shifting to images of Schoenberg's expressionistic self-portraits; excerpts from letters Schoenberg wrote to Wassily Kandinsky in which he confronts anti-Semitism and proclaims his rejection of politics (read on-screen into a microphone by two young men in the broadcasting studio); a statement by Brecht on the connection of economics to fascism, from the year 1935 (recited by Huillet in her home); and finally, images of bombs being loaded onto B-52 aircraft and then dropped on the rice fields of Southeast Asia. Schoenberg's "Accompaniment" begins about halfway through the film, while the composer's letters are being read, and continues to the end.19

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18 Straub/Huillet use a slightly different variant for the title of Op. 34.

19 Barton Byg, _Landscapes of Resistance: The German Films of Danièle Huillet and Jean-Marie Straub_ (Berkeley: University of California Press, 1995), 154. Although I have not had the opportunity to
Despite the disturbing images in this film, it is not sure that Schoenberg was referring to any specific events of his time with the program of this piece. However, the success of the first performance indicates that the audience at least responded to the emotional content of the work.

The emotional trajectory progresses from Threatening Danger and Fear toward Catastrophe, evoked through dramatic changes in tempo, texture, dynamics, and transformations of the basic motive. While Schoenberg does not indicate in the score where the sectional divisions of the three descriptive subtitles occur, the work does divide into three parts that seem to correspond to the sections of a sonata form.
CHAPTER 2

SCHOENBERG’S TEACHING (COMPOSITIONAL AESTHETICS AND PHILOSOPHY)

This chapter outlines Schoenberg’s compositional philosophy and aesthetics, with special attention to his concepts of Gedanke, comprehensibility, Grundgestalt, “developing variation,” and aspects of program music provided in his writings and documented with musical examples. These terms and principles are then reassessed and interpreted in light of his compositional practices in Op. 34. In his pedagogical and philosophical writings, Schoenberg used mostly tonal music to illustrate the above-mentioned concepts. In addition, the commentaries and applications of Schoenberg’s theories by current scholars are generally limited to tonal repertoire. It is for this reason that I am presenting my own interpretation of how these concepts can be applied to elucidate the musikalische Gedanke of Op. 34, which is based on the twelve-tone method.

Schoenberg was an influential figure not only as a composer, but also as a pedagogue, philosopher, and aesthetician of musical art, whose ideas are revealed in copious essays and textbooks. His general outlook can be characterized as an anti-theory or anti-science: “I am still more a composer than a theorist. When I compose, I try to forget all theories and I continue composing only after having freed my mind of them.”¹ He was not, however, anti-traditional or revolutionary despite the image created by his critics and the general public. Rather, his view was evolutionary and deeply concerned with musical progress: “While composing for me had been a pleasure, now it became a

duty. I knew I had to fulfil a task: I had to express what was necessary to be expressed and I knew I had the duty of developing my ideas for the sake of progress in music, whether I liked it or not; but I also had to realize that the great majority of the public did not like it.”

Throughout his creative life, Schoenberg always kept his obligation to continue the legacy of German music tradition.

In general, Schoenberg did not leave any systematic theory and his explanations are full of paradoxes. Many of his fundamental concepts had constantly evolved throughout his lifetime, contradicting each other, and he had a difficult time verbally explaining them. However, the underlining principles had not changed throughout his creative career despite the fact that his compositional style and method had changed. Composition for him was to present the musical idea in a comprehensible manner:

Form in the arts, and especially in music, aims primarily at comprehensibility. The relaxation which a satisfied listener experiences when he can follow an idea, its development, and the reasons for such development is closely related, psychologically speaking, to a feeling of beauty. Thus, artistic value demands comprehensibility, not only for intellectual, but also for emotional satisfaction. However, the creator’s idea has to be presented, whatever the mood he is impelled to evoke. Composition with twelve tones has no other aim than comprehensibility.

In order to achieve comprehensibility, a musical work has to have formal logic and coherence: “The chief requirements for the creation of a comprehensible form are logic and coherence. The presentation, development and interconnexion of ideas must be based on relationship.”

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3 Schoenberg, “Composition with Twelve Tones (1),” (1941), in Style and Idea, 215.

Grundgestalt (basic shape) and developing variation: “Whatever happens in a piece of music is nothing but the endless reshaping of a ‘basic shape.’”\(^5\) In both *Structural Functions of Harmony* and *Fundamentals of Musical Composition*, Schoenberg demonstrated, through musical examples from Bach to Brahms, that all the great works were organically constructed on formal logic and coherence.

In his twelve-tone works, Schoenberg continuously applied the aesthetic tradition of organicism that is common to Austro-German art music. For him the twelve-tone method was only a means to provide logic and to achieve comprehensibility through coherence between the parts and the whole. As he instructed his students to use the method but to compose as they composed before,\(^6\) it is essential to understand the fundamental principles of Schoenberg’s compositions regardless of his style characteristics:

For me, it is certain that the laws of the old art are also those of the new art. If you have correctly perceived and correctly formulated them, and if you understand how to apply them correctly, then you no longer feel the need for any other, any new teaching. A piece, an idea, its presentation are assessed in the same way as at any other time, by those truly informed. What was a discovery is still a discovery today, its logic has not changed, its beauty has stayed the same; but forms continue to arise, in keeping with the demands of the idea and the manner of its presentation, which depends on the initial inspiration.\(^7\)

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\(^6\) Schoenberg, “Schoenberg’s Tone-Rows,” (1936), in *Style and Idea*, 213.

\(^7\) Schoenberg, “On the Question of Modern Composition Teaching,” (1929), in *Style and Idea*, 375.
Gedanke

As indicated by his statements that "Music is not merely another kind of amusement, but a musical poet’s, a musical thinker’s representation of musical ideas," and that "An idea can never perish," Schoenberg’s concept of idea (Gedanke) is essential to an understanding of his musical thinking. For him, it was the fundamental precept for all the techniques of composition. In his essay "New Music, Outmoded Music, Style and Idea," Schoenberg expressed the importance of the idea in a musical work and criticized contemporary composers for placing too much emphasis on style instead of idea. While his constant effort and struggle to explain the essence of idea continued throughout his lifetime, Schoenberg was never satisfied. However, the development of his concept can be traced in the series of incomplete Gedanke manuscripts written between 1923-1936.

Throughout his writings on Gedanke, Schoenberg was more concerned with the relationship (Beziehung and Zusammenhang) between materials rather than the materials themselves such as theme and motive:

Composing is: thinking in tones and rhythms. Every piece is the presentation of a musical idea. Musical thinking is subject to the laws and conditions of all our

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8 Schoenberg, “Composition with Twelve Tones (1),” (1941), in Style and Idea, 220.


10 Ibid.

11 The following statements illustrate Schoenberg’s difficulty defining Gedanke. On April 7, 1929: "The question 'What is a musical idea?' has never before been answered – if indeed it has ever been asked. I thought that I would be able to state this clearly today, since I had it so clearly in mind. But I must still wait. Perhaps, though, I shall come to it yet." And in 1940: "All these questions I have handled much better later." See The Musical Idea, 74.

other thinking, and beyond that must take into consideration the conditions resulting from the material. All thinking consists essentially in bringing things (concepts, etc.) into relationship with each other. An idea is the production of a relationship between things otherwise having no relationship to one another.\textsuperscript{13}

The relationship must always be new, and it is purely musical for a composition (\textit{musikalische Gedanke}):

An idea in music consists principally in the relation of tones to one another. But every relation that has been used too often, no matter how extensively modified, must finally be regarded as exhausted; but ceases to have power to convey a thought worthy of expression. Therefore every composer is obliged to invent, to invent new things, to present new tone relations for discussion and to work out their consequences. It is for this reason that the technique of music must develop so quickly and so persistently.\textsuperscript{14}

Furthermore, Schoenberg expands it to the more holistic total process of a work. The following statement characterizes the essence of an idea as the totality of a piece:

In its most common meaning, the term idea is used as a synonym for theme, melody, phrase or motive. I myself consider the totality of a piece as the idea: the idea which its creator wanted to present. But because of the lack of better terms I am forced to define the term idea in the following manner:

Every tone which is added to a beginning tone makes the meaning of that tone doubtful. If, for instance, G follows after C, the ear may not be sure whether this expresses C major or G major, or even F major or E minor; and the addition of other tones may or may not clarify this problem. In this manner there is produced a state of unrest, of imbalance which grows throughout most of the piece, and is enforced further by similar functions of the rhythm. The method by which balance is restored seems to me the real idea of the composition. Perhaps the frequent repetitions of themes, groups, and even larger sections might be considered as attempts towards an early balance of the inherent tension.\textsuperscript{15}

\textsuperscript{13} Schoenberg, \textit{Gedanke} manuscript no. 6 (1931), \textit{The Musical Idea}, 370. This statement is similar to Richard Strauss’s idea: “What I really considered worthwhile was discovering how to compel two mutually antagonistic themes to come together.” Quoted in Ernst Krause, \textit{Richard Strauss: The Man and His Work}, tran. John Coombs (London: Collett’s, 1964), 154.


Thus, the concept of *Gedanke* encompasses all components of a piece, which work together to achieve balance. In the *Gedanke* manuscripts as well as many of his other writings, Schoenberg often used this concept of “unrest” produced by tonal conflict as the nature of a musical idea. Even though the time he started composing twelve-tone music coincided with the time he wrote the first *Gedanke* manuscript of 1923, Schoenberg continuously referred to the eighteenth- and nineteenth-century literature to illustrate tonal unrest.

In all his writings, Schoenberg went to great lengths to illustrate how the process of tonal force and resolution function as the musical idea of tonal music. This concept of “tonal problem” is further explored in the writings of Patricia Carpenter, Severine Neff, and Jack Boss, all of whom applied the theory to the analysis of tonal repertoire. 

Although both Carpenter and Neff contributed extensively to the exploration of Schoenberg’s concept of *Gedanke* as it applies to tonal compositions, they do not develop this line of thinking in compositions with twelve tones.

In his 1934 English-language *Gedanke* manuscript, Schoenberg defines an idea as a tonal relation: “An idea is the establishment of relations between things or parts between which no relation existed before that establishment. An intelligent relation can

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only be found between things or parts which ressemble [sic] one another.18 If a musical idea is a relationship between tones, the above view may include music that is not tonal. But are there any tonal processes for restoring unrest or imbalance involved in twelve-tone composition?

Schoenberg inconsistently employs the term “tonal.” While he usually uses the term to indicate the single tonal center and a practice common in the eighteenth- and nineteenth-century literature, he also extends the meaning to encompass any relationship among tones. For instance, he expresses his disapproval of the term “atonal” in the footnote to the third edition of *Harmonielehre*:

> I am a musician and have nothing to do with things atonal. The word 'atonal' could only signify something entirely inconsistent with the nature of tone. Even the word 'tonal' is incorrectly used if it is intended in an exclusive rather than inclusive sense. It can be valid only in the following sense: Everything implied by a series of tones (*Tonreihe*) constitutes tonality, whether it be brought together by means of direct reference to a single fundamental or by more complicated connections... A piece of music will always have to be tonal, at least in so far as a relation has to exist from tone to tone by virtue of which the tones, placed next to or above one another, yield a perceptible continuity.19

In this study, tonal music refers to the repertoires of the eighteenth and nineteenth centuries. However, I also use the term “tonal relation” to include any relationship among tones.20

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20 Similarly, I use “tonal structure” and “tonal motion” to indicate any relationship among tones.
For composition with twelve tones, Schoenberg proposes a new way of presenting the musical idea. In his 1923 essay, he addresses the challenge of finding a new means of replacing tonality in order to give coherence in a twelve-tone composition.\textsuperscript{21} In the \textit{Gedanke} manuscript of 1925, he describes the difference between tonal and twelve-tone works by denying the existence of a tonal problem in twelve-tone music:

\begin{quote}
Compositions executed tonally in every sense proceed so as to bring every occurring tone into a direct or indirect relationship to the fundamental tone, and their technique tries to express this relationship so that doubt about what the tone relates to can never last for an extended period. . . . Composition with 12 tones related only to one another . . . presupposes the knowledge of these relationships, does not perceive in them a problem still to be solved and worked out, and in this sense works with entire complexes similar to the way in which language works with comprehensive concepts whose range and meaning are assumed generally to be known.\textsuperscript{22}
\end{quote}

Here, the presupposed relationships appear to be the pitch order and intervallic content inherent in the basic set. Schoenberg seems to be suggesting that the use of the basic set guarantees coherence, but he does not mention the effect of compositional decisions upon the abstract row form.

In the later essay of 1941, Schoenberg epitomizes his idea of totality as the notion of a multi-dimensional presentation of the idea:

\begin{quote}
THE TWO-OR-MORE-DIMENSIONAL SPACE IN WHICH MUSICAL IDEAS ARE PRESENTED IS A UNIT. Though the elements of these ideas appear separate and independent to the eye and the ear, they reveal their true meaning only through their co-operation, even as no single word alone can express a thought without relation to other words. . . . A musical idea, accordingly, though consisting of melody, rhythm, and harmony, is neither the one nor the other alone, but all three together. The elements of a musical idea are partly incorporated in
\end{quote}


\textsuperscript{22} Schoenberg, \textit{The Musical Idea}, 395.
the horizontal plane as successive sounds, and partly in the vertical plane as simultaneous sounds.23

Through the concept of totality in multiple dimensions, Schoenberg articulated a link between twelve-tone and tonal compositions, according to which both exhibit a reciprocal relationship between melody and harmony. At the same time, in the Gedanke manuscript of 1925, he identified a difference in that twelve-tone music lacks resolution of a tonal problem.

Contrary to the extensive discussion on tonal force or problem through the numerous examples from the eighteenth- and nineteenth-century literature, Schoenberg gave significantly limited information on composition with twelve tones.24 He focused primarily on the fundamental theory and possibility of the method, but never mentioned how the compositional choices affect the properties of the row and forge the idea of a composition or how a sense of unrest can be created through parameters other than tonal force. In fact, Schoenberg finds another means of creating unrest in a motivic process: “We know that in the motive there must be present a certain unrest that will give rise to further motion. This unrest is produced by the combination of partly dissimilar components. Just such impelling unrest will arise when larger forms are assembled from components that are only partly similar.”25

This motivic process, which is the basis for the technique of developing variation, is certainly applicable to twelve-tone composition. Although tonal tension as in

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23 Schoenberg, “Composition with Twelve Tones (1),” (1941), in Style and Idea, 221.

24 The most extensive discussion is his radio talks in 1931 and 1932 on his Variations for Orchestra, Op. 31.

eighteenth- and nineteenth-century literature no longer functions as the primary
teleological drive in twelve-tone repertoire, the tonal relationships found in his Op. 34 are
formed contextually through non-pitch parameters such as register, dynamics, and
rhythm. In this study, I propose that the effect of unrest can be produced and then
balance restored by a means other than tonality. In Op. 34, the return of referential
pitches in their original registers functions as a recapitulatory process restoring the
balance of the piece. Thus, in addition to the mere conceptual reprise of P-0, contextual
emphasis of certain pitches contributes to a sense of departure and return (see Figure 2.1).

In addition to the purely musical idea (musikalische Gedanke), another
interpretation of Gedanke is rooted in the spiritual and metaphysical realm. In his
writings, Schoenberg often uses religious and supernatural metaphors to explain his
compositional process. For instance, he writes, “A creator has a vision of something
which has not existed before this vision. And a creator has the power to bring his vision
to life, the power to realize it.”26 Elsewhere, he states: “I am convinced that in the works
of the great masters many miracles can be discovered, the extreme profundity and
prophetic foresight of which seem superhuman.”27

26 Schoenberg, “Composition with Twelve Tones (1),” (1941), in Style and Idea, 215.

Carl Dahlhaus refers to this aspect of Schoenberg’s writing as his “Aesthetic Theology,” meaning there is a mystical quality that cannot be expressed verbally. In a series of articles, John Covach expands on Dahlhaus’s idea by investigating other sources of influence on Schoenberg’s concept of the occult. As shown in Figure 2.2, Covach perceives three major influences on Schoenberg’s concept of Gedanke.

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28 Dahlhaus, “Schoenberg’s Aesthetic Theology,” in Schoenberg and the New Music, 81-93.

Although there are epistemological differences among the ideas presented by the people shown in Figure 2.2, they all believed in a higher truth or spiritual world beyond our physical world. Plato thought that ultimate reality is spiritual in nature and that there is a prior idea or form for every material object. Kant distinguished between noumenal and phenomenal and assumed that the spiritual “thing-in-itself” does exist. Schopenhauer continued Kantian tradition by referring to “thing-in-itself” as “Will” and representation, which is our perceptual world. Although Kant denied our ability to access the spiritual world, Schopenhauer claimed that only music can express the innermost truth of the world.
Goethe felt Bach’s fugues symbolize “a possible world prior to the creation of the real world.” He believed that a physical object and its idea exist in a unified state that is perceivable through *geistige Auge*. Goethe’s scientific writings were disseminated to *fin-de-siècle* Vienna through editions by a Viennese scientist, Rudolf Steiner, who was devoted to a science of the spirit, which he named Anthroposophy. Covach assumes that Steiner, who had an influence on Kandinsky’s occult, may have been known by Schoenberg.

The Swedish scientist and theologian Emanuel Swedenborg claimed that he had a psychic ability that enabled him to communicate with angels. Because Kant believed that we cannot access the spiritual world, he thought that Swedenborg was insane and should be placed in an institution. Schoenberg characterizes the simultaneous linear and vertical presentation of a serial idea as related to Swedenborg’s heaven, in which “there is no absolute down, no right or left, forward or backward.” Thus, in this multi-dimensional space, the motive can appear in both horizontal and vertical dimensions of the work.

Schoenberg knew Swedenborg through the French writer Honoré de Balzac who had adopted Swedenborg’s theology to his novels. He was actually planning to compose a large-scale work based on Balzac’s “Seraphita” around 1914, to which a Scherzo sketch and the unfinished last movement *Die Jakobsleiter* belong. In the 1840s, Balzac also

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32 Schoenberg, “Composition with Twelve Tones (1),” (1941), in *Style and Idea*, 221.
wrote “Gambara,” a story about a composer, who heard the voice of an angel and composed extremely dissonant music that nobody understood. The story certainly reminds us of Schoenberg.33

Schoenberg seems to equate the concept of religious vision or inspiration with the Gedanke of a piece: “A composer . . . should conceive a composition as a totality, in one single act of inspiration.”34 He uses the metaphor of living being to describe this wholeness: “For the work of art, like every living thing, is conceived as a whole — just like a child, whose arm or leg is not conceived separately. The inspiration is not the theme, but the whole work.”35 He also distinguishes between the conception of Gedanke and its presentation: “Alas, it is one thing to envision in a creative instant of inspiration and it is another thing to materialize one’s vision by painstakingly connecting details until they fuse into a kind of organism.”36

Thus, Schoenberg’s concept of Gedanke is spiritual in a sense, and in order to communicate the abstract idea conceived through epiphanic experience, Gedanke must be presented in a musical work with dimensions of time and space through logic and coherence. In this sense, his perspective of Gedanke binds both the physical and the metaphysical in nature. This conflicting duality is also found in his notion of comprehensibility.

36 Schoenberg, “Composition with Twelve Tones (1),” (1941), in Style and Idea, 215.
In the present study, I interpret *Gedanke* as a realization of *Grundgestalt*, which is presented at the outset of a musical composition. Therefore, the concept of *Gedanke* contains the process of developing the basic idea (*Grundgestalt*), establishing a kind of musical discourse with the teleological progression.

**Comprehensibility**

An artist must present a musical idea in a comprehensible manner in order that the listener can perceive both the parts and the whole. Schoenberg’s notion of comprehensibility is based on aural perception:

The laws of comprehensibility must be understood with especial precision and strictness because of the difficulties inherent in music. Since music is intended (primarily) for listening (and only secondarily for reading) and through its tempo so determines the course of ideas and problems that a protracted lingering over a misunderstood idea becomes impossible (as it is not, for example, to a reader of a novel or viewer of a picture or a sculpture), every idea must be presented so that the listener’s *power of comprehension* can follow it.37

Coherence facilitates the listener’s comprehensibility, and it is based on repetition of musical material: “In general, music is always hard (not even relatively hard) to understand – unless it is made easier by repetition of as many minute, small, medium or large sections as possible.”38 Comprehensibility also depends on one’s memory: “One can comprehend only what one can keep in mind. Man's mental limitations prevent him from grasping anything which is too extended. Thus appropriate subdivision facilitates

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understanding and determines the form.”  

Schoenberg further acknowledges the limited ability of the human ear:

> When tones follow one another too quickly, the ear will grasp them as sounding simultaneously (glissando, arpeggio). If they follow each other too slowly, the ear grasps the element of change through three or four intervening notes at most but in the process will have lost the earlier coherence. It can therefore be stated further that the effect of coherence is limited in both directions with regard to time.  

With this statement, he is more focused on the foreground, rather than long-term hearing. However, Schoenberg seems to have an ambivalent idea toward the degree of comprehensibility.

Despite the artist’s responsibility of presenting an idea in a comprehensible manner, Schoenberg also implies subconscious understanding, which is possible for the chosen audience: “The limits of comprehensibility are not the limits of coherence, which can be present even where comprehensibility has ceased. For there are connections inaccessible to consciousness. Such connections possibly have an effect on more experienced or trained [individuals].”

With this perspective, he values a hidden relationship between musical statements as he claims for his first *Kammersymphonie*, Op. 9. As shown in Figure 2.3, Schoenberg illustrates that the head motive of the second principal theme (b) yields the

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42 Schoenberg, “Composition with Twelve Tones (1),” (1941), in *Style and Idea*, 222-223.
inverted form of the same unordered pitch intervals \((-6, +2, +2, -3)^{43}\) with the interval succession derived from the “true principal tones” of the first theme (a). He claims that this relationship is a result of a subconscious act, that he had not realized until twenty years later. Here he does not give any criteria for distinguishing between the principal and non-principal tones. He neither discusses the harmonic background established by the accompaniment nor includes it in the excerpt. Even though it is difficult to perceive B4\(^{44}\) of the first theme (m. 12) as a structural tone due to its shorter durational value, the harmonic background of an E major triad justifies it as the “true principal tone,” embellished by the upper and lower neighbors A\(^#\)4 and C5. Essentially, both of the themes outline E major and F minor triads respectively, in that the third tones F\(^#\) (m. 11) and Bb (m. 32) are passing tones.

Figure 2.3. Connection between the first and second themes of *Kammersymphonie*, Op. 9\(^{45}\)

\[\text{Figure 2.3. Connection between the first and second themes of *Kammersymphonie*, Op. 9.}\]

\[\text{Figure 2.3. Connection between the first and second themes of *Kammersymphonie*, Op. 9.}\]

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\(^{43}\) Schoenberg uses plus and minus signs to indicate major and minor intervals, respectively.

\(^{44}\) My registral assignment designates middle C as C4.

\(^{45}\) Abridged reproduction of Schoenberg’s Ex. 3 with measure numbers added, in “Composition with Twelve Tones (1),” (1941), in *Style and Idea*, 222.
Although Schoenberg never really emphasizes the middleground and background structure of music as Schenker does, the above example indicates that relationships beneath the surface level have to be examined for access to the spiritual essence of his musikalische Gedanke. When he describes the musical space of twelve-tone music as Swedenborg’s heaven (described in Balzac’s Séraphita), Schoenberg seems to suggest spiritual and metaphysical hearing in order to comprehend his idea: “The unity of musical space demands an absolute and unitary perception.”

Schoenberg not only stresses the composer’s metaphysical and superhuman aspects but also the listener’s ability to hear a complex web of polyphonic texture and to comprehend the idea of the work. His esoteric attitude toward art permits only a chosen few people to understand his music. Schoenberg declares that no artist should compromise to please a mass audience. The audiences of art-music, Schoenberg claims, are mature enough to be offended by repetition of what can be understood at one single hearing: “[A]n alert and well-trained mind will demand to be told the more remote matters, the more remote consequences of the simple matters that he has already comprehended. An alert and well-trained mind refuses to listen to baby-talk and requests strongly to be spoken to in a brief and straight-forward language.”

A two-step process is required to obtain the totality of musikalische Gedanke, and only a few people can perceive the whole from the parts:

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46 Schoenberg, “Composition with Twelve Tones (1),” (1941), in Style and Idea, 223.

[O]ur way of taking in music proves to be, for the most part, the comprehension of parts, and only a very precise knowledge of the whole, and of all its parts and their functions, enables a particular few among us to comprehend a totality. The conception of the maker, however, proceeds from the whole. He creates from a vision of the whole in which parts function in a specific way, move, change – in short, live.  

Thus, one needs an ability to reassemble the parts so that the whole can be perceived as it was conceived by the composer. Neff comments on two degrees of comprehensibility in Schoenberg’s mind:

Schoenberg uses different words to describe such understanding of a work through intuitive contemplation. Comprehensibility (Fasslichkeit) emphasizes the conditions of coherence grasped during the temporal unfolding of a piece: it is "to analyse quickly," to apprehend "in the small amount of time granted us by the flow of the events, . . . recognize . . . figures . . . the way they hang together, as well as their meaning." Understanding (Verstehen) is used to describe the same process out of time, the reconsideration of the imagined work as an organic form in all its manifestations.

Timothy Jackson advocates profound hearing based on the long-range linear voice-leading: “‘hearing Schoenberg’ entails . . . a deeper kind of musical perception: hearing voice-leading tissues beneath the surface of the music and structural connections over immediate and less immediate spans (‘Fernhören,’ in Wilhelm Furtwängler’s term) and, from this perception, intuiting the compositional idea.” This sort of intuitive hearing can be necessary to comprehend Schoenberg’s Gedanke, which is spiritual in nature. As Goethe’s notion of “geistiges Auge,” we have to apply our intuitive power such as

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“geistiges Ohr” or “geistiges Hören” to hear what Schoenberg heard and challenged listeners to hear.

On a surface level, Schoenberg’s music is very comprehensible, with its saturation of referential motives. He compensates for a lack of tonality with a motivic coherence. I call this comprehensible hearing. On the other hand, there is another, more intuitive hearing of linear connections beneath the immediate surface. The present study attempts to uncover the hidden connection between the foreground and background voice leading and other features, which can be construed as a spiritual or subconscious manifestation of Schoenberg’s Gedanke.

Grundgestalt

Schoenberg declared, “Whatever happens in a piece of music is nothing but the endless reshaping of a basic shape.”\(^5\) If Gedanke encompasses the total process of a composition, the basic shape (Grundgestalt) serves as its germinal source and is presented at the outset of a piece. Nevertheless, the distinction between the two terms may not be so precise in Schoenberg’s mind. Alexander Goehr understands the spiritual nature of Gedanke in contrast to Grundgestalt, which refers more to the actual musical materials, and he suspects that even Schoenberg mixes these terms: “Schoenberg seems to confuse his absolute, almost transcendental concept of the ‘Idea’ with his concepts of theme, Grundgestalt and twelve-tone row.”\(^5\) For instance, Schoenberg sometimes

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designates the components of a work, such as the first and second themes as ideas.\textsuperscript{53} In *Fundamentals of Musical Composition*, Schoenberg refrains from using the terms *Grundgestalt* or *Gedanke*, using instead common terms such as motive and theme to identify a progenitor and idea of a piece. He seems to avoid rather abstract and philosophical concepts in this textbook for beginning students.

In his theoretical writings, Schoenberg’s definition of *Grundgestalt* appears to be vague, because of his inconsistent and interchangeable usage of several terms: motive, basic motive, shape (*Gestalt*), and basic shape (*Grundgestalt*), to indicate smaller musical components. Although Schoenberg defines that “A *Gestalt* usually consists of more than one statement of the motive,”\textsuperscript{54} he often regards both the basic motive and the basic shape as the source for all the materials in a work. In *Fundamentals of Musical Composition*, he refers to the basic motive for its generative role: “Inasmuch as almost every figure within a piece reveals some relationship to it, the basic motive is often considered the ‘germ’ of the idea.”\textsuperscript{55} At one point, he even equates the basic shape to the theme: “‘Whatever happens in a piece of music is nothing but the endless reshaping of a basic shape.’ Or, in other words, there is nothing in a piece of music but what comes from the theme . . . itself. Or, all the shapes appearing in a piece of music are *foreseen* in the theme.”\textsuperscript{56} This is understandable because the theme can be considered to be a motive-

\textsuperscript{53} See his use of the terms, the principal and subordinate ideas in Schoenberg, “Eartraining through Composition,” (1939), in *Style and Idea*, 381. See also *The Musical Idea*, 135 and 159, and *Fundamentals*, 20.


\textsuperscript{55} Schoenberg, *Fundamentals*, 8.
form derived from the basic motive, and the theme itself can function as the *Grundgestalt* of the other *Gestalt*.

Schoenberg’s student Josef Rufer, based on his class notes, explicates the distinction among these terms:

[A] *motif* is the smallest musical form, consisting of at least one interval and one rhythm. The next sized form is the *Grundgestalt* or phrase, "as a rule 2 to 3 bars long" (the number of bars depending on the tempo, among other things), and consisting of the "firm connection of one or more motifs and their more or less varied repetitions." The next sized form, the *theme*, "arises from the need to connect several shapes together" and consists of "the connection (here he expressly does not say *firm*) of the *Grundgestalt* (basic shape) with its more or less varied repetitions."\(^{57}\)

Despite Rufer’s definition, the length of *Grundgestalt* should be determined contextually according to the *Gedanke* of a particular composition.

For twelve-tone music, Schoenberg seems to regard the basic set itself as *Grundgestalt*: “With this [technique] the relationship of the 12 tones is fixed once and for all for an entire movement, indeed for an entire piece, and relationships other than those provided by the *Grundgestalt* can never occur.”\(^{58}\) Elsewhere he states:

The Method of Composing with Twelve Tones derives all configurations [elements of a work] from a basic set (*Grundgestalt*) [tone-row or note-series]. The order in this basic set and its three derivatives contrary motion [inversion], retrograde, and retrograde inversion respectively – is, like the motive [in classical music], obligatory for the whole piece. Deviation from this order of tones should normally not occur, in contrast to the treatment of the motive, where variation is indispensable.\(^{59}\)

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\(^{56}\) Schoenberg, “*Linear Counterpoint,*” (1931), in *Style and Idea*, 290.


\(^{58}\) Schoenberg, *Gedanke* manuscript no. 3 (1925), in *The Musical Idea*, 355.
Here, it is not clear whether *Grundgestalt* contains only the prescribed pitch order and intervallic content or more specific realization of the row through rhythm, register, timbre, and dynamics.

Rufer clarifies the difference between the basic shape and basic series:

the musical shape (or phrase) which is the *basis* of a work and is its “first creative thought” (to use Schoenberg’s words). Everything else is derived from this – in music of all kinds, not only twelve-note music; and it is not derived merely from the basic *series* which is contained in the basic shape, but also from *all* the elements contained in the basic shape – that is to say, those elements which, together with the series as the melodic element, give it its actual shape, i.e. rhythm, phrasing, harmony, subsidiary parts, etc.\(^{60}\)

Thus, according to the above statement, the basic shape encompasses the non-pitch domains of the row and serves as the basis for the entire composition.

It should be pointed out that, despite Schoenberg’s expression “first creative thought,” the composer’s initial idea of a work does not necessarily appear as the first event in the finished composition. Graham Phipps makes this point: “in evaluating a composition in terms of the *Grundgestalt* principle, one cannot presuppose a knowledge of the preliminary sketches nor of the creative thought processes of the composer other than those revealed in the composition itself. One must examine the developmental aspects of the music alone.”\(^{61}\) Thus, we should distinguish “the real (or realized) *Grundgestalt*,” which is the generative source for all that follows, from the composer’s first thought in the compositional process.

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\(^{60}\) Rufer, vii-viii.

Furthermore, if we equate the *Grundreihe* (basic set) to the *Grundgestalt*, problems will arise because some pieces do not present the entire basic row in order at the beginning.\textsuperscript{62} The basic set conceptually acts as the generative idea for all the materials of the whole work, but this set is not necessarily the first perceptual event, from which the piece grows in an actual temporal space.

In this study, based on Rufer’s and Phipps’s interpretation, I consider the specific compositional realization of the abstract row properties as *Grundgestalt*, which functions as the germinal cell to materialize the teleological process of *musikalische Gedanke*. This *Grundgestalt* contextually establishes a condition or tonal relation - not only the intervallic content of the row, but hierarchy implied by the specific register, partitioning, and rhythmic articulation. I am concerned to differentiate between specific pitch-class relationships and mere intervallic relationships. This approach is different from that of many other scholars, who do not recognize any hierarchy among pitch classes. To some extent, therefore, I am departing from Schoenberg’s own statement of the method, but basing my approach on the observation made in Op. 34.

In Op. 34, the first presentation of the prime row sets up a contextual relationship through partitioning, register, rhythm, and instrumentation beyond the abstract intervallic content. This relationship (*Grundgestalt*) establishes the criteria for further development that manifests the *musikalische Gedanke* of the piece.

\textsuperscript{62} Examples of this occur in the *Variations for Orchestra*, Op. 31, and the present piece, Op. 34. Graham Phipps also makes this point in “Schoenberg's *Grundgestalt* Principle,” 1-21 and 400.
Developing Variation

According to Schoenberg, every motive possesses a sense of unrest and implication of motion, which has to be resolved or realized: “A motive is something that gives rise to a motion.” Developing variation is an actual process of unfolding or realizing the implication inherent in the Grundgestalt. Schoenberg believes that coherence is based on repetition, but repetition must be varied to avoid monotony. In his essay “Criteria for the Evaluation for Music,” Schoenberg commends Brahms’s use of varied thematic repetition (developing variation) in contrast to Wagner’s unvaried and sequential thematic procedure.

Not all the motivic variations, Schoenberg says, are structurally significant:

One can distinguish two methods of varying a motive.

With the first, usually the changes virtually seem to have nothing more than an ornamental purpose; they appear in order to create variety and often disappear without a trace (seldom without the second method!!).

The second method can be termed developing variation. The changes proceed more or less directly toward the goal of allowing new ideas to arise.

Schoenberg’s definition of the motive in Models for Beginners in Composition characterizes the nature of developing variation:

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63 For thorough investigation of Schoenberg’s notion of tonal developing variation, see Walter Frisch, Brahms and the Principle of Developing Variation (Los Angeles: University of California Press, 1984), 1-18.

64 Schoenberg, Coherence, 27. He also calls this “obligations of the motif” in Models for Beginners in Composition, Syllabus, Music Examples, and Glossary, rev. ed. with corrections, ed. Leonard Stein (Los Angeles: Belmont Music, 1972), 56.

65 Schoenberg, Coherence, 37.


67 Schoenberg, Coherence, 39.
Motif is a unit which contains one or more features of interval and rhythm. Its presence is manifested in its constant use throughout a piece. Its usage consists of frequent repetitions, some of them unchanged, most of them varied. The variations of a motif produce new motif-forms, which are the material for continuations, contrasts, new segments, new themes, or even new sections within a piece. Not all the features are to be retained in a variation; but some, guaranteeing coherence, will always be present. Sometimes remotely related derivations of a motif might become independent and then be employed like a motif.68

Thus, the technique of developing variation generates the larger sections of a piece through reshaping of the Grundgestalt so that even the contrasting materials are derivatives of the basic motive. Schoenberg states “It demands that nothing be repeated without promoting the development of the music, and that can only happen by way of far-reaching variations.”69

While the process varies some features of the basic material, it also retains some features in order to assure continuity and logic. Schoenberg regards transpositions, inversions, retrogrades, diminutions and augmentations as exact repetitions “if they preserve strictly the features and note relations.”70 In Fundamentals of Musical Composition, Schoenberg lists different features that can be varied.71

All the features of rhythm, interval, harmony and contour are subject to various alterations. Frequently, several methods of variation are applied to several features simultaneously; but such changes must not produce a motive-form too foreign to the basic motive. In the course of a piece, a motive-form may be developed further through subsequent variation.72

68 Schoenberg, Models for Beginners in Composition, 56.
70 Schoenberg, Fundamentals, 9.
71 Ibid., 10.
72 Ibid., 9.
This statement also reveals that Schoenberg was concerned with the gradual logical
development of motives, which is comprehensible to the average listener.\textsuperscript{73} He further
states: “the order of motive-forms is conditioned by the requirements of
comprehensibility and musical logic.”\textsuperscript{74} It is curious that Schoenberg does not include
tonal context in the list of features despite the fact that Brahms often reinterprets tonal
(scale degree) function of a motive and theme in order to explore remote tonal regions.\textsuperscript{75}
Although Schoenberg observes the tonal diversion to the remote key of Bb minor (mm.
21-22) in the first movement of Brahms’s Op. 51, No. 1, he does not mention how the
tonal context of the motive is reinterpreted in order to modulate to Bb minor.\textsuperscript{76}

Schoenberg lists two kinds of thematic construction, the sentence and the
period.\textsuperscript{77} The sentence develops the motive immediately so that new ideas arise
continuously. In the period, the first phrase is followed by the contrasting phrase before
the development. Schoenberg regards the sentence to be a higher form than the period.
In his essay “Brahms the Progressive,” Schoenberg praises Brahms for his use of
sentence structure in that the closing segment of the phrase becomes the head motive of

\textsuperscript{73} See his essay “Heart and Brain in Music,” (1946), in \textit{Style and Idea}, 58-61, where he presents
the sketches of Op. 9 to illustrate how the final version develops the initial motive slowly in a logical and
comprehensible manner.

\textsuperscript{74} Schoenberg, \textit{Fundamentals}, 58.

\textsuperscript{75} For example, see the theme in the first movement of Brahms’s Op. 120, No. 1. Jack Boss also
points out that Schoenberg fails to mention tonal context as a variable feature. See “Schoenberg’s Op. 22

\textsuperscript{76} Schoenberg, “Brahms the Progressive,” (1947), in \textit{Style and Idea}, 402-403. See also \textit{Structural
Functions of Harmony}, 78.

\textsuperscript{77} Schoenberg, \textit{Fundamentals}, 20-25.
the ensuing phrase.\footnote{Schoenberg, “Brahms the Progressive,” (1947), in Style and Idea, 398-441.} Another good example of this Brahmsian linkage technique is the theme in the third movement of his Second Symphony cited by Walter Frisch.\footnote{Frisch, Brahms, 16. Heinrich Schenker describes this procedure as a “Knüpftechnik” [technique of linkage] in his Harmony (1906). See Harmony ed. and ann. Oswald Jonas, tran. Elisabeth Mann Borgese (Chicago: University of Chicago Press, 1954), fn. 10, 11-12.} In Fundamentals of Musical Composition, Schoenberg systematically illustrates how the initial motive can generate themes, sentences, and eventually the entire piece through the technique of developing variation in order to accommodate beginning students.

Despite his methodical presentation in a pedagogical context, Schoenberg’s motivic analyses focus mostly on consecutive interval successions. These analyses disregard perceptual units articulated by rhythmic and harmonic accents. This is reflected in Schoenberg’s illustration of how the interval of a second generates the Andante theme of Brahms’s Op. 51, No. 2.\footnote{Schoenberg, “Brahms the Progressive,” (1947), in Style and Idea, 430-431. See also Ex. 30 in Fundamentals, 8.} Dahlhaus makes a similar observation:

Schoenberg’s method of deducing all the motifs from the interval of an ascending and descending second is abstract, inasmuch as it ignores rhythm and articulation with a thoroughness which flies in the face of ordinary listening habits derived from tradition – and thus reduces the results of the analysis to a statement about merely latent processes.\footnote{Dahlhaus, “What is ‘Developing Variation’?” in Schoenberg and the New Music, 130.}

Some scholars maintain that Schoenberg’s analytical demonstration of developing variation is arbitrary, appearing to be based on the composer’s viewpoint (constructive) rather than the listener’s perceptual experience.\footnote{See John Rothgeb, review of Brahms and the Principle of Developing Variation, by Walter Frisch, Music Theory Spectrum 9 (1987): 204-15.} Schoenberg’s preoccupation in his
writings with motivic coherence over voice leading and harmony may be interpreted as self-justification in that he attempted to prove a connection between his own music and that of his predecessors.83

Besides the actual motivic and thematic generative role, developing variation can also function at a more abstract level, constructing a tonal scheme of a work. Dahlhaus observes: “Developing variation differs from thematic – motivic work above all in the higher level of abstraction which it permits and perhaps even requires.”84 Schoenberg describes that the tonal relationship (F major and A major) between the first and second themes in Brahms’s Third Symphony is an expansion of the principal motive F-Ab in the bass (mm. 3-4).85 In a similar manner, a chromatic inflection at the outset (tonal problem) is often realized as an extended tonal region in the later part of a piece as seen in Schoenberg’s illustration of how the mysterious E in the outset of Brahms’s Op. 60 serves as a tonal problem and is realized and resolved in the recapitulation.86 Dahlhaus states that the level of abstraction has to be determined according to the totality of a particular work.87

As with other compositional concepts, most of Schoenberg’s musical examples for developing variation are tonal. The only exceptions are his radio talks on his

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84 Dahlhaus, “What is ‘Developing Variation’?” 130.
87 Dahlhaus, “What is ‘Developing Variation’?” 132.
Variations for Orchestra, Op. 31, and Four Orchestral Songs, Op. 22, which were broadcast in 1931 and 1932, respectively. In the lecture on Op. 31, Schoenberg claims a connection between this twelve-tone piece and the tonal tradition based on the technique of developing variation. However, the analysis resorts to a mere character description of each variation and an identification of the original theme that appears as Hauptstimme or Nebenstimme in each variation, and he barely reveals relationships between the serial structure and the variation technique.

The lecture on Op. 22 also focuses on the development of the basic motive. For the first song, “Seraphita,” Schoenberg shows how the basic melodic intervals of a minor second and a minor third generate other figures through octave transfer, reordering of pitches, and interval expansion. Based on Schoenberg’s general remarks, Jack Boss demonstrates how the concept of developing variation is applied to Schoenberg’s atonal literature. Boss systematically categorizes motive-forms of the first song “Seraphita” according to the remoteness of the derivatives from the motive source, and elucidates the formal structure through the gradual increase in remoteness in the relationship with the text setting. His motivic units are strictly foreground and they are based on the overlapped consecutive ordered pitch intervals. Boss characterizes Schoenberg’s atonal motive as treating abstract interval successions rather than actual pitches. In my study, the first presentation of the basic intervals are pitch specific, thus the motivic intervals

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with the specific pitches have a structural priority over other motive-forms with transposed pitches. I apply the method that Schoenberg used in analyses of tonal music in a serial work

Ethan Haimo’s study incorporates all the features of the motive that can be varied including actual pitch content.\textsuperscript{90} He interprets Schoenberg’s twelve-tone method as a means to accomplish the idea of developing variation. Haimo asserts that the reconciliation between serial ordering and developing variation is one characteristic of Schoenberg’s mature twelve-tone techniques. He demonstrates this idea in the introduction of Moses and Aron by showing that the different row forms facilitate the variation of the basic idea. While his analysis essentially deals with how the foreground materials are continuously generated through the technique of developing variation, he does not explore any large-scale voice-leading connections. My study uses Haimo’s analytical method as a tool for examining the surface structure of Op. 34 and expands it to the enlarged realization of the foreground event.

In general, Schoenberg’s view of motivic variations is limited to the moment-to-moment musical surface. As we found in the example of the hidden relation between the two themes in Op. 9, he also honors coherence at the deeper structure or higher musical dimensions: “All that happens at any point of this musical space has more than a local effect. It functions not only in its own plane, but also in all other directions and planes,

\textsuperscript{90} Ethan Haimo, “Developing Variation and Schoenberg’s Serial Music,” Music Analysis 16/3 (October 1997): 349-365.
and is not without influence even at remote points.91 Developing variation thus can perform on strands beneath the surface, lying across the serial boundary.

Even though the structural levels as they occur in tonal compositions cannot be detected in Op. 34, Schenker’s concept of “concealed motivic repetition” can be applied to discover the enlarged manifestation of Grundgestalt. As discussed under comprehensibility, I believe that Schoenberg was aware of the deeper structure of a work. Therefore, Schoenberg’s notion of a multi-dimensional presentation can be interpreted not only as two dimensions in a horizontal-vertical space, but also as three dimensions in a foreground-background space. Several examples in Schoenberg’s compositions can be shown to support his view on the far-reaching realization of the Grundgestalt in an extended musical space. For example, in the Piano Concerto, Op. 42, the row choice for each section outlines the pitch-class order of the prime row (see Figure 2.4).92 Here, the result is conceptual rather than perceptible because each row area consists of its retrograde and combinatorial pair and the first pitch of each row group is not necessarily emphasized as a structural tone.93

91 Schoenberg, “Composition with Twelve Tones (1),” (1941), in Style and Idea, 220.


93 For example, the row regions starting at mm. 86 and 117 begin with the retrograde of the first hexachord.
Figure 2.4. The prime row manifested by the first pitch of each row group

<table>
<thead>
<tr>
<th>P-0</th>
<th>E♭</th>
<th>B♭</th>
<th>D</th>
<th>F</th>
<th>E</th>
<th>C</th>
<th>F♯</th>
<th>A♭</th>
<th>C♯</th>
<th>A</th>
<th>B</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measure</td>
<td>1</td>
<td>46</td>
<td>54</td>
<td>63</td>
<td>74</td>
<td>86</td>
<td>103</td>
<td>106</td>
<td>107</td>
<td>117</td>
<td>122</td>
<td>126</td>
</tr>
<tr>
<td>Row</td>
<td>P-0</td>
<td>P-7</td>
<td>P-11</td>
<td>P-2</td>
<td>P-1</td>
<td>P-9</td>
<td>P-3</td>
<td>P-5</td>
<td>P-10</td>
<td>P-6</td>
<td>P-8</td>
<td>P-4</td>
</tr>
</tbody>
</table>

In the same piece, the main theme (prime row) is extracted from the non-adjacent pitches (primarily hexachordal boundary tones – ordinals 1, 6, 7, and 12) of the non-prime rows (see Figure 2.5).\(^94\)

Figure 2.5. *Piano Concerto*, Op. 42, mm. 133-141

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>P-0</td>
<td>E♭</td>
<td>B♭</td>
<td>D</td>
<td>F</td>
<td>E</td>
<td>C</td>
<td>F♯</td>
<td>A♭</td>
<td>C♯</td>
<td>A</td>
<td>B</td>
<td>C♯</td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>Ordinal</td>
<td>6</td>
<td>12</td>
<td>7</td>
<td>1</td>
<td>12</td>
<td>1</td>
<td>6</td>
<td>2</td>
<td>12</td>
<td>6</td>
<td>1</td>
<td>12</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Row</td>
<td>P-3</td>
<td>I-2</td>
<td>P-9</td>
<td>I-0</td>
<td>P-1</td>
<td>I-10</td>
<td>P-8</td>
<td>P-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A similar procedure is found in the *Variations for Orchestra*, Op. 31. In the fifth variation (mm. 178-201), the double bass projects the original theme (P-0) in the foreground by extracting one pitch-class from the twelve different non-prime forms (shown in the lower staff of Figure 2.6). The same procedure with various instruments unfolds RI-9 (mm. 183-189), R-0 (mm. 190-194), and I-9 (mm. 195-201) as well. The *Hauptstimme* (shown in the upper staff of Figure 2.6) consists of the chromatic tetrachord (0123), recalling the BACH motive. These tetrachords are formed through the non-

\(^{94}\) See Mead, “Large-Scale Strategy,” 128-130.
adjacent dyad of the first hexachord and the adjacent dyad of the second hexachord. For example, the first tetrachord in m. 179 is formed by ordinals 2-4 and 7-8 of P-3. More importantly, the first pitch of each tetrachord unfolds I-9 (mm. 179-189) in the less immediate musical surface with interruptions. Nonetheless, these examples do not suggest any hierarchy existing between the structural levels; rather they validate Schoenberg’s way of projecting a foreground motive in a deeper dimension as an enlarged form.

Based on Haimo’s assertion that Schoenberg reconciled serial structure and developing variation, I focus on how the row properties facilitate the idea of developing variation. This includes the enlarged realization of the foreground event based on Schoenberg’s concept of musical space. As in Haimo’s analysis, I am concerned not only with their intervallic relationship, but also with the specific pitch-classes. Therefore, the initial motives, which are obtained through the partition of the prime row, are pitch-class specific. Because all the pitch-classes return for every presentation of the row, the initial pitch motives are placed in a different context. Coherence is achieved through not only the use of the basic set and its transformations but also by the specific pitch-classes in the collections derived from both adjacent and non-adjacent ordinals, which are brought out in the presentation of different row forms through registral, timbral, and rhythmic partitions.

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Figure 2.6. *Variations for Orchestra*, Op. 31, mm. 178-189 (selected parts only)
Aspects of Program Music

The extra-musical and programmatic aspects play an indispensable role in Schoenberg’s output throughout his creative career, as seen from the early works of Lieder and tone poems influenced by Richard Strauss to the atonal and twelve-tone compositions with extra-musical elements. For his atonal repertoires, Schoenberg used texts and programs in order to build a coherent large-scale composition without the aid of the constructive functions of tonality and harmony:

A little later I discovered how to construct larger forms by following a text or poem. The differences in size and shape of its parts and the change in character and mood were mirrored in the shape and size of composition, in its dynamics and tempo, figuration and accentuation, instrumentation and orchestration. Thus the parts were differentiated as clearly as they had formerly been by tonal and structural functions of harmony.

Then, the twelve-tone method finally freed him from reliance on text and a program for the formal structure: “it was only through composition with 12 tones that the formal possibilities of an absolute music were unleashed and broke through, freed from all admixture of extra-musical elements.”

Despite the compositional freedom of the new technique, programmatic elements continued to play an integral part in Schoenberg’s twelve-tone works, in that many are related to his own religious and political ideas.

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99 Examples are Moses and Aron, A Survivor from Warsaw, Dreimal Tausend Jahre, and in a sense Piano Concerto, Op. 42.
With the solid constructive means of a new method, Schoenberg had learned to conflate the aspects of emotional and constructive qualities of music.

Dahlhaus characterizes Schoenberg’s musical poetics as a mixture of both expressiveness and formalism:

Schoenberg’s musical poetics can be understood as the attempt to mediate between postulates which the unfortunate party strife in music aesthetics between formalism and the theory of the affects projects as opposites, that is, between the demand for convincing expressivity at every moment on the one hand and for total interrelatedness of the musical events on the other.¹⁰⁰

This idea is reflected in Schoenberg’s own writing: “It is not the heart alone which creates all that is beautiful, emotional, pathetic, affectionate, and charming; nor is it the brain alone which is able to produce the well-constructed, the soundly organized, the logical, and the complicated. First, everything of supreme value in art must show heart as well as brain.”¹⁰¹

Despite his numerous programmatic compositions and his belief in the expressive power of music, he hardly expounds on the relationship between the musical structure and the emotional and programmatic contents of music. Rather, most of his writings primarily deal with the means of constructing the organically comprehensible whole through the concepts of Grundgestalt and developing variation. This is especially true for twelve-tone music, as in his writing “Composition with Twelve Tones,” in which Schoenberg does not touch upon the emotional aspect of twelve-tone music. However, some of his other writings refer to the emotional character of music in general.¹⁰²


Schoenberg’s 1912 essay “The Relationship to the Text” epitomizes his aesthetics of program music, which is based on the nineteenth century view of absolute music found in Schopenhauer’s philosophy. In the essay, he argues that music should be judged solely by the musical content, not by how well the music depicts the content of the poem:

There are relatively few people who are capable of understanding, purely in terms of music, what music has to say. The assumption that a piece of music must summon up images of one sort or another, and that if these are absent the piece of music has not been understood or is worthless, is as widespread as only the false and banal can be.103

Schoenberg corroborates this view by his own experience of understanding the content of Schubert’s song better without knowing the poem: “I had grasped the content, the real content, perhaps even more profoundly than if I had clung to the surface of the mere thoughts expressed in words.”104 Here, “the real content” seems to resonate with the concept of musikalische Gedanke – the totality of the piece, which is presented through pure musical relationships. Furthermore, Schoenberg claims that the sound of the first words rather than their meaning motivates him to compose a comprehensible, coherent whole:105

[I]nspired by the sound of the first words of the 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 grasping them in the ecstasy of

102 For example, “Heart and Brain in Music,” (1946), 53-76; “The Relationship to the Text,” (1912), 141-45; “This is My Fault,” (1949), 145-47 in Style and Idea. See also Bailey, Programmatic Elements.


104 Ibid., 144.

105 Richard Kurth notes this idea of the mimologist, in that the sound of the word contains the essence of the word, reflecting Plato’s notion found in the Cratylus. See “Pierrot’s Cave: Representation, Reverberation, Radiance,” in Schoenberg and Words: The Modernist Years, ed. Charlotte M. Cross and Russell A. Berman, 203-241. (New York: Garland Publishing, 2000).
composing, and that only days later I thought of 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 poet 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.\footnote{Schoenberg, “The Relationship to the Text,” (1912), in Style and Idea, 144.}

Schoenberg continues with the notions of musical coherence and organicism:

Thence, it became clear to me that the work of art is like every other complete organism. It is so homogeneous in its composition that in every little detail it reveals its truest, inmost essence. When one cuts into any part of the human body, the same thing always comes out – blood. When one hears a verse of a poem, a measure of a composition, one is in a position to comprehend the whole.\footnote{Ibid.}

These statements confirm Schoenberg's belief that the whole composition is a corollary of the initial implications of Grundgestalt, including the sound of the text. Moreover, logical presentation of the musical idea facilitates the understanding of the essence of the poetic content, which lies behind the surface of the text. This aesthetics is built upon Schopenhauer’s philosophy of absolute music in the nineteenth century that only music has the ability to express the innermost essence of the world. Nevertheless, Schoenberg disagrees with Schopenhauer’s intent to translate musical phenomena into human language because Schoenberg believes that the essence is only perceptible, but not comprehensible through the logic of our language.\footnote{Ibid., 141-142.} Schoenberg concludes the essay with the statement: “When one has perceived this [higher reality], it is also easy to understand that the outward correspondence between music and text, as exhibited in declamation, tempo and dynamics, has but little to do with the inward correspondence,
and belongs to the same stage of primitive imitation of nature as the copying of a model.\textsuperscript{109}

Schoenberg maintains the same stance in the preface of his 1912 \textit{Pierrot lunaire}, in which he asks performers not to add illustrations of their own based on the meaning of the text.\textsuperscript{110} Later in the 1949 essay “This is My Fault,” however, he revises this position and denounces those contemporary composers who try not to reflect the text in music: “What nonsense! . . . Songs, operas, and oratorios would not exist if music were not added to heighten the expression of their text.”\textsuperscript{111}

Schoenberg thus opposes the total separation between musical expression and poetic content; rather, he believes that the descriptive expression conveying the programmatic meaning can function as an integral part of \textit{musikalische Gedanke}.\textsuperscript{112} Nonetheless, the essence still has to reside in the totality of \textit{musikalische Gedanke} and not in the superficial depiction and illustration of text and program. Therefore, understanding the musical idea enables us to gain access to the real content of the poem or program. The relationship between text and music mirrors Schoenberg’s recurring dialectical aesthetics of “style and idea,” in that the former is the outward appearance and the latter is the inward essence.

Dahlhaus’s statement further elucidates the composer’s aesthetics:

\begin{itemize}
\item[\textsuperscript{109}] Ibid., 145.
\item[\textsuperscript{110}] For the relationship between Plato’s notion and Schoenberg’s text setting in \textit{Pierrot lunaire}, see Kurth, “Pierrot’s Cave,” 203-241.
\item[\textsuperscript{111}] Schoenberg, “This is My Fault,” (1949), in \textit{Style and Idea}, 146.
\item[\textsuperscript{112}] For example, in \textit{A Survivor from Warsaw}, the music illustrates the text such as “like a stampede of wild horses.”
\end{itemize}
He [Schoenberg] adopted the theory of Schopenhauer and Wagner that music apprehends the essence of the world directly in sounds, whereas verbal language is a mediated, secondary form of expression. When music is linked with a text, therefore—whether a poem set to music or a programme—the music does not illustrate the text, but the text appears as a metaphor for what the music says in the ‘true language’.

Therefore, Schoenberg views the music as having its own expressive power without the aid of a text. Music has its own autonomous structure and meaning, beyond a mere illustration of the emotional content.

Because there is little information available concerning the compositional origins, especially in regard to the conception of the subtitle of Op. 34, the present study focuses on the musikalische Gedanke expressed by the musical relations. It is not certain whether or not Schoenberg had the subtitle in his mind before he started composing. It is possible that the subtitle may have been conceived after the completion of the work in order to accommodate a film scene. In fact, as Dahlhaus points out, the particular subtitle of Op. 34 recalls the musical discourse of many of Schoenberg’s non-programmatic compositions. As in many other works of Schoenberg, the musical structure and the programmatic elements of Op. 34 complement each other. Through this relationship, the listener achieves a deeper understanding of the musikalische Gedanke. This study further examines the connection between the musical structure and expressive content of the piece, and how the emotional trajectory described by the subtitle coincides with the three-part structural divisions with some features of sonata form, especially in the first two sections.

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114 Ibid., 102.
Conclusion

All the concepts discussed in this chapter are essential for an understanding of Schoenberg’s twelve-tone music, specifically Op. 34. His compositional method is derived from the tonal tradition of the eighteenth and nineteenth centuries, and it transcends the stylistic differences in each compositional period, connecting Schoenberg’s practice to the music of the great masters. The Gedanke is presented or materialized as an organic whole in a comprehensible manner through the unifying concepts of Grundgestalt and developing variation, in which the tonal relation (Grundgestalt) implied at the beginning unfolds through developing variation.

Examining a composer’s own statements to understand a work of musical art can be beneficial in some cases as well as quite misleading in others. Schoenberg is one of those composers whose commentaries often contradict each other. Despite these inconsistent explanations of his music and aesthetic concepts, the compositional practice evident in his music demonstrates consistency. Therefore, his own commentaries may only be considered as secondary material. The primary source must be the music itself.
CHAPTER 3

UNDERSTANDING OF SCHOENBERG’S TWELVE-TONE METHOD IN SCHOLARSHIP

Schoenberg’s explanations of *musikalische Gedanke* are inconclusive, containing many contradictions and lacking clear definition. Subsequently, however, composers and theorists have contributed a great deal to our understanding of Schoenberg’s concept by elucidating the method’s technical aspects. The works of these writers have been beneficial for a fuller understanding of the *musikalische Gedanke*; much of this thinking is also valuable for a fuller understanding of Op. 34. In this chapter, current scholarship on Schoenberg’s twelve-tone works in general is summarized and my own methodology is presented.¹

In both Schoenberg’s own writings and current scholarship, his concept of *Gedanke* is loosely defined, especially in the context of his twelve-tone literature. John Covach observes that the commentators on Schoenberg’s compositional philosophy, such as Patricia Carpenter and Severine Neff, do not apply his aesthetics to his twelve-tone works, while twelve-tone scholars such as Milton Babbitt, Stephen Peles, and Andrew Mead, do not incorporate Schoenberg’s own aesthetics in their analysis.² Hence, there is a need to bring together Schoenberg’s compositional philosophy and its application to his own twelve-tone works.


Current scholarship on Schoenberg’s twelve-tone music can be summarized in terms of “method vs. system.” The composer reacted to Richard Hill’s systematic row analysis of Schoenberg’s twelve-tone works by expressing that the composition with twelve tones is not a system but a method:

I did not call it a ‘system’ but a ‘method’, and considered it as a tool of composition, but not as a theory. And therefore I concluded my explanation with the sentence: ‘You use the row and compose as you had done it previously.’ That means: ‘Use the same kind of form or expression, the same themes, melodies, sounds, rhythms as you used before.’

Schoenberg further stresses this point through a comparison of science and art:

While science has to demonstrate its problems perfectly and completely without any omission and from every point of view, and has therefore to proceed systematically, logically and consequently, art presents only a certain number of interesting cases and strives for perfection by the manner of presentation. Therefore art is more inclined to choose its cases according to variety rather than to system, according to structural qualifications rather than to consequence.

In his essay "Composition with Twelve Tones (1)," Schoenberg declares that the twelve-tone method is an extension of tonal practice in which dissonance is emancipated. As discussed in the previous chapter, the essay focuses primarily on a technical aspect of the method: how a single set can be compositionally realized in different characters and textures through the use of rhythm, counterpoint, instrumentation, and grouping of pitches (partitioning). Although Schoenberg repeatedly emphasizes the importance of the logical presentation of a musical idea over the

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5 Ibid., 214. See also The Musical Idea, 115-127.

6 Schoenberg, "Composition with Twelve Tones (1)," (1941), in Style and Idea, 216-218.
technique, he does not reveal the musical idea behind his compositional decisions (realization of the set). He stresses the equal weight among pitches, which excludes a sense of tonal hierarchy, by demonstrating how to avoid an interval of an octave. In “Addendum” (1946) at the end of the essay "Composition with Twelve Tones (1)," Schoenberg still maintains the validity of the method as a free atonal style without tonal hierarchy, despite the fact that his later twelve-tone works composed in the United States often contain octave doubling and tertian harmony. On the one hand, Schoenberg tries to defend his new method of composition by stressing its historical connection to tonal tradition and its unifying power which replaces tonality; on the other hand, for him the essence of art, which is *musikalische Gedanke*, resides beyond mere technical aspects, and transcends the stylistic differences. This is reflected in Schoenberg’s reaction to Rudolf Kolisch’s row analysis of his Third String Quartet:

> But this isn’t where the aesthetic qualities reveal themselves, or, if so, only incidentally. I can’t utter too many warnings against over-rating these analyses, since after all they only lead to what I have always been dead against: seeing how it is done; whereas I have always helped people to see: what it is! . . . My works are twelve-note compositions, not twelve-note compositions: in this respect people go on confusing me with Hauer, to whom composition is only of secondary importance.

Despite the fact that Schoenberg repeatedly implies that the use of a basic set guarantees logic and coherence, I believe that there is a deeper musical logic underlying the surface row structure. After all, the method is only a means to achieve a comprehensible composition: “In my workshop language, when I talked to myself, I

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7 Schoenberg, "Addendum," (1946), in *Style and Idea*, 244-245.


9 For example, see Schoenberg, *The Musical Idea*, 395.
called this procedure 'working with tones of the motif'. This was obviously an exercise indispensable for the acquisition of a technique to conquer the obstacles which a set of twelve tones opposes to a free production of fluent writing.\textsuperscript{10}

In the twelve-tone essays, Schoenberg demonstrates only the elementary technical aspects of the method instead of discussing the manifestation of \textit{Gedanke}, which lies beneath the serial surface. Schoenberg’s insufficient and misleading explanations have created much confusion and led to misconceptions regarding how the method works.

Earlier literature on the subject can be seen in light of a controversy between those who have questioned the legitimacy of the method and those who have defended Schoenberg against his detractors.\textsuperscript{11} The major criticism of the method was that the harmonic use of the row produces intervals that are not in the basic set. For example, Peter Stadlen attacks this problem by saying that the vertical presentation and the reordering of the row destroy the identity of the series,\textsuperscript{12} while George Perle defends Schoenberg by saying, “The relevance of the composer’s serial activity to his composition is determined by the evidence of the work itself and not by the consistency and internal logic of his or anyone else's verbal formulations about the nature of this activity.”\textsuperscript{13} As is

\textsuperscript{10} Schoenberg, “Composition with Twelve Tones (2),” (c, 1948), in \textit{Style and Idea}, 248.


\textsuperscript{12} Stadlen, 20-21.

\textsuperscript{13} Perle, “Theory and Practice in Twelve-Tone Music,” 63.
evident in Schoenberg’s writings and compositions, the row and its subsets can appear in any dimension of musical surface as in Swedenborg’s heaven.\textsuperscript{14} For Schoenberg, the row is not a system to enforce, but simply the method to manifest the musical idea: “One has to follow the basic set; but, nevertheless, one composes as freely as before.”\textsuperscript{15} The Stadlen-Perle polemic reflects the two different modes of understanding the twelve-tone method.

Schoenberg’s viewpoint of historical derivation was reinforced by René Leibowitz, who traced how each of Schoenberg’s style periods evolved historically from Western polyphonic music.\textsuperscript{16} In his unpublished treatise on twelve-tone composition, Leibowitz illustrated similarities between the serial structure and the tonal form found in Schoenberg’s Piano Suite, Op. 25 and Klavierstücke, Op. 33b.\textsuperscript{17}

In a similar fashion, Schoenberg’s student Josef Rufer strengthened the aspect of “method” by articulating the historical continuity founded on the traditional concepts of Grundgestalt and developing variation.\textsuperscript{18} As in Schoenberg’s essay, Rufer illustrated various ways of realizing the basic set found in Schoenberg’s works. He often used terms from tonal practice to emphasize the historical connection to tradition. For example, the perfect fifth relationship between the first tones of the combinatorially related rows was

\begin{itemize}
  \item \textsuperscript{14} See Schoenberg, "Composition with Twelve Tones (1)," (1941), in Style and Idea, 220.
  \item \textsuperscript{15} Ibid., 224.
  \item \textsuperscript{18} Rufer, Composition with Twelve Notes Related Only to One Another.
\end{itemize}
seen as a tie to an acoustical law of nature rather than as the significant row property (invariant hexachordal content). Rufer also equated transpositions of the row with modulation in tonal music. Despite Rufer’s claim, I believe that the operational property of the row does not necessarily follow the syntax of tonal music. Rather the way in which Schoenberg manipulates the row can be understood in terms of traditional tonal thinking.

Although both Leibowitz and Rufer highlight Schoenberg’s understanding of serial method in the context of tonal tradition, their analyses are limited to the identification of row forms and description of the form through tonal idioms, without touching on the structural possibilities of the method or the relationship between the basic set and the large-scale organization of a musical composition. This situation was probably quite harmful to a proper understanding of the method.

A new generation of serial composers led by Pierre Boulez and Milton Babbitt attacked Schoenberg’s reliance on tonal idioms, and advocated a more systematic understanding of the method. For instance, Boulez argued that tonal forms and gestures were not historically related to the twelve-tone pitch organization. Babbitt was disappointed with Schoenberg’s explanation of the method and maintained that Schoenberg did not realize all of the possibilities of the twelve-tone system.

19 Ibid., 97.
20 Ibid., 87.
22 See Milton Babbitt, review of Le Système dodécaphonique, by Schoenberg, Journal of the American Musicological Society 3/3 (Fall 1950): 266. See also his review of Schoenberg et son école and
In the 1950s, Babbitt initiated systematic studies of serial possibilities of row formation, especially combinatorial relationships.\textsuperscript{23} Aspects of Babbitt were taken up by David Lewin, Martha Hyde, Andrew Mead, and other American scholars such as Brian Alegant and Richard Kurth.\textsuperscript{24} This group of scholars views Schoenberg’s twelve-tone music as an autonomous system that differs from the traditional tonal system.

In a series of seminal articles, Babbitt has laid a theoretical and compositional foundation for an extension of the system beyond Schoenberg’s practice by presenting the operational potentials of the row construction. In “Some Aspects of Twelve-Tone Composition,” he promotes the possibilities of the system and explicates the nature of the semi-combinatorial principle that is latent in Schoenberg’s mature twelve-tone works. He also proposes further extension to the possibilities of all-combinatorial rows. In “Twelve-Tone Invariants as Compositional Determinants,” he discusses how dyadic invariants arise from the operations of transposition and inversion. Even though Babbitt states that the structural function of the invariants depends upon how they are presented


in an actual composition through rhythm, dynamic, register, phrasing, and timbre,\textsuperscript{25} he rarely illustrates their use in musical examples. In his “Set Structure as Compositional Determinant,” Babbitt shows how the row properties (invariants) influence the formal, registral, and rhythmic structures of the third movement of Schoenberg’s Fourth String Quartet, Op. 37. His studies stress the observation that the twelve-tone system is an autonomous system and that it controls all aspects of music (non-pitch parameters). Bryan Simms states that Babbitt’s analytical approach “looks for an explanation of musical forms within the elements and operations of the system itself, rather than within traditional music.”\textsuperscript{26} Babbitt’s approach focuses on the pre-established meaning of the system instead of the realization of the row in actual composition. For him, music seems to be a means to support the system of twelve tones rather than a means to manifest the musical idea supported by the method of twelve tones.

Babbitt’s mathematically based approach has been further developed by David Lewin and David Beach. Lewin explores the segmental association by presenting a systematic way of finding the ordered invariance between the prime row and its transformations.\textsuperscript{27} Beach’s article provides a systematic explanation of mapping the invariant segments of a twelve-tone set and its various transformations.\textsuperscript{28}

\textsuperscript{25} Babbitt, “Twelve-Tone Invariants,” 253-254.


This aspect of “twelve-tone system” has been further promoted by Martha Hyde, who views the basic set as a collection of intervals rather than pitch-classes.\(^{29}\) Hyde aims to justify Schoenberg’s statement that the basic set regulates both melody and harmony of the work. According to Hyde, Schoenberg’s concept of harmony encompasses a harmonic entity unfolding either vertically or horizontally or in both ways. “The primary harmonic dimension” is derived from the adjacent pitches of the basic row, while “the secondary harmonic dimension” is defined by the non-adjacent partitioning of the row through instrumentation and register. Through the use of Allen Forte’s set theory, her analyses of Schoenberg’s Opp. 25, 26, 29, 30, 37, and 45 demonstrate that the secondary harmonies have an identical pitch-class set with one of the adjacent segments of the basic row. Hyde concludes that the secondary harmonic dimension often determines the formal structure of the work, including the phrase organization. By showing that the twelve-tone procedure alone can determine the phrase structure, she refutes Boulez’s criticism of Schoenberg’s reliance on tonal forms.

Hyde’s studies stress a conception of the twelve-tone system in which the basic set controls every aspect of a composition including meter. For her, non-pitch parameters are not to aid comprehensibility of the complex pitch relations, but rather to articulate the constructive properties inherent in the basic row. She assumes that Schoenberg was thinking only in terms of intervals and not actual pitches.\(^{30}\) For Hyde, tonal artifacts\(^{31}\) in


Schoenberg’s twelve-tone works do not have any structural function. Her assumption appears to be solely based on Schoenberg’s earlier statements on the method, in which he defends the validity of the method through overemphasizing strict rules such as an avoidance of tonal hierarchy.

In contrast to the view outlined above, I find, through examination of Schoenberg’s music, that he often assigns specific tonal function to the abstract set through non-pitch parameters, creating tonal hierarchy among pitches. In addition, the pitch order of the basic set usually has priority over other rows in his twelve-tone music, as he often reprises P-0 at the end of a piece. Although Hyde contributes to the elucidation of Schoenberg’s notion of *Gedanke* as a multi-dimensional presentation by showing the important connections between the musical surface and the basic set, she neglects to examine more specific aspects, such as pitch content, including absolute pitches, and melodic gesture within the generalized pitch-class set.

Stephen Peles expands Hyde’s idea of the secondary harmonic dimension to specific pitch content grouped through register and timbre, and he reveals how the pitch-set collection is generated from the particular row form. He is more concerned with the pitch-class content of the collection rather than the mere abstract pc-set found in Hyde’s analysis. Because Peles’s study articulates Schoenberg’s idea of multiple dimensions, it is beneficial for my own study.

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31 I define the term “tonal artifacts” as *a priori* foreground gestures of fifths, thirds, and semitones that suggest functional tonal implications of the past.

Following Peles’s strategy, Andrew Mead further explores the relationship between the partitional strategy and the large-scale form.³³ Mead demonstrates long range connections supported by non-segmental invariance, which is brought out compositionally. His method calls attention to many details of pitch collections based on elements including articulations (arco and pizzicato). However, Mead primarily focuses on invariant pitch-set collections without the concept of developing variation or hierarchical structure within those segments. He confines his approach to serial structure and does not consider gestures, which transcend the boundary of row forms.

Both Peles and Mead attempt to address issues not covered in Schoenberg’s twelve-tone essays, and they contribute significantly to an understanding of the method by showing how non-pitch parameters may influence the surface coherence of a twelve-tone work. Nevertheless, these studies are founded on the idea that composition with twelve tones is a system controlled by the row properties, in which tonal artifacts do not have any functional meaning. While these studies contribute to the explication of the relationship between the row properties and their applications in terms of pitch collection, the analyses do not discuss the motivic gesture within the block of generalized collections. In addition, they fail to discuss the musikalische Gedanke as it applies to Schoenberg’s compositions. Bryan Simms comments that “for many writers on twelve-tone music following World War II, the ‘idea’ in such pieces had become synonymous

with the method itself, which was then viewed in a far more systematic light than Schoenberg had apparently intended.”

Recent research focuses further on the mathematically based generalized system of analysis (for example, transformational theory), which seems to de-emphasize the traditional mode of perception. These approaches advocate the idea that post-tonal music is built on a separate system apart from traditional tonal syntax. For example, Robert Morris bases his theory on the compositional point of view in Composition with Pitch-Classes: A Theory of Compositional Design, while David Lewin’s Generalized Musical Intervals and Transformations focuses on analytical theory that encompasses all styles of music. Tiina Koivisto believes that it is an advancement to understand post-tonal music without reference to tonal syntax: “One advantage of this attitude is that it prevents the analysis of atonal music from ‘looping back’ to tonal analogies through the use of concepts that model relationships specifically arising from properties of the diatonic universe.” Employment of this methodology denies Schoenberg’s own attitude toward his serial music, as revealed by his own compositional practices and comments.


Although the analytical systems projected by this group of scholars are a valuable tool to elucidate the relationship between the surface collections and the generative properties of the basic set in terms of abstract unordered pitch classes and pc-sets, these scholars tend to disregard our perceptual proclivity based on the tonal language of the eighteenth and nineteenth centuries. For instance, Hyde insists: “We should try to hear a twelve-tone piece, then, not only in itself, but also in reference to its basic set and to the operations of the twelve-tone system (transposition, inversion and retrogression).”\(^{39}\)

Mead, on the other hand, claims that we can hear the boundary of the perceptual aggregate, which consists of up to twelve pitch classes through the repetition of a pitch class.\(^{40}\) Despite these claims, it is difficult to ignore the fact that Schoenberg’s twelve-tone compositions consistently place traditional tonal relationship in prominent and obvious positions.

Graham Phipps, contrary to Hyde’s way of comprehending twelve-tone music as a foreign language, argues that we should understand Schoenberg’s twelve-tone music as an extension of the primary musical language of tonality.\(^{41}\) As was noted earlier, Schoenberg aimed for a comprehensible presentation of the musical idea through the familiar language of the tonal idiom. He describes comprehensibility as follows: “If a person is meant to understand what another is saying to him, the first presupposition is

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that the speaker use such signs or means of expression as are known to the listener; for example, the words of a language familiar to him.”

For Schoenberg, “Composition with twelve tones has no other aim than comprehensibility.”

Several contemporary scholars, such as Peter Odegard, Kenneth Hicken, Graham Phipps, Ethan Haimo, and Silvina Milstein, understand Schoenberg’s serial language as an extension of the eighteenth- and nineteenth-century tradition instead of a new musical system. These scholars base their analyses on Schoenberg’s aesthetics, in which the twelve-tone method is used to achieve a comprehensible whole. This school of thought can be divided into two sub-groups: those who follow the idea of Schoenberg, Rufer and Leibowitz and apply the technique of tonal composition such as principles of Grundgestalt and developing variation, and those who try to apply the Schenkerian method to the post-tonal compositions.

In the former group, for example, Peter Odegard investigates Schoenberg’s variation technique in his atonal and twelve-tone works and finds that the motivic elaboration functions as a form-generating device, just as tonality does in tonal music. Graham Phipps defines and applies Schoenberg’s concept of Grundgestalt to the Variations for Orchestra, Op. 31, to demonstrate that the salient thematic materials, motives, rhythmic figures, and timbral associations in the work are derived from the first

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42 Schoenberg, Coherence, 13.


nine and one-half measures. Furthermore, he finds that the Grundgestalt emphasizes the traditional dominant-tonic pattern of F-Bb. As discussed in the previous chapter, Jack Boss and Ethan Haimo have applied the technique of developing variation to Schoenberg’s atonal and twelve-tone works.

Currently the only analytical study available on Schoenberg's Op. 34 is David Hush’s dissertation "Modes of Continuity in Arnold Schoenberg’s Accompaniment to a Cinematographic Scene, Opus 34." His study elucidates some foreground continuities of the piece through registral shift of dyadic gestures and rhythmic motives. However, Hush does not penetrate many of the complexities of the piece, particularly relationships between the foreground motive and large-scale structure. Moreover, he does not discuss Schoenberg’s compositional philosophy, nor does he show how the musical idea of the work is realized in context.

In this study, I have applied some of the analytical techniques deriving from Babbitt and his followers to elucidate how the row properties (especially segmental invariants) can enhance the comprehensibility and coherence of the music. However, my main focus is to examine Schoenberg’s treatment of motivic coherence in Op. 34 and to demonstrate how his teaching of the Grundgestalt principle may be applied in connection with row formulation. Throughout this study, I have attempted to demonstrate the work’s internal formal structure through an assessment of developing variation technique as it

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may apply to the primary motive. I have also considered the traditional notion of phrase structure and the relationship of a perfect fifth as important perceptual elements for the work’s comprehension. The tonal relations in Op. 34 are forged not only by the intervallic content of the row, but also by the absolute pitches that are projected by non-pitch materials of the work. I have further examined how these local events are reflected at the large-scale level through the interpretation of the voice-leading structure of the outer voices as the manifestation of Schoenberg’s spiritual aspect of Gedanke.

Large-Scale Tonal Structure, Voice Leading, and Prolongation in Post-Tonal Music

Among the scholars who understand Schoenberg’s twelve-tone method as an extension of the tonal tradition, some have attempted to reveal the voice leading and resultant view of hierarchical structure through the application of Heinrich Schenker’s concepts. The rest of the chapter focuses on Schenkerian strategies of the hierarchical structure, prolongation, and voice leading in the post-tonal music, as they might apply to Schoenberg’s twelve-tone music.

In his *Structural Hearing* (1952), Felix Salzer has extended the application of Schenker’s theory to the music of pre- and post-common practice period. Roy Travis applies Salzer’s approach in a series of articles including an analysis of Schoenberg’s Op. 19 in which he claims that the prolonged dominant G pedal resolves to the tonic C at the

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Kenneth Hicken also follows Salzer to analyze the same piece, but he reads G as tonic with the Ursatz of the piece reduced to the I-V-I progression in G. Hicken’s earlier study identifies the pitch organization in the introduction of the Variations for Orchestra, Op. 31, as a fused bitonality of F and B. His graph shows all the vertical sonorities as embellished tertian chords, which are mostly interpreted as either dominant or tonic in the context of F and B tonal centers. Although the approach taken by Travis and Hicken stems from the idea that Schoenberg’s post-tonal music is an extension of eighteenth- and nineteenth-century tradition, their analyses are not convincing because of their view that all the pitches are subordinate to a tonal Ursatz based on the tertian harmonic structure.

The most difficult task in proposing the post-tonal hierarchical and prolongational structure is to construct theoretical criteria for distinguishing the structural and non-structural (ornamental) tones. Joseph N. Straus has criticized the analyses of Salzer and Travis by contending that no criteria exist for determining which pitches and sonorities are structural or non-structural in the context of post-tonal music. Straus proposes four criteria for tonal prolongation: (1) Consonance-Dissonance Condition, (2) the Scale-
Degree Condition, (3) the Embellishment Condition, and (4) the Harmony/Voice-Leading Condition.

While I agree with Straus that these conditions cannot be applied to a post-tonal context, I feel that Straus’s conditions appear to be forcing the characteristics of tonal prolongation onto post-tonal works. As Howard Cinnamon suggests, Straus does not allow for an adjustment among stylistic differences. Cinnamon argues that “the determination of consonance and dissonance has been neither static nor absolute. . . . Straus does not consider the role of context in determining the structural relationship between consonant and dissonant tones.”

Cinnamon combines both voice-leading graph and pitch set analysis to reveal the tonal and non-tonal elements of Schoenberg’s Op.11, no. 2. Based on Schoenberg’s statement in Harmonielehre, Cinnamon interprets non-chordal tones as extensions of triadic harmony.

Contextual approach is employed in many of the Schenkerian-based linear analyses of post-tonal music. Timothy Jackson advocates linear analysis of post-tonal music without relying on a tonal harmonic background. He claims that “Schoenberg realized that the possibility of creating leading tones, passing tones, and neighbor tones without relying upon traditional definitions of consonance and dissonance.” Jackson does not identify tonal implications or functions that would suggest any centricity in his


post-tonal analyses. In a post-tonal context, he states, “tonal processes do not necessarily retain their structural value.”

Silvina Milstein attempts to reconcile the two opposing views of “method vs. system” by showing how the row properties and their deployment in a composition are based on Schoenberg’s traditional tonal compositional procedure through semitonal gestures and a bass supporting a motion of a fifth. Her study introduces new analytical perspectives derived from Schoenberg’s tonal thinking by attempting to find an alternative rationale for Schoenberg’s row manipulation, which departs from many of the systematic twelve-tone studies built solely on the serial structure of a piece. Nevertheless, Milstein does not incorporate Schoenberg’s notions of *Gedanke* and *Grundgestalt* into her analyses. Furthermore, some of her analyses are not convincing due to her lack of solid criteria for determining a tonal hierarchy in a serial context.

As an alternative to Schenkerian ideas of prolongation, Fred Lerdahl adapts his and Jackendoff’s cognitive-based tonal theory to reveal a hierarchical and prolongational structure in atonal music. He proposes salience conditions for atonal music to replace stability conditions of tonal music. Lerdahl’s conditions include non-pitch parameters such as dynamics, register, and duration. Jack Boss agrees that the

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56 Milstein, *Arnold Schoenberg: Notes, Sets, Forms*.


structural and ornamental pitches can be distinguished according to contextual criteria and concludes that:

We can say that structural levels are generated in Schoenberg's music through ornamentation instead of prolongation. But it is important to remember that Schoenberg's structural levels, unlike Schenker's, only go up as far as necessary to reach an unornamented motive - in Schoenberg's thinking, long-range coherence is not hierarchical in the Schenkerian sense.\textsuperscript{59}

This statement supports the idea that the enlargement of the surface motive is one of the motive-forms derived from the \textit{Grundgestalt} rather than the background structure itself, as in Schenker’s concept of \textit{Ursatz}.

From another perspective, Allen Forte incorporates linear graphs in his set theory to present a hierarchical structure in terms of pitch-class set relations instead of traditional voice leading.\textsuperscript{60} Catherine Nolan follows Forte’s approach in an analysis of Webern’s \textit{Piano Variations} Op. 27.\textsuperscript{61} Both Forte and Nolan avoid bringing up the issue of perceptual comprehension in abstract set theory. Nolan’s analysis of Webern departs from Mead’s by showing motivic expansion that transcends the serial structure.\textsuperscript{62}

Although Nolan considers the musical surface according to registral proximity, she does


not explain the meaning behind hierarchical relationships among pitch-set classes. This approach seems more abstract and conceptual than what we can perceive.

**Methodology**

In post-tonal music, polyphonic lines do not support a single tonality as in eighteenth- and most nineteenth-century literature, but rather often conflict with each other. In Op. 34, the dense serial cycle of a measure or two leads to a highly concentrated twelve-tone aggregate that offsets possible tonal motions. For instance, a semitonal ascent, which is analogous to the leading tone-to-tonic gesture, may be obscured by another counteracting line. When one line completes the semitonal motion D-Eb, another line may have a C#-D motion. Thus, Eb and D are still sounding together vertically, with the tonal emphasis on Eb attenuated. These multiple tonal references are consistent with Schoenberg’s concept of pantonality.

Despite the lack of coordination among multiple lines, directed motion can be detected in each line. In the context of twelve-tone music, I believe that the way in which Schoenberg realizes the row delineates the tonal hierarchy and functional implications among tones, which elucidate the essence of the *musikalische Gedanke* and its reliance upon *a priori* features of the musical foreground. While hierarchy among tones can be established contextually, hierarchy among the structural levels as they occur in tonal compositions cannot be detected in Op. 34. In this study, I have adapted the Schenkerian graphing technique to illustrate how the primary motives are emphasized through their registral distribution and other contextual factors. However, the voice-leading graphs in

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63 Nolan, 72.
this study do not suggest any hierarchical relationship between foreground and background structures in the Schenkerian sense, in which the foreground is viewed as an outgrowth of the background. To the contrary, I understand that the interaction among foreground events establishes the large-scale coherent whole. As discussed in the previous chapter, I associate the metaphysical aspect of Schoenberg’s *Gedanke* with background subconscious hearing. The analyses in this study treat linear voice leading as an integral part for comprehending the *musikalische Gedanke* rather than as an independent phenomenon.

As Schoenberg refers to the multi-dimensional presentation of ideas in the twelve-tone works as Swedenborg’s heaven, I view the enlargement of the surface motive as a manifestation of the *Gedanke* in a different musical dimension. Each post-tonal work has its own set of criteria forged through the contextual relationship. This relationship is realized through the act of composition rather than merely the properties inherent in the row.

Following Lerdahl’s method, I have proposed several criteria to determine the distinction between structural and ornamental tones based on the salient features found in Op. 34. As Schoenberg’s *Grundgestalt* principle, large-scale form is generated through the organic development of the implications inherent in the *Grundgestalt*. Thus, structural priority should be placed on the opening gestures, which establish the tonal relationships through compositional realization of the basic set. As

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64 Although Lerdahl implies that his theory of atonal prolongation is not applicable to serial compositions, I believe that his criteria are helpful in elucidating the structure of Op. 34. See “Atonal Prolongational Structure,” 84.
discussed in the previous section, I am concerned with specific pitch-classes in addition to the intervallic structure; this study focuses on the way in which the referential tones are articulated by non-pitch parameters rather than the traditional means of tonality. Therefore, the Grundgestalt condition along with other contextual conditions replaces Straus’s conditions of tonal prolongation. The following criteria project multiple dimensions derived directly from the musical fabric to facilitate an understanding of the musikalische Gedanke of Op. 34.

**Register**

An examination of a stepwise voice leading in a particular registral strand uncovers a connection among different instrumental lines, which together form a structural tonal motion. I have focused on the outer-voice leading, in which Schoenberg repeatedly projects the referential tones of the work. Voice exchange between the outer voices also serves as an essential structural element, reinforcing the Grundgestalt.

In Op. 34, registral placement significantly contributes to the grouping of the referential pitches, assisting aural comprehension. Throughout the work, referential subsets and primary motives are often emphasized through their placement in extreme registers. The outer voices with a specific register establish a stepwise connection suggesting a large-scale tonal motion, and the return to the original register serves as one of the essential conditions for the recapitulation of the referential motives.

**Fifth, Tritone, and Semitone**

Although neither the fifth nor the semitone defines a tonal center as is commonly the case in the traditional tonal music in the eighteenth and nineteenth centuries, these
two intervals are, nonetheless, primary features of Schoenberg’s twelve-tone works. They are a means by which his music relies on familiar tonal syntax as a means of comprehensibility. For example, if the semitonal motions of C-C# and A-G# emphasize the C#-G# dyad, the dyad C-A along with the dyad Eb-Gb may imply a B#/C diminished seventh chord, dominant function to C#. As Schoenberg often projects stepwise motion through registral placement, the semitone serves as the most significant voice-leading interval.

In Op. 34, tritone is also an important constructive element especially at the large-scale level, and the resolution of the tritone into the fifth in the outer voices may be interpreted as part of tonal process manifesting the *musikalische Gedanke*.

Rhythm, Duration, and Metric Accent

As Mead observed, rhythmic construction contributes to the grouping of the musical surface.\(^{65}\) Duration also contributes to the perceived metric groupings against the notated meter. In Op. 34, the notated meter does not indicate the perceived meter. Metric accent is established through attack rhythm and durational accent across the bar lines. For example, the first main theme suggests a metric interaction between duple and triple meter.

Other important idiomatic features of Schoenberg’s twelve-tone music include: Repetition, Timbre (Instrumentation), and Boundary Tones.

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Repetition of a pitch is quite common in all of Schoenberg’s twelve-tone works. Not only a single pitch, but also groups of pitches are freely repeated within the presentation of a row.

As with register, instrumentation contributes to the perceptible grouping of the surface events. The salient motives that are emphasized by register and metric accent may be further articulated by timbral association. For example, the timpani often emphasize referential intervals, motives, and pitches.

The first and last pitches of any passage generally receive more structural weight than the intervening pitches, especially if they are highlighted by other means of accent such as metric and agogic. This criterion also applies to the outer-voice boundary tones of each section and subsection of the work.

All of the above criteria aid the comprehension of the musical surface. Because of so many concurrent events in Schoenberg’s twelve-tone music, large-scale voice leading is not easy to hear. Thus, it has to be justified contextually through salient features of the particular composition. In this study, my interpretation of voice leading is based on the idea that the macro-structure is an outgrowth of the Grundgestalt defined at the outset of the piece.
CHAPTER 4

ANALYSIS OF BEGLEITUNGSMUSIK ZU EINER LICHTSPIELSZEKE, OP. 34, PART I

The following analysis of Schoenberg’s Op. 34 examines the connection between its musical traits and the composer’s aesthetics. The musical analysis is organized in a manner that proceeds from a preliminary view of the whole to a detailed examination of the individual parts – first its sections and then the individual phrases – to a view of the reassembled whole that reflects the details. Emphasis is placed upon the contrapuntal and harmonic unfoldings of the Grundgestalt in different dimensions and the ways that the row form functions to enhance coherence and unity of the work.

Preliminary View of the Whole

The formal structure of the piece can be understood as the interaction between row usage (aggregate completion), developing variation of the Grundgestalt, and emotional evocation. This section presents a general synopsis of Op. 34. The fundamental discourse and emotional content of the work are expressed through changes in tempo, dynamics, instrumentation, and texture. The following table shows the overall trajectory of the work through the tempi, meters, and dynamic levels. In addition to the parameters shown in the Figure 4.1, texture, serial organization, and tonal structure contribute to the sectional divisions and overall structure.
While Schoenberg does not indicate in the score where the sectional divisions of the three descriptive subtitles (Threatening Danger, Fear, and Catastrophe) occur, the work does divide into three parts. These sections seem to correspond to the three parts of...
a sonata form. Although this work starts calmly in a slow tempo, an agitated tremolo in the strings adds intensity and suggests an ominous sense of danger. The first section has an expository character, and can be divided into three subsections. The first subsection functions as an introduction where all the essential motives – i.e., the Grundgestalt – are introduced. Here the prime row is introduced through smaller segments (dyads and trichord). Not until m. 9, is the row presented in its entirety, where the oboe states it in melodic form accompanied by agitated rhythmic figures. These rhythmic patterns from both the theme and its accompaniment pervade the piece. The third subsection (m. 18) introduces the contrasting waltz-like second theme in 3/4 meter, which gradually builds up to the first climactic arrival of the piece at m. 43 with a ritardando and double forte.

The second major section (Fear) contrasts with the first section through a significant increase in tempo and a change to a more developmental character. The thematic stability of the first section is replaced by the instability of fragmentary statements of the basic motives. The second section begins with agitated repeated figures in place of the thematic or rhythmic statements from the first section. At m. 89, brass instruments bring back the rhythmic motive of the first theme but with different pitch content; the intensification of the orchestration (i.e., the use of the brass) produces an emotional build-up, evoking fear. The brass section continues to lead the building up of tension through the primary rhythmic figure along with the acceleration of the tempo and dynamics, while the woodwinds and strings are reduced to the role of accompaniment.

Before the catastrophic point (m. 170), the gradual acceleration of the tempo and increase in intensity is somewhat relaxed at m. 123 (Etwas langsamer). This decrease in
tempo highlights the more extreme acceleration approaching the catastrophic climax. At m. 125, the familiar thematic statement returns in a recognizable variation. Again, woodwinds and strings take control of the thematic material, while brass instruments vanish completely. A gradual increase of tempo and dynamics is initiated by the crescendo piano gesture at m. 136. The brass entry at m. 145 further intensifies the climactic growth with a *stretto* statement of the basic motive, leading to *Presto* at m. 156.\(^1\) The dynamics and tempo both reach their extreme levels at the catastrophic point (m. 170). Then, the chaos slowly subsides with a *rallentando*. At m. 178 (*Adagio*) the opening tempo comes back, along with the texture of a single melody and chordal accompaniment. The melody brings back the familiar rhythmic motive solemnly in the lower strings, but the original theme never returns. At m. 200 the opening motivic gestures recapitulate with some variation. The piece ends as quietly as it had begun, while recapturing the ominous mood of the opening.

As can be seen, the emotional content progresses teleologically from Threatening Danger and Fear toward Catastrophe, and is depicted through dramatic changes in tempo, texture, dynamics, and transformations of the basic motive.\(^2\) One approach that might be useful for examining the emotional journey from Threatening Danger and Fear to Catastrophe is Leonard Meyer’s and Eugene Narmour’s implication-realization theory, as follows: the first two sections, Threatening Danger and Fear, imply upcoming events;

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\(^1\) David Neumeyer maintains that the last major section (Catastrophe) starts at m. 156. See David Neumeyer, “Schoenberg at the Movies: Dodecaphony and Film,” *Music Theory Online* 0/1 (1993).

\(^2\) The use of descriptive subtitles is reminiscent of his earlier work, *Five Pieces for Orchestra*, Op. 16, with the titles *Vorgefühle* [Premonitions], *Vergangenes* [Yesteryears], *Sommermorgen am See* (Farben) [Summer Morning by a Lake (Colors)], *Peripetie* [Peripetia], and *Das obligate Rezitativ* [The Obligatory Recitative].
they are realized at the beginning of Catastrophe, and reflected in the coda. In a more general sense, the same theory can apply to Schoenberg’s compositional theory: implications of the Grundgestalt at the outset of the work are realized through the technique of developing variation in the course of the work, then the opening idea is reflected upon at the end. In this way, the implication-realization theory based on tonal music may still work for music composed with the twelve-tone method. In Op. 34, the Grundgestalt provides material and the twelve-tone method serves as means for the depiction of emotional events.

Threatening Danger (Exposition)

Introduction (mm. 1-8) as Grundgestalt

As discussed in Chapter 2, Schoenberg’s concept of Grundgestalt has an essential structural role in all his works; the Grundgestalt shapes the entire work through its continuously varied repetition. In Op. 34, the statement of the Grundgestalt in the introduction establishes the basis for the first thematic presentation of the row. The complete linear statement of the prime row does not occur at the very beginning of the piece. Instead, motivic fragments from the prime row establish the tonal relationship through the partitioning of the row, registral association, and rhythmic emphasis. A similar procedure is found in the Variations for Orchestra, Op. 31, in which the

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introduction sets the stage for the first melodic presentation of the row.\textsuperscript{5} All the traits found in the first thematic statement of Op. 34 are derived from the introduction. Thus, the introduction puts meaning and life into the abstract intervallic relations found in the row and forecasts the discourse of the work through the presentation of specific relationships among the tones.

The introduction consists of three statements of the prime row, which suggest separate phrases. The first two are more or less improvisatory in character because the motivic fragments lack a steady pulse. The third statement establishes a steady tempo, which leads into the linear presentation of the entire row.

Phrase 1 (mm. 1-2)

The first appearance of the row consists of four motivic gestures (see Figure 4.2). The piece opens with an agitated low-string tremolo sounding the first two ordinals (Eb\textsubscript{3} and Gb\textsubscript{3})\textsuperscript{6} of P-0, which establish the ostinato background of the work. Then, the bassoon and double bass announce the remainder of the first hexachord. Although ordinals 3 to 6 appear in order, they are heard as two melodic statements of D4-C4 (ordinals 3 and 6) by the bassoon and E2-C#2 (ordinals 4 and 5) by the double bass, due to instrumental and registral association.\textsuperscript{7} In m. 2, the horn and trombone (doubled by the piano) introduce the second hexachord in a short staccato gesture of two trichords, A-Ab-F (ordinals 7-10-11) and B-Bb-G (8-9-12) respectively, presented as three vertical minor

\textsuperscript{5} In Op. 31, the first linear statement of the prime row appears in m. 33.

\textsuperscript{6} My registral assignment designates middle C as C\textsubscript{4}.

\textsuperscript{7} Throughout this study, numbers 1 through 12 are used to indicate the order number of each row. Retrograde forms keep the same numbering of their prime forms starting from number 12 to 1. Schoenberg also designates the bassoon motive as \textit{Hauptstimme}.
sevenths. (Of some interest is the change of register for the final pitch in the upper voice. This gesture emphasizes the pitch F).

Figure 4.2. *Grundgestalt*, mm. 1-3

The rhythmic structure of these gestures places emphasis on certain pitches. The first dyad Eb-Gb is neutrally articulated, as it is presented vertically. In the second dyad D-C, C is accentuated through the resolution of the suspended D. The dyad E-C# stresses C# with its placement on the downbeat. The two trichords in the second hexachord are deemphasized by sixteenth-note values and weak metrical position. The rhythmically articulated pitches C and C# in the first hexachord have an important structural role, which I discuss later.

In this statement, interval-classes 2 and 3 are prominent. The first hexachord unfolds as two dyads of minor thirds, Eb-Gb (1-2) and E-C# (4-5) and a dyad of a major second, D-C (3-6). The second hexachord can be viewed as three pairs of inverted major
seconds, A-B (7-8), Bb-Ab (9-10), and F-G (11-12). These primary interval-classes function as generative motives of the entire piece.

It is significant that the second hexachord is registrally and instrumentally partitioned into two trichords of set (014) in non-adjacent order: ordinals 7-10-11 (A-Ab-F) and 8-9-12 (B-Bb-G). The (014) trichord is an essential sonority in the piece, and the two ordered trichords of the first hexachord, ordinals 1-2-3 and 4-5-6, also form this set. Thus, the aggregate can be completed by combining the ordered trichords from the first hexachord with the two non-adjacent trichords from the second hexachord. Moreover, these non-adjacent trichords are identical in pitch content to the first two ordered trichords (Ab-F-A and G-Bb-B) of I-5 (see Figure 4.3).\(^8\)

Figure 4.3. Trichordal invariants (014) between combinatorial pairs

<table>
<thead>
<tr>
<th>Ordinals</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>P-0</td>
<td>A</td>
<td>B</td>
<td>B(^b)</td>
<td>A(^b)</td>
<td>F</td>
<td>G</td>
<td>E(^b)</td>
<td>G(^b)</td>
<td>D</td>
<td>E</td>
<td>C(^#)</td>
<td>C</td>
</tr>
<tr>
<td>I-5</td>
<td>A(^b)</td>
<td>F</td>
<td>A</td>
<td>G</td>
<td>B(^b)</td>
<td>B</td>
<td>D</td>
<td>C</td>
<td>C(^#)</td>
<td>E(^b)</td>
<td>G(^b)</td>
<td>E</td>
</tr>
</tbody>
</table>

As in many other mature twelve-tone works of Schoenberg, the P rows are combinatorially related to their I-rows transposed up five semitones, i.e., between P-0 and I-5.\(^9\) As the aggregate can be completed through the partitioning of four (014) trichords,

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\(^8\) This technique is termed isomorphic partitioning under inversion by Ethan Haimo and Paul Johnson in “Isomorphic Partitioning and Schoenberg’s Fourth String Quartet,” *Journal of Music Theory* 28/1 (1984): 47-72.
the use of combinatorially related hexachords enables the composer to unify the piece organically through continuous variation of the (014) trichord. Therefore, the non-adjacent (014) trichords in m. 2 foreshadow the structural importance of the (014) trichord and also suggest the further manipulation of the combinatorial relationship. In the course of the piece, the (014) trichord unfolds through the elements of different row forms.

It should be pointed out that the ordered intervals of the (014) trichords in m. 2 are different: (-1, +9) for A3-Ab3-F4 and (-1, -3) for B2-Bb2-G2. As a result, F4 is registrally isolated from other pitches of the second hexachord. The placement of F facilitates a semitonal connection to E4 in the following measure (flute), so that F may be understood as an upper neighbor to E. This projects another (014) trichord F-E-C# with the ordered intervals of (-1, -3). Of particular interest is that this trichord is related to the trichord B-Bb-G in the trombone at T6, forecasting the constructive role of a tritone played in the piece.

This registral separation becomes significant when the first linear statement of the row occurs in mm. 9-12. In this instance, the registral isolation of F5 highlights the semitonal melodic closure of the theme, Ab4-G4 in m. 12. This Ab-G motion is predicted in mm. 2-5 by the trombone line G2-Ab2. The importance of the semitone is suggested by the melodic gestures A3-Ab3 and B2-Bb2 in m 2. The semitonal motion as well as the perfect fifth and the tritone have crucial roles in articulating the work’s tonal structure. Another implication that becomes significant in the later part of the piece is the

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vertical sonority formed by the resolution of the suspended D to C above the dyad Eb-Gb in m. 2. This C/B# diminished triad suggests a dominant of C# in the course of the work.

The first two measures of the piece present several important ideas, including the focal dyad Eb-Gb and the (014) trichord. The first two melodic gestures, D-C (ordinals 3-6) and E-C# (ordinals 4-5) may be understood as a dialectical opposition articulated through timbre and register. The non-adjacent dyad D-C is normalized when the opening material reprises in the coda, with the two dyads then combined to become the tetrachordal gesture D-E-C#-C, set (0124) (mm. 202-209). In addition to the (014) trichord, the (0124) tetrachord functions as another important referential sonority. This motivic synthesis at the end can be interpreted as a resolution of the initial contrasting motives, D-C and E-C#, completing the process of the *musikalische Gedanke*. The (0124) chord briefly appears as a vertical sonority at the end of m. 2 (ordinals 1-2-11-12) and is extensively developed at the end of the piece.

The registral placement of the pitches at the opening is also significant in that the focal pitch-classes and sonorities are often stressed through their registral extremes. For example, the dyad C#2-E2 in the double bass functions as a bass support, especially after the catastrophic climax at m. 170. In addition, the recapitulation is marked by the return of the original registers of the referential tones rather than by a thematic statement.

**Phrase 2 (mm. 3-5)**

The second statement of the set continually reinforces the primary interval-classes of 2 and 3. In m. 3, over the Eb3-Gb3 ostinato, the opening melodic gestures D4-C4 and E2-C#2 exchange octaves, appearing as D2-C2 in the double bass and E4-C#4 in the
flute. In mm. 4-5, the vertical pairs of the second hexachord in the previous statement unfold as melodic motives (see Figure 4.4). The vertical intervals of the minor seventh (B2-A3) and fourteenth (G2-F4) in m. 2 unfold as ascending melodic intervals of major seconds, A3-B3 (horn I) and F4-G4 (bassoon), while the vertical minor seventh Bb2-Ab3 becomes a vertical major second, Ab2 (trombone)-Bb2 (horn II). These two rising seconds not only contrast with the primarily falling melodic gestures of the first statement, but also contribute to the continuity between appearances of the row. The ascending seconds are answered by the rising minor third Eb3-Gb3 in the viola and violoncello (mm. 5-6), which initiates the next row statement. Thus, the rising motives foreshadow and connect to the third presentation, which is more rhythmically goal-oriented.

Rhythmic features in the first two statements of the row anticipate upcoming events.10 The most prominent rhythmic motive (long-short-long) of the work appears with the first thematic announcement of the prime row in mm. 9-12. The basis for this rhythmic motive can be understood as a combination of the two contrasting figures in the opening six measures. In opposition to the long-short rhythm of the first melodic gesture D-C of the bassoon (mm. 1-2), the second rhythm is a short-long pattern of ascending motives A-B (horn), F-G (bassoon), and Eb-Gb (viola and violoncello) in mm. 4-6.

10 Schoenberg stresses the importance of rhythm as a structural motive. For example, see The Musical Idea, 199 where he states that “Rhythm (in the sense applicable to the musical work of art) is surely not just any succession of stressed and unstressed attacks; it is also necessary that this succession behave like a motive. In other words, it forms an enduring gestalt that can indeed be varied, can even be entirely transformed and dissolved, but which, like the motive, will be repeated again and again (varied or unvaried, developed or liquidated, etc.)”
The first two statements also establish another important intervallic relationship, which is salient throughout the work. With its two melodic gestures D4-C4 (mm. 1-2) and F4-G4 (mm. 4-5), the bassoon emphasizes the perfect fifth relation C-G (ordinals 6 and 12) through a strong metric position. The same relationship is highlighted in the first linear presentation of the row (mm. 9-12) with the semitonal gestures C#4-C4 (m. 10) and Ab4-G4 (m. 12). Throughout the work, the perfect fifth relation is especially important among row statements, which are controlled through the use of the combinatorial and non-combinatorial partners a perfect fifth apart.
Phrase 3 (mm. 6-8)

The third statement initiates a steady pulse, which prepares the first linear thematic statement of the prime row. In this instance, two of the focal dyads, Eb-Gb and C#-E, are continuously articulated. The formerly neutral rhythmic statement of the dyad Eb-Gb is now assigned to the short-long rhythm, which prepares the first melodic statement of the row at m. 9. It is noteworthy that the Eb3-Gb3 dyad maintains its original register and instrumentation throughout the introduction, while all other row elements frequently shift register.

On the other hand, the priority of the dyad C#-E is reinforced through its repetition with different instruments in multiple octaves. In m. 6, the oboe’s presentation of the second trichord Db5-C4-E5 emphasizes the focal dyad C#5-E5 through its registral placement. This is further reinforced by the bass descent E2-D2-C#2 in the bassoon (mm. 6-7), part of a voice exchange between the outer voices. In addition, the second clarinet picks up the oboe’s Db5-E5 (m. 6) in the lower register as Db3-E3 (mm. 6-7). Note that the bassoon’s descending motive E2-D2-C#2 is repeated in the higher registers by different instruments in mm. 6-8. The motive begins with the E5 of the oboe’s Db5-E5 in m. 6, which is followed by the D5 in the following measure, then descends to the bassoon’s C#5 in m. 8.

In mm. 7-8, the flute twice announces the second hexachord as a disjunct melody, with the second statement (m. 8) transposed up an octave, the note values augmented. The three pairs of dyads in major seconds are presented as two minor sevenths (A5-B4, F5-G4) and a major ninth (Bb5-Ab4). The higher registral strands A5-Bb5 and A6-Bb6
adumbrate the first sectional goal at the end of the first thematic group (m. 18), with the A5 reached through the lower neighbor Ab5. The opening melodic motives D-C and E-C# now serve as a chordal accompaniment for the second hexachord, while the melodic Eb-Gb functions as the *Nebenstimme*.

This third statement (mm. 6-8) introduces important rhythmic patterns, the triplet and its subdivision, which are the basis for the accompanimental patterns for the first thematic statement. The gradual increase of the triplet subdivision in the Eb-Gb dyad (mm. 7-8) contributes to the smooth transition to the agitated accompanimental figure in m. 9.

In the introduction, an important tonal relationship is set up through partitioning, registral and instrumental associations, and rhythm. The dyad Eb-Gb definitely projects its function as a focal sonority through the fixed register and instruments. The dyad C#-E offers an opposing polarity, which is emphasized through the voice exchange in mm. 6-7, and the registral association of C#2 is especially significant, as the piece ends with it in the bass. Not only does the interval of the major second play a vital role as a melodic interval, but it also equals the distance between the two juxtaposed referential dyads Eb-Gb and C#-E.

The characteristics in the introduction are reflected in the first linear statement of the prime row, as follows:
The First Thematic Group

The first linear appearance of the prime row in mm. 9-12 emphasizes all the intervals stressed in the introduction (see Figure 4.5). Here each hexachord is presented in the form of antecedent and consequent phrases, respectively. As a result, two other intervals, the tritone Eb-A between the respective first tones, and the perfect fifth C-G between the respective final tones of the two hexachords are highlighted. Both of these intervals adumbrate a structural significance, elucidating the *musikalische Gedanke* of the piece. The tritone dyad Eb-A in the first theme is implied by the stepwise ascent in the introduction, A3-B3 (mm. 2-4)-C4 (mm. 6-7)-D4 (m. 8) leading to the first pitch Eb4 (m. 9) in the theme (see Figure 4.4).

The semitonal closure C#4-C4 (m. 10) of the first phrase is answered by major seventh F5-G4 (m. 12) at the end of the second phrase. However, the registral displacement of the F, which is suggested throughout the introduction, emphasizes the Ab4-G4 semitonal descent. The gestures Ab-G (first violin) and A-Bb (bassoon) in mm. 9-10 also foreshadow this upper neighbor motion.
The chromatic stepwise gesture is ubiquitous in many of Schoenberg’s post-tonal works. I interpret this feature as reminiscent of traditional melodic syntax, which Schoenberg uses to enhance comprehensibility. Mark DeVoto has observed that Berg’s
use of stepwise gestures, which he calls creeping chromaticism, demonstrates his connection to the great tradition of the eighteenth and nineteenth centuries.\textsuperscript{11} This statement is also applicable to Schoenberg. In the fifth variation of Op. 31 (see Figure 2.6), Schoenberg extracts the chromatic BACH motive (0123) through the non-adjacent dyad of the first hexachord and the adjacent dyad of the second hexachord. In Op. 34, the semitonal gesture also functions as one of the key components for understanding the \textit{Gedanke} of the piece. As shown in Figure 4.6, the first linear presentation of the prime row suggests a perceived meter shift between 3/4 and 2/4. In the first hexachord (mm. 9-10), the perceived metric accent projects the chromatic descent of Eb4-C4. In the second hexachord (mm. 11-12), registrally isolated F5 brings out the remaining pitches A-B-Bb-Ab-G, which form a chromatic motive. At a later point, this motive is reordered and projected over a larger span, forming the chromatic ascent of G-Ab-A-Bb-B in the top voice.

Figure 4.6. Chromatic motive embedded in the first theme, mm. 9-12

The serial structure of mm. 9-12 reflects Schoenberg’s notion of the multi-dimensional presentation of a musical idea. The melody is accompanied by the trichordal subsets of the row assigned to different instrumental groups. In m. 9 the first trichord (Eb-Gb-D) in the oboe is accompanied by the second trichord (E-C#-C) in the low strings, the third trichord (A-B-Bb) in woodwinds, and the fourth trichord (Ab-F-G) in the high strings. Since each measure successively introduces a new trichord of the melody, which is accompanied by the other three trichords, each measure completes the twelve-tone aggregate. As a result, the aggregate sounds in two dimensions of the musical surface, horizontally through the melody and vertically through both the melody and accompaniment. As seen in Op. 31 (see Figure 2.6), this technique of two dimensional serial structures is one of the salient features in Schoenberg’s mature twelve-tone works.\textsuperscript{12}

In Op. 34, the rhythmic design of the first linear statement of the row plays a significant role in the comprehensibility of the work. The rhythmic events of this melody are based on the dotted long-short figure. This pattern is assigned to each dyad of the row except for the last one, F-G, in which G sustains longer than F, suggesting a sense of cadential closure.

The shift between duple and triple meter suggested by this theme, as well as hemiola, is prevalent throughout the piece. As seen in Figure 4.6, the first phrase can be

\textsuperscript{12} See also the opening statement of the prime row in the Fourth String Quartet, Op. 37, in which the linear completion of the aggregate extends for six measures, while almost every measure fulfills the vertical twelve-tone aggregate (except for the last vertical aggregate, which extends for three measures).
divided into 3/4, 2/4, 2/4, and 2/4), while the second phrase emphasizes 2/4, 2/4, and 3/4. As a result, it forms a symmetrical relationship in which 2/4 is framed by 3/4.

The suggestion of a militaristic rhythmic pattern in the accompaniment, derived from the subdivision of the triplet, presages later development of this rhythm. For instance, at the beginning of the middle section (mm. 44-59) woodwinds recall the augmentation of this rhythmic figure. This motive, which is similar to the well-known motor-rhythm in Beethoven’s Fifth Symphony, can be interpreted programatically as danger in this work.

More contrast in rhythmic activity between the melody and its accompaniment occurs in Threatening Danger than in the other two sections. The theme progresses slowly against a quick, agitated harmonic background. In Fear, along with the tempo acceleration, the rhythmic conformity level increases because both the melodic and harmonic materials move more quickly.

The timbral and registral associations suggested at the opening of the piece, continue to provide unity within the first theme. The C#2 provides the lowest support at the beginning (m. 9) and the end of the theme (m. 12), with D2 (m. 11) functioning as its upper neighbor. Moreover, the (0124) tetrachord, E-C#-D-C in the double bass (mm. 1-4) continuously appears in the same register and in the same timbre throughout the first thematic section (mm. 1-17).

As can be seen, the first row presentation (mm. 1-2) anticipates the course of the following statements. The introduction as a whole predicts the main features of the first linear statement of the row in both pitch and non-pitch parameters. Furthermore, both the
introduction and the first theme set up the contextual criteria for the large-scale tonal form of the piece. The pitches C# and Eb – not just the intervals themselves – are established as absolute referential tones through register, partitioning and rhythm; these tones are continually represented in different contexts throughout the piece.

Through m. 12, only the prime row is revealed. The next point to be discussed is the pre-compositional materials (row formation and its properties) and how they articulate the above-mentioned focal pitch-classes and sonorities.

**Row Formation and its Properties**

An understanding of the general properties of the row explains the composer’s choice of row forms and the way in which they interact to articulate his musical idea. As in Schoenberg’s other twelve-tone compositions, the row formation of the work is an essential tool for creating an organic whole to achieve comprehensibility. Moreover, the row properties provide a source for the process of developing variation. In his mature serial compositions, Schoenberg uses the properties of combinatoriality and invariant relationships to give the work variety and coherence. The row formation determines the relationship among tones, but it is only an abstract property until stressed in the musical context by the composer. The emphasis of referential pitches and sonorities often determines the choice of a particular row form, lending to the work’s comprehensibility.

The row forms are often grouped together or used exclusively to articulate the Grundgestalt of the work. In *A Survivor from Warsaw*, Op. 46, Schoenberg extensively uses six row-forms (P-0, P-4, P-8, I-0, I-4, I-8), which share the invariant augmented triad.

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13 For the matrix and the row structure of Op. 34, see Appendix.
(Ab-C-E) as a common element. On the other hand, in the *Variations for Orchestra*, Op. 31, the first three variations explore only the row forms (P-0/I-9, P-3/I-0, P-6/I-3, P-9/I-6), which yield the opening tritone dyads Bb-E and G-C# as ordinals 1-2 and 8-9. For each composition, Schoenberg established a hierarchical order among all the row forms, analogous to key relationships in tonal music.

As shown in Figure 4.7, the row of Op. 34 contains only interval-classes 1 to 4 between adjacent ordinals. Although interval-class 6 is excluded from the adjacent intervals, it is emphasized as the interval between the first pitches of the respective two hexachords, (ordinals 1 and 7) as seen throughout the previous section. Because of its inversional equivalency, the second hexachord of the I-forms also starts a tritone away from the first hexachord. The tritone also has structural significance in the piece, to be discussed in the following chapters. On the other hand, the retrograde forms articulate a perfect fifth as the interval between ordinals 12 (G) and 6 (C) of P-0.

Figure 4.7. Interval-content of the row

<table>
<thead>
<tr>
<th>Interval-Class</th>
<th>P-0</th>
<th>E♭</th>
<th>G♭</th>
<th>D</th>
<th>E</th>
<th>C♯</th>
<th>C</th>
<th>A</th>
<th>B</th>
<th>B♭</th>
<th>A♭</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>3</td>
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<td>1</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In the previous section, the introduction was shown to feature the two most prevalent interval-classes in the foreground structure, 2 and 3. These intervals are also highlighted by their appearance between the boundary tones of each hexachord of the row. For example, in the P-0 form, ordinals 1 and 6 (Eb-C) form interval-class 3, and ordinals 7 and 12 form interval-class 2. Furthermore, as shown in Figure 4.8, the I-form
maps the first dyads of each hexachord, Eb-Gb and A-B, of the corresponding P-form onto the boundary dyads. The reverse relationship holds true as well.\textsuperscript{14}

Figure 4.8. Dyadic invariants between P and I forms

<table>
<thead>
<tr>
<th>Ordinals</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
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</thead>
<tbody>
<tr>
<td>P-0</td>
<td>E\textsuperscript{b}</td>
<td>G\textsuperscript{b}</td>
<td>D</td>
<td>E</td>
<td>C#</td>
<td>C</td>
<td>A</td>
<td>B</td>
<td>B\textsuperscript{b}</td>
<td>A\textsuperscript{b}</td>
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<tr>
<td>I-0</td>
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<td>C</td>
<td>E</td>
<td>D</td>
<td>F</td>
<td>G\textsuperscript{b}</td>
<td>A</td>
<td>G</td>
<td>A\textsuperscript{b}</td>
<td>B\textsuperscript{b}</td>
<td>C#</td>
<td>B</td>
</tr>
</tbody>
</table>

At m. 125 of the development (Fear section), seen in Figure 4.9, Schoenberg employs this property to emphasize the opening dyads D-C in the higher part and Gb-Eb with the chromatic descent through the registral partitioning of the first hexachord of I-0. Thus, the basic ideas are continually featured in the context of different row forms, realizing the idea of developing variation.

Figure 4.9. Registrally emphasized dyads D-C and Gb-Eb, mm. 125-126

\textsuperscript{14} The P-form maps the first dyads of each hexachord Eb-C and A-G of the corresponding I-form onto the boundary dyads.
This connection is further articulated through the chromatic stepwise voice leading. For example, in the first linear presentation of the prime row in mm. 9-12, the dyad Eb-C (ordinals 1 and 6) is connected through the chromatic passing tones 3 (D) and 5 (C#), while the dyad A-G is connected through the passing tone 10 (Ab) as seen in Figure 4.10.

Figure 4.10. Op. 34, mm. 9-12

It is also significant that each hexachord of the P form has five common pitches with the corresponding hexachord of the I-form. Between the rows P-0 and I-0, except ordinals 5 and 11 (dyad F-C#), each hexachord of P-0 shares five common tones with the corresponding hexachord of I-0.

Partitioning and Invariance

In his serial compositions, Schoenberg strategically creates a sense of unity and coherence through the partitioning of the row into smaller subsets, which act as recurrent focal sonorities. Dyadic, trichordal, and tetrachordal segments of the row are prominent throughout the piece, along with the use of invariant relations among these segments. This section focuses on the ordered segmental subsets of the row and their invariant
relationships that Schoenberg exploits compositionally to elucidate the *Gedanke* of Op. 34. These properties support Schoenberg’s notion of developing variation.

The trichordal partitioning of the row creates two (014) trichords in the first hexachord and trichords (012) and (013) in the second hexachord respectively (see Figure 4.11).

Figure 4.11. Trichordal partitioning of the row

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<table>
<thead>
<tr>
<th>P-0</th>
<th>(014)</th>
<th>(014)</th>
<th>(012)</th>
<th>(013)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(E^b)</td>
<td>G^b</td>
<td>D</td>
<td>E</td>
<td>C^f</td>
</tr>
</tbody>
</table>
```

In its earlier appearances, the (014) trichord has demonstrated its important role in unifying the work. The two (014) trichords are related by a transposition of a whole step (\(T_{10}\)): the second trichord is a transposition down a whole tone. Therefore, an invariant trichord arises in the rows, which are a whole step away from each other. For example, the first trichord of P-0 appears as the second trichord of P-2, while the second trichord of P-0 is identical in pitch content with the first trichord of P-10 (see Figure 4.12). Thus, the initial emphasis of the interval-class 2 also plays an important role in the serial structure of the piece to manipulate trichordal invariants. The serial structure in mm. 44-82 and 156-160 is based on this invariant relation.
The harmonic implications inherent in the (014) trichord serve the role of enhancing the tonal structure of the piece. The vertical presentation of the trichord Eb-Gb-D can be interpreted as a B chord with both major and minor thirds and an implied root. In the coda, this trichord forms a B dominant seventh chord with ordinals 7 (A) and 8 (B), suggesting an enharmonic augmented sixth chord in the key of Eb.

The (014) trichord permeates both the linear and vertical structure of Op. 34. Schoenberg often extracts the (014) trichord in non-adjacent order to further stress its importance. The most prevalent non-adjacent (014) is formed through ordinals 7-10-11, and 8-9-12 of the second hexachord of the row as they appear in m. 2. Throughout the work, Schoenberg projects this non-adjacent trichord through registral distribution, which facilitates continuity among different row forms.

Schoenberg also exploits the ordered partition of trichords between combinatorially related rows as a source for developing variation. In Figure 4.13, the combinatorial hexachords share two ordered trichords, which have two pitches in common as well as a pitch a whole step apart. This relationship is employed in mm. 44-59 to maintain motivic continuity in the section.

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15 See Phipps, “Harmony as a Determinant of Structure in Webern's Variations for Orchestra.”
Figure 4.13. Trichordal relation between combinatorially related rows

<table>
<thead>
<tr>
<th>Ordinals</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>P-0</td>
<td>E^b</td>
<td>G^b</td>
<td>D</td>
<td>E</td>
<td>C^g</td>
<td>C</td>
<td>A</td>
<td>B^b</td>
<td>A^b</td>
<td>F</td>
<td>G</td>
<td></td>
</tr>
<tr>
<td>I-5</td>
<td>D</td>
<td>C</td>
<td>C^g</td>
<td>E^b</td>
<td>G^b</td>
<td>E</td>
<td>A^b</td>
<td>F</td>
<td>A</td>
<td>G</td>
<td>B^b</td>
<td>B</td>
</tr>
</tbody>
</table>

Tetrachordal partitioning of the row results in two (0124) tetrachords and one (0235) tetrachord (see Figure 4.14). The essential tetrachord (0124) in Op. 34 is formed by ordinals 3-4-5-6 (D-E-C#-C) of P-0. As stated before, this tetrachord is generated through the opening dyadic gestures D-C and E-C# and functions as the structurally significant referential sonority of the work. This tetrachord is related to the first tetrachord at T_{10} and to the second tetrachord at T_{5I}. The invariant of this tetrachord appears as the first tetrachord of P-10 and the second tetrachord of I-7 (see Figure 4.15). Both vertical and horizontal emphases of the tetrachord D-E-C#-C (0124) prevail throughout the work. More importantly, the trichordal segments of the row – (014), (013), and (012) – are all subsets of the (0124) tetrachord. In other words, any of these trichords can be expanded to the (0124) with the addition of one pitch.

Figure 4.14. Tetrachordal segments of the row

<table>
<thead>
<tr>
<th>Ordinals</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>P-0</td>
<td>E^b</td>
<td>G^b</td>
<td>D</td>
<td>E</td>
<td>C^g</td>
<td>C</td>
<td>A</td>
<td>B^b</td>
<td>A^b</td>
<td>F</td>
<td>G</td>
<td></td>
</tr>
</tbody>
</table>
Throughout the piece, Schoenberg uses P-3 and I-3 extensively to articulate the essential dyads of the piece, Eb-Gb, D-C, and E-C#. Figure 4.16 shows how the row forms P-3 and I-3 highlight these motives through developing variation. The dyad Eb-Gb appears as ordinals 1 and 6 of P-3 as well as 1 and 2 of I-3. The dyads D-C and E-C# occur with some inserted tones, facilitating the possibility of developing variation.

Schoenberg also extracts the (0124) sonority through ordinals 1-2-11-12. The combinatorially related rows enhance developing variation of this partitioning. Figure 4.17 illustrates some interesting tetrachordal relationships between these rows. The (0124) tetrachord formed through ordinals 1-2-11-12 of P-0 and I-5 share two common pitches; the two other pitches are related by half step. This tetrachord of P-0 has three pitches in common with the (0123) tetrachord of I-5, and the remaining pitch of each unit
is a half step apart. The same relationship is true between the (0123) tetrachord of P-0 and the (0124) tetrachord of I-5. This property is manipulated by way of developing variation between row forms I-8 and P-3 in mm. 82-99.

Figure 4.17. Tetrachordal relations between combinatorially related rows

<table>
<thead>
<tr>
<th>Ordinals</th>
<th>1</th>
<th>2</th>
<th>11</th>
<th>12</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>P-0</td>
<td>E♭</td>
<td></td>
<td>G♭</td>
<td>F</td>
<td>G</td>
<td>D</td>
<td>E</td>
<td>C♯</td>
<td>C</td>
<td>A</td>
<td>B</td>
<td>B♭</td>
</tr>
<tr>
<td>I-5</td>
<td>E</td>
<td>G♭</td>
<td>F</td>
<td>A♭</td>
<td>E♭</td>
<td>C♯</td>
<td>C</td>
<td>D</td>
<td>B</td>
<td>B♭</td>
<td>G</td>
<td>A</td>
</tr>
<tr>
<td>Ordinals</td>
<td>12</td>
<td>11</td>
<td>2</td>
<td>1</td>
<td>10</td>
<td>9</td>
<td>8</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

In addition to the combinatorial pairs, Schoenberg also explores non-combinatorial pairs of row forms with the prime form and its inversion seven half steps up, as found between P-0 and I-7. A curious relationship between this pair may explain his choice of row forms in mm. 109-116. As shown in Figure 4.18, ordinals 3-4-5-6-7-8 of I-7 are the retrograde of ordinals 3 to 8 of P-0. It is notable that this hexachord belongs to the same pitch-class set (023457) as the remaining hexachord of the row.\(^{16}\) In this relationship, ordinals 9-10-11-12 of I-7 (Eb-F-A♭-Gb) can be understood as an expansion of ordinals 1 and 2 of P-0 (Eb-Gb), while ordinals 1 and 2 of I-7 (B♭-G) can be interpreted as a contraction of ordinals 9-10-11-12 of P-0 (B♭-Ab-F-G). It is significant that the fifth relationship of the first pitches is still maintained as a combinatorial pair.

\(^{16}\) This is one of six possible all-combinatorial hexachords.
The consecutive use of the rows RI-10 and R-3 gives him the tool for developing variation through contraction, expansion, and retrograde. The tetrachord A-B-G#-F# (ordinals 12-11-10-9 of RI-10) is contracted to A-F# (ordinals 2-1 of R-3), while the dyad Bb-Db (ordinals 10, 9 of RI-10) is expanded to Bb-Ab-Cb-Db (ordinals 12-11-10-9 of R-3). At the same time, pitches F-G-E-Eb-C-D (8-7-6-5-4-3 of RI-10) is reversed as ordinals 8-7-6-5-4-3 of R-3.

The last ordered tetrachord (0235) is identical to the sum of two minor-third dyads that are a whole tone apart. Thus, the referential dyads of the piece, Eb-Gb and
C#-E, also form this tetrachord. These dyads are contained in the last tetrachord (0235), C#-Eb-Gb-E of I-5. In m. 68, the statement of tetrachord (0235) C-Bb-Db-Eb (12-11-10-9 of P-5) brings out two interlocking dyads of a minor third through registral placement. This tetrachord is followed by the whole-tone subset (0246) E-D-Bb-C (8-7-11-12 of P-5). As shown in Figure 4.20, this whole-tone subset can be interpreted as two interlocking dyads of major thirds emphasized through the registral separation. Thus, Schoenberg creates a contrast of minor and major thirds, which share the same bottom notes C-Eb/C-E and Bb-Db/Bb-D, through the statement of two tetrachords. This passage can also be viewed as a symmetrical gesture framed by the dyad C-Bb, in which the middle dyads Db-Eb and E-D are related by a half step. In mm. 73-75, the combinatorial partner of P-5/I-10, projects the same kind of relationship.

Figure 4.20. *Hauptstimme*, mm. 68-70

As noted in the prior section, the chromatic stepwise motive performs a significant role in terms of cognitive understanding of the piece. I argue that the semitonal gesture still has the cognitive function of emphasizing certain pitches. The chromatic motive is embedded in the row as trichord 7-8-9 (012), tetrachords 6-7-8-9 (0123) and 7-8-9-10 (0123), pentachords 6-7-8-9-10 (01234) and 7-8-9-10-11 (01234), and hexachord 6-7-8-9-10-11 (012345) as adjacent elements. As presented in m. 2,
Ordinals 7-8-9-10 are often projected as a pair of vertical minor seventh dyads a semitone apart (A-B/Bb-Ab). Schoenberg also extracts the same pair of dyads from the last dyad of both combinatorial and non-combinatorial fifth related rows. Figure 4.21 illustrates that the last dyads of the combinatorial pair P-0 and I-5 form the (0123) trichord, while the non-combinatorial fifth pair (I-5/P-10) forms another (0123) trichord. Schoenberg often supports the semitonal gesture by placing these dyads in the same register. In the Fear section, the dyadic pair E-F#/Eb-F appears in the higher strand, implying the Eb centricity through the upper neighbor E.

Figure 4.21. Dyadic connection between the fifth related rows

<table>
<thead>
<tr>
<th>Ordinals</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>P-0</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>I-5</td>
<td>Gb</td>
<td>E</td>
</tr>
<tr>
<td>P-10</td>
<td>Eb</td>
<td>F</td>
</tr>
</tbody>
</table>

The above-mentioned row properties, specifically trichordal and tetrachordal invariants, serve as a basis for the developing variation and enhance the unity and comprehensibility of Op. 34. These properties assure continuity among different row forms, yet they are not the only aspect that determines the tonal content of the piece. Schoenberg tends to extract non-adjacent pitches to articulate the opening motives, rather than using ordered invariant possibilities among row forms. Moreover, he emphasizes structural referential pitch-classes and sonorities through register, instrumentation, and
continuous developing variation, which often exceed the boundary of the serial structure. In the subsequent chapters, such techniques of articulation and developing variation are examined.

**The Statement of I-0 (mm. 13-16)**

The remainder of the first thematic section states I-0 for the first time with the rhythmic and melodic profiles of the introduction and the first theme (see Figure 4.22). The first violin presents the *Hauptstimme* (mm. 13-16) with the first hexachord, employing the rhythmic figure of mm. 11-12, which was used for the second hexachord of P-0. However, due to the addition of a pick-up note, the metric accent brings out different ordinals (2-4-6) than that of the P-0 theme. Here, the metrically accented pitches C-D-Gb forms set (026). The same set is also featured as the highest registral strand C-E-Gb. Previously the retrograde of the trichord C-E-Gb appeared through the shorter durational pitches of the first theme (mm. 9-10) and it was a complementary trichord of the durationally articulated trichord (012). The tritone C-Gb becomes significant in the later part of the piece, serving as part of a C diminished seventh chord.

Figure 4.22. I-0 theme, mm. 13-16
On the other hand, Schoenberg obscures the tritone between the hexachordal division of the row with the repetition of ordinals 5 and 6 that begin the consequent phrase in m. 15. At m. 14, the flute interrupts the sustained high Gb6 with the second hexachord of I-0 followed by the first violin’s second phrase starting on the ordinal 5 (F) (see Figure 4.23). Both statements employ the triplet rhythm of mm. 6-7, previously identified with the second hexachord of P-0. In the accompaniment, the agitated rhythmic figure of the strings and winds is transferred to brass instruments and reinforced by a loud dynamic level.

Besides rhythmic coherence, the melodic semitone serves as another binding device connecting the statements of P-0 and I-0. For example, in m. 13 of the clarinet part, the dyad Ab-G (ordinals 10-12 of P-0) of mm. 9-11 now appears through consecutive ordinals 9-8 of I-0.

Despite the rhythmic and motivic continuity, the thematic character is transformed through expansion of the melodic intervals. Here the disjunct linear presentation of I-0 radically alters the relatively conjunct melodic contour of the P-0 theme (mm. 9-12). Throughout the piece, Schoenberg frequently exploits registral transfer and a shift between simple and compound intervals to create varied repetitions of the basic motives. Besides the technical reason, the contrasting new melodic contour of the I-0 theme may imply the threatening danger of destroying the essential character of the P-0 theme. This idea is also supported by the fact that the melodic contour becomes conjunct again after the catastrophic climax at m. 170.
Figure 4.23. I-0 statement, mm. 13-17
The first structural goal in m. 17 establishes a tritone dyad Eb-A in the outer voices, stressed with a *ritardando* (see Figure 4.23). Schoenberg briefly reprises the prime row in retrograde (R-0) and the tritone is presented through the first pitch of each hexachord of P-0. Because this tritone also defines the two hexachords of I-0, it represents the serial structure up to this point. The A5 in the top is reached by the flute’s rising fourth E-A, which consists of two interlocking (014) trichords E-F-Ab and F-Ab-A in mm. 16-17. This gesture consists of the retrograde of the treble part in mm. 2-3. More importantly, these trichords are formed by combining the pitches of both I-0 and P-0 (ordinals 3 and 5 of I-0 and 10 and 7 of P-0). Hence, the referential trichord (014) transcends the serial boundary. In the same measures, the non-adjacent partitioning of m. 2 is applied to the second hexachord of I-0 played by the piano and violoncello, projecting the (014) trichords Cb-Ab-G and Db-Bb-A through registral placement.

**The Second Thematic Group (mm. 18-43)**

Following the first closure at m. 17, a definite design change takes place with respect to tempo, meter, and thematic character (see Figure 4.24). The theme (in 3/4 time) assumes a waltz-like character, and the tempo is slightly increased with the marking *Mäßig aber leicht*. The change of such parameters contributes to the contrast between the first and second themes associated with a practice of the eighteenth and nineteenth centuries. The second theme has a lighter character, evoking the *Gesangsthema* of the traditional sonata form. Moreover, the first two phrases of the second theme start on Ab, establishing the traditional perfect fifth relationship with the first theme starting on Eb. The metric structure of the second theme also recalls the first theme. The conflict
between triple and duple meter in the first theme is now realized as a traditional hemiola in an alternation of simple triple and compound duple.

Figure 4.24. Second thematic group (A section), mm. 17-26
The second thematic group consists of three subsections: A (mm. 18-26), B (mm. 27-35), and C (mm. 36-43). The serial structure is based on combinatorial pairs of hexachords. In the A section, these pairs are presented simultaneously approximately every two measures to complete the aggregate (see Figure 4.25). The woodwinds (flute, oboe, and clarinet) play the main melody of I-5 and P-5, accompanied by the strings with their combinatorial pair.

Figure 4.25. Serial structure, mm. 18-26

<table>
<thead>
<tr>
<th>m.18</th>
<th>20</th>
<th>22</th>
<th>24</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Woodwinds</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I-5</td>
<td>H1/17</td>
<td>P-5</td>
<td>H1</td>
</tr>
<tr>
<td><strong>Strings</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P-0</td>
<td>H1</td>
<td>I-10</td>
<td>H1</td>
</tr>
</tbody>
</table>

Within this two-measure unit, Schoenberg produces a complex contrapuntal texture through registral shift and rhythmic variations. In m. 18, the waltz melody (first tetrachord of I-5 played by the flute, oboe, and clarinet) is accompanied by the sixteenth-note figure (the first hexachord of P-0 played by the viola, violoncello, double bass, and piano). In this statement, the tetrachordal head motive of the *Hauptstimme*, Ab4-F4-A4-G4 is echoed by the violoncello with the contour altered in m. 19 (Ab2-F3-A3-E4), forming a varied imitation separated by two beats. Then, the same canonic technique is employed for the following statement of P-5 (mm. 20-21).

---

17 H1 and H2 designate the first and second hexachords, respectively.
In the accompanimental subordinate line (m. 18), the first hexachord of P-0 in the strings appears as a compound melody Eb-F#-E (013) (ordinals 1-2-4) and D-C#-C (012) (ordinals 3-5-6) through registral distribution. These two trichords are further articulated through the timbre: the first trichord is doubled by the bassoon and the second by the horn. As shown in Figure 4.26, these non-adjacent trichords of P-0 (H1) are identical in pitch content to the two ordered trichords of the second hexachord of I-5. In I-5, the first trichord of the second hexachord is D-C-C# instead of D-C#-C. Thus, the first hexachord of P-0 is stated in a way that emphasizes the trichordal organization of I-5. In the same way, the first hexachord I-10 projects the trichords of the second hexachord of P-5 in the subsequent phrase (m. 20). On the other hand, the metric accent of the *Hauptstimme* in I-5 (m. 18) delineates the chromatic (0123) motive Ab-A-Bb-B, which has the same content as the tetrachord formed by 7-8-9-10 of P-0 (see Figure 4.27). Thus, different levels of cognitive understanding are possible according to the multiple dimensions forged through metric accent and registral placement. Through the means of non-pitch parameters, Schoenberg reinforces the close relationship between the combinatorial partners.

Figure 4.26. Isomorphic partitioning between P-0 (H1) and I-5 (H-2)
As the *Hauptstimme* repeats itself in the lower register with varied contour, m. 19 presents the first hexachord of P-0 as two vertical ordered trichords in the violins, with the D₅-C#₅ (ordinals 3-5) appearing as the bottom pitches. In the following measures (mm. 20-21), the bottom notes of the (014) trichords of I-10 (H1) continue the descent of C#₅ to C₅ (ordinals 1 to 4), forming the enlarged statement of D-C#-C first found in m. 18. Therefore, motivic coherence is achieved here by transcending the boundary of the row organization.

Despite the change in thematic character, the idea of the first theme is still reinforced in the second theme. For example, the essential feature of the first theme, chromatic descent of Eb-C is emphasized through the abstracted trichord D-C#-C, which is also an outgrowth of the opening gesture D-C. The use of combinatorial hexachordal pairs enables Schoenberg to produce the contrapuntal texture between the *Hauptstimme* and accompaniment. The Ab-B ascent of I-5 is complemented by the descent of Eb-C of P-0 (mm. 18-19), while the Ab-F descent of P-5 is accompanied by the Db-E ascent of I-10 (mm. 20-21).
The opening motive D-C is also elaborated in the *Hauptstimme* (mm. 21-26). Here, the second hexachords of I-5 and P-5 stress D4 through repetition as the lowest boundary and C5 as the goal tone, in which the first gesture D-C (m. 21) is nested in the enlarged projection of D-C. In addition, C is highlighted as the linear boundary tone of the higher registral strand with the symmetrical ascending and descending motions to E. Similarly, a major third A4-F4 is outlined in mm. 21-26 (viola and violin). As a whole, the *Hauptstimme* in the A section brings out the pitches Ab4-D4-C5 in that the Ab descends chromatically to the lower end D, which repeats with an upper neighbor Eb, reaching to the goal tone C. The emphasized pitches Ab-D-C form another (026) trichord, alluding to the I-0 statement in the first theme.

The non-adjacent trichord (014) of the opening idea is repeatedly applied as well in this section. In mm. 21-23, the registral placement of the second hexachord of I-5 in the winds extracts the trichords D-Eb-Gb and C-Db-E, which are identical in pitch content to the first two trichords (014) of P-0 (see Figure 4.28). These trichords are foreshadowed by the end of the first thematic group, with the ascending gesture E5-F5-Ab5 in the flute (mm. 16-17), which has the same interval succession (+1, +3). The same registral partitioning is employed for the second hexachord of I-10 in mm. 23-26.
As discussed under row properties, the inversionally related row forms, such as I-5/P-5, share five common tones between corresponding hexachords. Thus, the statement of P-5 is a variant of I-5, not only because of the inversional relationship of the interval content, but also the pitch elements appear in different order. Throughout the A section, this feature is highlighted because the common tones between inversionally related hexachords maintain the same register.

The B section (mm. 27-35) continues the statement of the combinatorial pairs with P-7/I-0 and I-7/P-2. In mm. 27-30, the first hexachords of P-7 and I-0 complete an aggregate. In the string section, the violins take the waltz melody and the lower strings play the chordal accompaniment. The trumpets play the subordinate melody, which is a retrograde of the main melody with a different rhythm, while the flute and oboe play the sixteenth-note figure, which is a linear unfolding of the low strings’ chordal accompaniment. As in Figure 4.29, each instrumental group completes the aggregate linearly, while the vertical dimension is also completed in every two measures. Hexachordal exchange among different instrumental groups enhances continuity and coherence through rhythmic variation. For example, quasi-rhythmic
augmentation/diminution occurs between the oboe line in m. 27 and the violins in m. 29, as well as the trumpet in m. 27 and the flute/oboe in m. 29.

Figure 4.29. Serial structure, mm. 27-30

The waltz theme of P-7 in mm. 27-28 can be understood as a variation of the waltz of I-5 in mm. 18-19. This is supported not only by the fact that they share five common tones, but also by the fact that the boundary tones (Ab-G) of I-5’s first tetrachord are identical to ordinals 5-6 of P-7, while P-7’s first tetrachord Bb-Db-A-B is an expansion of ordinals 5-6 of I-5 (see Figure 4.30).
In mm. 27-30, the primary interval-classes of 2 and 3 prevail in the musical fabric. Although the immediate surface stresses a minor third, which is predominant in the first hexachord, an interval of a major second is articulated through the vertical presentation of the (014) trichord. In mm. 27-28, the trichords formed in the lower strings (viola, violoncello, and double bass) project a melodic gesture of a whole step, which recalls the opening melodic motive of D-C. The chromatic rising and falling motion of the waltz theme, which stresses an interval of a minor third, is further articulated with the doubled glockenspiel.

In the rest of the B section (mm. 32-35), a linear statement of RI-7 and R-2 appears successively, the former in the clarinet and the latter in the bassoon. Every measure, a melodic hexachord is accompanied by its complementary hexachord to complete a vertical aggregate.

Continuity among different row forms is achieved through canonic repetitions of linear motives. Figure 4.31 illustrates motivic coherence, which overlaps the serial
structures. In m. 29, Schoenberg begins the trumpet’s retrograde statement of I-0 (H1) with ordinal 5 (F) instead of 6 (F#). The second violin in mm. 29-31 repeats the linear dyad F-F# in an octave higher, which is followed by a leap to D6-E6 (12-7 of P-7). Thus, with elements of both I-0 and P-7, the violin transposes the trumpet tetrachord F4-F#4-D5-E4 in m. 29 up an octave except for the violin’s E, which is two octaves higher. It is noteworthy that this tetrachord forms (0124), which is identical to the set formed by the opening motives D-C and E-C#.

In this passage, the leap of F#-D, always in the same register, serves as a source for developing variation. In the trumpet’s presentation of P-7 (H2) in mm. 30-31, the dyad F#-D expands to F#-F-Eb-(C)-D, with Eb functioning as an upper neighbor of D. Note that the registral isolation of C5 emphasizes a connection with the RI-7 statement in the clarinet (mm. 32-33), in which Ab is interpolated between Gb/F# and F. The ascending leap in the (014) trichord F#4-F4-D5 reverses the descending gesture D6-F5-F#5 of the violins in mm. 29-30. In the ascending motive, the opening melodic tone D (m. 1) is articulated through the duration, leap, and the upper neighbor Eb. Furthermore,

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18 David Hush also points out this connection but does not relate it to the other ensuing events. See “Modes of Continuity in Schoenberg’s Begleitungsmusik zu einer Lichtspielscene, Opus 34,” 23.
the opening motive D-C appears in the context of a chromatic descent (see Figure 4.32).
In mm. 32-33, registral isolation of E4 projects the descent of Eb5-D5-Db5-C5-B4-Bb4, which is balanced by the bassoon’s ascending motion C4-Db4-D4-Eb4-E4 (R-2) articulated by the isolated Cb5 (mm. 34-35). The semitonal gesture is prevalent throughout the second thematic section. As seen in m. 18, register and timbre stress the motive D-C#-C. The upper neighbor figure Ab-G in the previous section now becomes A6-Ab6-G6, emphasized through registral extremes in mm. 21-23.

Figure 4.32. Statement of RI-7 and R2 in mm. 32-35

By maintaining the same contour and almost identical rhythm for R-2, Schoenberg elucidates a relationship between RI-7 and R-2 (mm. 32-35). As shown in Figure 4.32, this parallel statement emphasizes two pairs of perfect fourths, D-A in RI-7 and C#-F# in R-2, through duration. It is interesting that these pairs also define the beginning of each hexachord of the combinatorial pair. Another connection is a pivot
between the ending of RI-7, A-(B)-G-Bb (ordinals 4-3-2-1) and the beginning of R-2, A-G-Bb (ordinals 12-11-10).

The most striking aspect of the RI-7 statement is the fact that the chromatic descent Eb-C of P-0 is embedded in the higher register extending to a fourth descent of Eb-Bb. R-2, then, unfolds the ascent of C-F. At a more abstract level, these chromatic motives belong to the adjacent hexachord (ordinals 5-6-7-8-9) of I-5 and I-7, respectively. Furthermore, the structural trichord Gb-F-D (014) and tetrachord Gb-F-D-E (0124) are projected by the perceived metric accent in RI-7.

In the strings, the statement of P-2 ends with the second trichord Gb-Eb-D in m. 35, identical to the first trichord of P-0, which starts on the last beat of the same measure in the violoncello and double bass. Thus, the trichord functions as a pivot chord to get back to the prime row. The highest strand in m. 31, G6-Ab6-G6 recaptures the recurring semitonal gesture, leading to Ab6 (m. 34)-A6-Bb6 (m. 35). Thus, it retraces the chromatic ascent from the outset of the first theme (G5 in m. 9), through the end of the first thematic group (A5 in m. 17), and to the end of the A section (Bb5 in m. 26). More importantly, it raises the register an octave higher than the preceding one, preparing the forthcoming B6 at the end of the Threatening Danger section.

As in the previous B section, the aggregate is completed both horizontally and vertically in the first part of the C section (mm. 36-39). On the horizontal surface, each instrumental group realizes the aggregate through the combinatorial hexachords P-0 and I-5 (see Figure 4.33). The first violins play the main melody from the second hexachord of P-0 followed by the second hexachord of I-5. A variation of the retrograde of the main
melody (P-0, H2) is stated by the horn followed by the trumpet, which plays the retrograde of I-5 (H2). The bassoon, violoncello, and double bass play the first hexachord of P-0 followed by the first hexachord of I-5. The second violin and viola complement the first hexachord of P-0 and I-5. Thus, each measure completes the aggregate vertically.

Figure 4.33. Serial structure, mm. 36-39

Section C synthesizes the rhythmic activity of the first and second thematic groups. While the first hexachords of P-0 and I-5 recall the rhythmic motive of the first theme, the second hexachords continue the rhythmic configuration of the second theme. The statement of P-0 (H1) specifically alludes to the I-0 statement in m. 13 (see Figure 4.34). Not only the rhythmic figure, but also the trichordal connection with the absolute pitches links this statement to I-0. As in the I-0 statement, metric accents project ordinals 2-4-6 forming the set (026), Gb-E-C, a trichord formerly brought out by register in the I-0 statement.
The (014) trichord also refers back to the I-0 statement. The (014) trichord, Eb-E-C is emphasized through lower register, and its pitch content is identical to the first trichord of I-0. The brass trichord E-Gb-Eb (ordinals 1-2-4 of P-0) in m. 37 anticipates the subsequent trumpet melody of RI-5, which starts with identical pitches in a different register. The accompanimental pattern of P-0 (m. 36) also brings back the semitonal motive D-C#-C in the second violin, viola, and piano.

The first major section (Threatening Danger) closes with a presentation of the P-5/I-10 pair. Just before the closure on C#2 in the bass, E1 is highlighted through extreme register, which rearticulates the opening gesture E-C#. In addition, the last gesture in the Hauptstimme (mm. 42-43) outlines the dyad E4-C#2 as the boundary tones of the second hexachord of I-10.

In summary, foreground coherence is reinforced through registral transfer and rhythmic and contour variations among subsets of each row form. Furthermore, the essential motives are enlarged over the row boundary through comprehensible use of registral placement. While Schoenberg succeeds in projecting the contrasting aspects of the second thematic group, he still builds upon the introduction and the first thematic
group, continuously articulating the principal intervals, pitch-classes, and motivic gestures within the presentation of different row forms.

**Tonal Structure and Large-Scale Voice Leading**

As stated earlier, the tonal relations found in the first two measures serve as a source for both the micro- and macro-structures of the work. Thus, repeated emphasis of the *Grundgestalt* provides cohesiveness throughout the piece. This section examines the long-range tonal structure of the Threatening Danger section, focusing on the outer-voice structure and how the tonal conflict contributes to the division within the first section.

The *Grundgestalt* in the first two measures predicted the tonal discourse of the entire section by presenting the dyad Eb-Gb as an ostinato background and the dyad E-C# as a lower end of the registral boundary. The tonal structure of the first section is characterized as a conflict between two referential centers of C# and Eb in both micro- and macro-levels. On the large-scale level, the opening dyad E-C# is enlarged in the bass, with C#2 functioning as the structural bass, which conflicts with the focal dyad Eb-Gb. Figure 4.35 illustrates that the introduction continually stresses the dyad E-C# with a voice exchange in mm. 6-7 between the outer voices, while the Eb-Gb ostinato persists in the middle staff. Here the E-C# dyad in the bass is expanded with the inserted passing tone D.

The upper voice structure of the work also facilitates the tonal conflict of C#/Eb by manifesting the dual function of Ab/G# as a dominant of C# and also as an upper neighbor of G, which in turn is the third of Eb. In the score, this duality is suggested in mm. 8-9 when the first linear theme of P-0 appears. The beginning of m. 9 strengthens
the Eb tonal center through the resolution of the tritone D4-Ab5 (oboe and flute in m. 8) into the dyad Eb4-G5 with the G acting as the third of Eb. While the neighbor motion Ab-G continues to appear in the first violin in mm. 9-10, the lowest note C#2 in the double bass imparts a possible new relationship, in which Ab is the fifth of C#, and G can function as a lower neighbor of the Ab.

Figure 4.35. Focal dyads E-C# and Eb-Gb in the introduction, mm. 4-9

The C# tonal context is also suggested by the very first harmonic implication in the piece (see Figure 4.2). In the first melodic gesture D4-C4, the suspended D
emphasizes C as the resolution tone, which with the ostinato Eb-Gb constitutes a first inversion C diminished triad, implying dominant function to C#. This harmonic entity is further reinforced in the coda through the motion of A/Bbb-Ab/G#, which suggests the resolution of the A as the seventh of the C diminished seventh chord. Hence, the dyad Eb-Gb not only serves as the tonal opponent against the dyad C#-E, but it is also part of the dominant harmony of C#.

The C#/Eb tonal conflict also contributes to the division within the first section. At the end of the first thematic group at m. 17, C#2 of the bass moves to Eb2 after the prolongation of C#2 through its lower neighbor C2 (see Figure 4.36). Here, the tritone dyad Eb-A in the outer voices can be understood as a vertical realization of the tritone relationship between the first and second hexachords of the prime row (ordinals 1 and 7). It is also suggested by the stepwise ascent in the upper staff from A3 in m. 4 to Eb4 in m. 9 (see Figure 4.35).

Figure 4.36. Voice-leading reduction of the first section (Threatening Danger)
The outer voice structure of the second thematic group implies the priority of Eb through semitonal motion (see Figures 4.24 and 4.36). In the top voice of mm. 19-21, Eb6 is stressed through the double neighbor figure Eb6-E6-D6-Eb6. The tritone D2-Ab6 in m. 22 recalls m. 8 by acting as the third and seventh of a dominant harmony, resolving to the tonic Eb. As a result, the outer voices in m. 23 give a sense of a 4-3 suspension above Eb2. In mm. 24-26, the G6 of m. 23 is transferred by voice exchange to G2 in the double bass, emphasized through the lower neighbor F#2, and then becomes the third of Eb in m. 26.

The fifth relationship Eb-Ab between the starting pitches of the first and second themes is also reflected in the outer-voices of the second group. At the outset of the second thematic group (m. 18), the tritone dyad Eb2-A5 at m. 17 resolves to Eb3-Ab4, unfolding the linear fifth relationship between the two themes. The following measure inverts this dyad as Ab2-Eb6 played by the double bass and first violin. The dyad Db2-G#4/Ab formed on the downbeat of m. 20 can be understood as the resolution of the dyad Ab-Eb, mimicking a dominant-tonic motion. This relationship is further emphasized by the double bass line Ab-Db-Ab in mm. 19-21. The temporary emphasis of C# is immediately followed by the Eb bass reinforced by the lower neighbor D in mm. 22-23. Therefore, within the Eb tonal section, the duality of C#/Eb is still reflected by the foreground gesture.

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19 Hush describes this bass motion alone as “a remarkable reference to tonal music” without discussing its structural significance. See “Modes of Continuity in Schoenberg’s Begleitungsmusik zu einer Lichtspielscene, Opus 34,” 14.
At a deeper level, the trichord Eb-F#/Gb-A/Bbb (Eb diminished triad) at the end of the first thematic group (m. 17) moves to the Eb triad Eb-G-Bb in m. 26 by resolving the F# and A. However, the resolution of the tritone is immediately followed by another tritone (E2-Bb5) because of the bass motion Eb-E. The dynamic emphasis also confirms the importance of E in this instance. Furthermore, the E functions as the goal of the enlarged stepwise ascent of C#/Db (m. 20)-E (m. 26) shown in Figure 4.36.

The first section (Threatening Danger) climaxes at m. 43, reinforcing the C# bass with the dyad C#2-B6 in the outer voices, B6 reached through the chromatic ascent from G5 at m. 9, designated motive x in Figure 4.36. A diminution of this ascent occurs in the *Hauptstimme*, in which the closing tone of the first theme, G4 in m. 12, is picked up by the chromatic ascent of the second theme, which moves from Ab to B in mm. 18-19. The pitch content of motive x (G-Ab-A-Bb-B) is suggested by the first thematic statement of P-0 (H2), in that the isolated F (m. 12) brings out the same pitch content in the different order (mm. 11-12).

Throughout the first section, the structural role of the tritone is manifested in the outer voices. The G5 in m. 9 forms a tritone with the prolonged bass C#2. At the end of the first thematic group, the tritone rises to Eb2-A5. This tritone resolves to Eb2-Bb5 as the A section of the second thematic group is concluding, but is immediately followed by another tritone, E2-Bb5. The resolution of Eb-A to Eb-Bb is forecast in mm. 7-8 of the introduction, where the semitonal gesture A-Bb appears above the Eb-Gb tremolo.

The tritone A-Eb is also manifested in the linear surface of the outer voices. For example, in the top line of mm. 17-21, the octave leap of A5-A6 is intersected by the
prolonged Eb6 in mm. 19-21. This linear tritone is also unfolded vertically between the violoncello (A2) and the first violin (Eb5) in m. 21, when the Ab in the violoncello ascends to A. In the same measure, it is inverted to Eb2-A5 played by the double bass/bassoon and first violin. The linear tritone becomes a salient feature in the developmental section, discussed in the next chapter.

Conclusion

The first section (Threatening Danger) presents two contrasting themes as in a traditional sonata structure. Both the thematic content and the tonal opposition between C# and Eb aid the enunciation of the formal division of the movement. Foreground coherence is built upon the germinal idea – the Grundgestalt. The phrase structure mostly coincides with the serial divisions, yet the essential cognitive motives and their motive-forms often extend beyond the boundary of the row structure, projected in multiple dimensions. Metric accents and registral placement unfold the chromatic motive and its complementary trichord (026) from the first hexachord, creating multiple networks of association. Registral disposition contributes to the illumination of the tonal reference implied through the outer voice structure. Although the property inherent in the row itself facilitates the foreground logic of the section, the essence of the musikalische Gedanke is forged and presented thorough the compositional choices made by Schoenberg through the means of non-pitch parameters.
CHAPTER 5

PART II, FEAR (DEVELOPMENT)

Part II (Fear) contrasts with Threatening Danger through a drastic acceleration in tempo and a change to a more developmental character. The texture of the section is characterized by the row presentations of trichordal and tetrachordal fragments in contrast to the thematic statements in the first section. The increasing tempo, ostinato rhythmic figures, dynamics, polyphonic complexity, and the rate of aggregate completion depict a sense of fear leading to the catastrophic point (m. 170) where the dynamics and tempo both reach their extreme levels.

Fear consists of six subsections according to tempo change. The tempo increases significantly from quarter note = 96 to 168 (with the marking Sehr rasch) at the outset of this section and continually accelerates in the first four subsections, reaching dotted half note = 90 (quarter note = 270)\(^1\) at the fourth subsection (m. 117). The increasing velocity relaxes at the beginning of the fifth subsection with dotted half note = 72 (quarter note = 216) where further acceleration of the tempo leads toward Catastrophe. Throughout Fear, extensive use of brass instruments contributes to the intensity and forcefulness characterizing the emotion of fear and anticipating a catastrophe.

Despite the contrasting characters separating Threatening Danger from Fear, the tonal relations set up in mm. 1-12 of Threatening Danger are continually featured in the Fear section through different row forms. Foreground logic is accomplished through the articulation of segmental invariants among row forms. This chapter focuses on the way

\(^1\) Since the note value of the beat changes, I have adopted this way of indicating its tempo.
Schoenberg manipulates the row properties to unify the foreground and illustrates how the material in Threatening Danger (exposition) is developed within the context of different row forms. Through examination of the Fear section, I hope to demonstrate that Fear and Catastrophe can be understood as a realization of an implication suggested in Threatening Danger.

Subsection I (mm. 44-81) – Part 1 (mm. 41-67)  
Serial Structure and Continuity among Different Row Forms

The first subsection is further divided into two parts. Its beginning part (mm. 41-67) presents the *Hauptstimme* in the bass with a background of the repetitive gestures of motivic fragments. As in Threatening Danger, the serial structure of Fear explores combinatorial and inversional relationships that enhance the ostinato-like texture. Invariant pitches within both the hexachordal and trichordal segments contribute to continuity among different row forms. This property is further articulated by the instrumental groupings.

As shown in Figure 5.1, different row forms appear every four measures. The bassoon, left-hand piano, and double bass play one of the hexachords as the *Hauptstimme*, accompanied by the other hexachord in the strings and right-hand piano. The accompaniment repeats the pattern every measure, with the violins and piano playing a trichord in permutated order, while the violoncello features the other trichord. The oboe and clarinet complement the *Hauptstimme* through the vertical trichord, which completes the aggregate every two measures.
Figure 5.1. mm. 44-59
Figure 5.1. (continued)
The hexachordal relationship among the combinatorial and inversional pairs projects the idea of developing variation in the *Hauptstimme*. Figure 5.2 illustrates the hexachordal relationship, in which the I-0 maps five of the six pitches of each hexachord of P-0 (except the dyad C#-F). Because of this property, the inversional relationship can be considered to be closely related as in the key relationship of tonal music. As shown in Figure 5.3, hexachordal invariants appear in the same instrumental group as the *Hauptstimme* so that each hexachordal melody serves as a variation of the previous one through reordering of the same pitch content. Because of the hexachordal invariant between the combinatorially related rows P-5 (H2)/I-10 (H1) and P-10 (H1)/I-3 (H2), the pitch content of the *Hauptstimme* shifts every eight measures in mm. 44-59. Moreover, even between the shifts of hexachordal content at m. 52 and 60, five of the six pitches are maintained because of the property between the inversional pairs I-10 (H1)/P-10 (H1) and I-3 (H2)/P-3 (H2). Schoenberg breaks this pattern at m. 64, where the hexachordal invariant no longer appears in the *Hauptstimme*; instead it is transferred to the accompaniment. Therefore, in mm. 60-67, the two hexachords in the *Hauptstimme* are not identical in content, but they are complementary and complete the aggregate.

Figure 5.2. Hexachordal relation between the inversionally related rows P-0/I-0

<table>
<thead>
<tr>
<th>Ordinals</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>P-0</td>
<td>E₅</td>
<td>G₇</td>
<td>D</td>
<td>E</td>
<td>C#</td>
<td>C</td>
<td>A</td>
<td>B</td>
<td>B₇</td>
<td>A₉</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>I-0</td>
<td>E₅</td>
<td>C</td>
<td>E</td>
<td>D</td>
<td>F</td>
<td>G₇</td>
<td>A</td>
<td>G</td>
<td>A₉</td>
<td>B₇</td>
<td>C#</td>
<td>B</td>
</tr>
</tbody>
</table>
Figure 5.3. Hexachordal invariant in the *Hauptstimme*

<table>
<thead>
<tr>
<th></th>
<th>P-5</th>
<th>H2</th>
<th>D</th>
<th>E</th>
<th>E♭</th>
<th>C♯</th>
<th>B♭</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>44</td>
<td></td>
<td></td>
<td>D</td>
<td>E</td>
<td>E♭</td>
<td>C♯</td>
<td>B♭</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>I-10</td>
<td>H1</td>
<td>C♯</td>
<td>B♭</td>
<td>D</td>
<td>C</td>
<td>E♭</td>
<td>E</td>
</tr>
<tr>
<td>48</td>
<td></td>
<td></td>
<td>C♯</td>
<td>B♭</td>
<td>D</td>
<td>C</td>
<td>E♭</td>
<td>E</td>
</tr>
<tr>
<td></td>
<td>P-10</td>
<td>H1</td>
<td>C♯</td>
<td>E</td>
<td>C</td>
<td>D</td>
<td>B</td>
<td>B♭</td>
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<tr>
<td>52</td>
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<td>B♭</td>
</tr>
<tr>
<td></td>
<td>I-3</td>
<td>H2</td>
<td>C</td>
<td>B♭</td>
<td>B</td>
<td>C♯</td>
<td>E</td>
<td>D</td>
</tr>
<tr>
<td>56</td>
<td></td>
<td></td>
<td>C</td>
<td>B♭</td>
<td>B</td>
<td>C♯</td>
<td>E</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td>P-3</td>
<td>H2</td>
<td>C</td>
<td>D</td>
<td>C♯</td>
<td>B</td>
<td>A♭</td>
<td>B♭</td>
</tr>
<tr>
<td>60</td>
<td></td>
<td></td>
<td>C</td>
<td>D</td>
<td>C♯</td>
<td>B</td>
<td>A♭</td>
<td>B♭</td>
</tr>
</tbody>
</table>

The accompaniment complements the *Hauptstimme* with the other hexachord, which is projected through the instrumentally articulated ordered trichords. As discussed under row properties, Schoenberg employs trichordal relationships within the combinatorial and inversional pairs to keep the ostinato effect among various row forms. Figure 5.4 illustrates the dyadic invariant found in ordered trichords of combinatorially and inversionally related rows. As can be seen, trichords connected by the arrow share two common pitches.
Figure 5.4. Dyadic invariant among the combinatorially and inversionally related rows

<table>
<thead>
<tr>
<th>Ordinals</th>
<th>1</th>
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<td>P-0</td>
<td>E₈</td>
<td>G₈</td>
<td>D</td>
<td>E C₉</td>
<td>C</td>
<td>A</td>
<td>B</td>
<td>B₈</td>
<td>A₈</td>
<td>F</td>
<td>G</td>
<td></td>
</tr>
<tr>
<td>I-5</td>
<td>D</td>
<td>C</td>
<td>C₉#</td>
<td>E₈</td>
<td>G₈</td>
<td>E</td>
<td>A₈</td>
<td>F</td>
<td>A</td>
<td>G</td>
<td>B₈</td>
<td>B</td>
</tr>
<tr>
<td>Ordinals</td>
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<td>B</td>
<td>G</td>
<td>A</td>
<td>G₈</td>
<td>F</td>
</tr>
</tbody>
</table>

Schoenberg carefully places these dyadic invariants in the same instrumental line to generate an ostinato effect and continuity in the accompanimental figure. As shown in Figure 5.5, the hexachord used for the accompaniment is instrumentally partitioned into two ordered trichords: 1) piano and violins, and 2) violoncello. The viola motive is extracted from both the trichords. Within the trichord of each instrumental group, two common tones are carried over to the next serial unit. For example, the dyad Ab₄-B₄ in the piano and violins (mm. 44-47) appears as Ab₃-B₃ (mm. 48-51) in the same instrumental line. Schoenberg further reinforces the connection through the absolute interval and register. For example, the semitonal gesture F#₃-F₃ in the violoncello in mm. 44-47 remains in the same register in mm. 48-51, then it appears an octave lower in mm. 52-55 (see Figure 5.1). The metric position of the motive, however, differs in each instance.
Figure 5.5. Serial organization and invariant relationships, mm. 44-67

<table>
<thead>
<tr>
<th>m.</th>
<th>Accompaniment</th>
<th>Hauptstimme</th>
</tr>
</thead>
<tbody>
<tr>
<td>44</td>
<td>P-5 (H1) 1 2 3 4 5 6 (H2)</td>
<td>Bsn. Pf. D.B.</td>
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<tr>
<td></td>
<td>A^b B G A G^b F</td>
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</tr>
<tr>
<td>48</td>
<td>I-10 (H2) 10 11 12 7 8 9 (H1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A^b B A G F G^b</td>
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</tr>
<tr>
<td>52</td>
<td>P-10 (H2) 7 8 9 10 11 12 (H1)</td>
<td></td>
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<tr>
<td></td>
<td>G A A^b G^b E^b F</td>
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<tr>
<td>56</td>
<td>I-3 (H1) 4 5 6 1 2 3 (H2)</td>
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<td></td>
<td>F A^b A G^b E^b G</td>
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<td>B^b A B C^# D C</td>
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<td>G A G^b E E^b F</td>
</tr>
<tr>
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</tr>
<tr>
<td></td>
<td>A^b B G A G^b F</td>
<td>C B^b C^# E^b E D</td>
</tr>
</tbody>
</table>

\(^2\) Although this figure draws upon that in David Hush’s article, I extend and supplement his observation in regard to the row properties and Schoenberg’s use of the non-adjacent (014) trichord. See Hush, “Modes of Continuity in Schoenberg’s Begleitungsmusik zu einer Lichtspielscene, Opus 34,” 7-15.
In mm. 60-67, the accompaniment introduces new instruments: piccolo, horns, and trumpet. Here, Schoenberg employs a different technique to ensure continuity between row forms. As indicated by the arrows in Figure 5.5, the dyadic invariant in the trichordal accompanimental pattern no longer appears in the same instrumental group at m. 60. Furthermore, starting at m. 64 connection of invariants transcends the hexachordal boundary between the *Hauptstimme* and accompaniment. At this point, Schoenberg brings back the partitioning of the non-adjacent (014) trichord found in m. 2 to maintain a link between the *Hauptstimme* and accompaniment as illustrated in Figure 5.6. The hexachord of the *Hauptstimme* in mm. 60-63 is projected instrumentally and registrally as the non-adjacent (014) trichords B-C-Ab and C#-D-Bb in piccolo and oboe, respectively. These trichords are identical in pitch content to two ordered trichords of the accompaniment (mm. 64-67) played by the violin and violoncello, respectively. By contrast, the instrumentally articulated (014) trichords G-E-Eb (violin and piano) and Gb-A-F (violoncello) of the accompaniment (mm. 60-63) are transferred to the registrally articulated non-adjacent trichords in the *Hauptstimme* in mm. 64-67. In addition, these trichords are highlighted instrumentally through piccolo, oboe, and horns (mm. 65-67).
Developing Variation of the *Grundgestalt*

The Fear section continually emphasizes referential dyads Eb-Gb, D-C, and E-C#, as well as the sonority (014) through different row forms. These factors facilitate the possibility of developing variation. Registral disposition contributes to comprehensibility by enhancing continuity among different row forms and articulating the *Grundgestalt*.

As illustrated in Figure 5.1, the focal dyad E-C# appears in the top line as Db5-E5 (clarinet in mm. 45-47) followed by the oboe’s C#5 (m. 48) connecting to the clarinet’s E5 (m. 50). The clarinet-oboe line E5-C#5-C5 (mm. 47-50) anticipates the head motive C#2-E2-C2 of the following *Hauptstimme* (bassoon and double bass) in mm. 52-53. In the following segment (mm. 60-67), the dyad E5-Db5/C# is highlighted as the highest pitch of the first violin ostinato trichordal pattern (see Figure 5.6). This dyad is expanded to the (014) trichord with the addition of F5, which is prolonged by the upper neighbor Gb5 in mm. 68-69 (see Figure 5.7). This expanded trichord is suggested already in m. 2-3, where F-E-C# (11-4-5 of P-0) forms a link between the first two phrases of the work.

Similarly, the opening gesture D-C, from mm. 1-2 is featured in the *Hauptstimme* as forming boundary tones of the second hexachord of P-5 (mm. 44-47). In the same way, the first hexachord of I-10 (mm. 48-51) yields the dyad E3-C#2 as its boundary tones. A melodic semitone prevails as well. For instance, the recurrent motion Ab-G of Threatening Danger is expanded throughout this subsection. The first violin’s G3 articulated with the viola’s gesture G3-F#3-F3 (mm. 44-45) is followed by the G#3 (mm. 48-51). In mm. 52-55, this gesture appears as G3-Ab3-G3 in the foreground, moving to the prolonged Ab in mm. 56-59. In the violoncello, the boundary gesture A-G of the
second hexachord of the prime row is enlarged as A2 (mm. 44-47) moving down to G2 (mm. 48-51). In mm. 52-55, a semitonal gesture Gb2-F2 prolongs Gb2, which returns to G2 in mm 56-59.

The rhythmic structure also emphasizes the connection with the opening material. The oboe and clarinet recall the militaristic rhythmic pattern of the accompaniment for the first theme (mm. 9-12). Although the pattern is augmented here, it is easily heard in this much faster tempo. The actual speed of this rhythmic motive is now 22% slower than that of the original appearance.

**Part 2 (mm. 68-81)**

Following the beginning of Subsection I, a gradual intensification occurs through the vigorous use of brass instruments (Figure 5.7). The *Hauptstimme* is transferred from bass instruments to treble instruments, with the bass now designated as *Nebenstimme*. In mm. 68-70, winds present the second hexachord of P-5 with the tetrachordal gesture as vertical dyads of minor sevenths that produce melodic (014) trichords. The (014) trichord C-Eb-E in the lower register refers back to the first trichord of I-0 and the second trichord of I-10. This passage can be viewed as a contrast between minor and major thirds as discussed under the row properties. The tetrachordal motive foreshadows its prominent appearance in the following subsection.
Figure 5.7. Part 2 of Subsection I, mm. 68-81
The trichordal accompaniment is now distributed to the first and second violins. Foreground logic is still observed even between rows, which are not related combinatorially or inversionally. P-5 (mm. 68-72) projects the dyadic and trichordal invariants from the previous I-8 (mm. 64-67). As shown in Figure 5.5, these invariants transcend the instrumental boundary. For instance, the registrally stressed (014) trichord A-Gb-F of the Hauptstimme (mm. 64-67) is played by the first violin (mm. 68-69), and the dyad B-Ab of the violoncello (mm. 64-67) appears in the second violin. In addition, the trichord Bb-C#-D in the violin (mm. 64-67) and piano is articulated by register in the winds (mm. 68-70).

Figure 5.8 illustrates that this part continually explores the trichordal and dyadic invariants between row forms through registral partitioning of 7-10-11/8-9-12 and instrumental ordered partitioning, both of which procedures yield the (014) trichord, a reference to the beginning measures of Threatening Danger. P-3 (mm. 78-81) closes this subsection following I-10 (mm. 73-77). Although they are not related combinatorially or inversionally, trichordal and dyadic invariants are found here. The dyad Eb6-E5 (ordinals 5-6 of I-10) in the flute (mm. 73-76) is transferred to E4-Eb3 (ordinals 5-6 of P-3) in the horns (m. 78). The higher registral strand of the Hauptstimme, A4-F#4-F4 in mm. 73-75 becomes the first trichord of P-3, F#5-A5-F4 in the flute (m. 78). This trichord further links the closing of Subsection I (Part 2) to its beginning, recalling the second trichord of P-5 in the first violin (mm. 68-69).
As in the first part of this subsection, the second part continually reinforces the idea of Threatening Danger. In mm. 71-73, the trumpet fleetingly brings back the pitch material of the second theme (P-5) with the rhythmic figure from the antecedent phrase of the first theme. Furthermore, the following statement (mm. 76-78) highlights the focal dyads D-C and E-C# by the placement in the low register in the context of the first hexachord of I-10 as shown in Figure 5.9. Both of these melodic figures dissipate under the nervous character of the accompanimental figures. The increased prominence of the agitated ostinato accompaniment and the ephemeral nature of this melodic line may suggest that fear of losing the thematic identity presented in Threatening Danger. The
fifth relationship, established between the first and second themes (Eb-Ab) in Threatening Danger, continues downward motion by fifth through the thematic statements of P-5 (Ab) followed by I-10 (Db). Throughout the Fear section, the Hauptstimme is often fragmented (usually less than hexachordal statements) and its entry is overlapped depicting a sense of restlessness.

Figure 5.9. Hauptstimme, mm. 76-78

Registral disposition further articulates the referential pitches. In mm. 64-65, the semitonal motion of vertical dyads E6-F#5 and Eb6-F5 reestablishes the referential tone Eb. These dyads as a whole form the (0123) set, which is related to the chromatic ascending line of the second theme, Eb-F, unfolded by the first hexachord of I-0 (mm. 29-30). The Eb6 maintains its position through the second trichord of I-10, C-Eb-E with the dyad C6-Eb6 being at the highest register (mm. 74-76). This is followed by the first trichord of P-3, F#-A-F (m. 78) with the dyad F#5-A5 in the top. These dyads in the higher strand form a C/B# diminished seventh chord that can be interpreted as a dominant of the referential tone C#, anticipating a more extensive elaboration later. The priority of Eb6 is further reinforced by the Fb6-Eb6 in the first violin (mm. 76-77). The status of Eb corresponds to that of A. The A5 in m. 78 leaps to A6 in m. 80. Thus, the referential
tritone of Eb-A of Threatening Danger once again resurfaces as an extended linear relation. The outer voices of the Fear section continually feature the tritone relationship in both vertical and horizontal spaces.

The first subsection of Fear closes at m. 81 with semitonal ascent in flute and first violin, A6-Bb6. This motion not only recalls the part of the ascending upper voice G-B in Threatening Danger, but also presages the same ascent toward the catastrophic B6 (m. 170). Furthermore, the bass figure in m. 81 stresses E2 as the lowest pitch forming a tritone with the Bb6, recasting the vertical dyad from m. 26.

Subsection II (mm. 82-103)

The second subsection further accelerates the tempo (half note =90 with the marking Rascher) in 2/4 time. Here, brass instruments contribute an increased level of dynamics and intensity. The tetrachordal motive from the previous subsection continually prevails. Here, Schoenberg stresses the referential tetrachord (0124) through partitioning of 3-4-5-6 and 1-2-11-12 along with the (0123) tetrachord through 7-8-9-10. The succession of 3-4-5-6 and 7-8-9-10 brings out the fifth relationship between ordinals 3 and 7. Partitioning of 1-2-11-12 is subtly suggested by the last sonority of the opening events from m. 2 where the last dyad of P-0 sounds with the sustained first dyad Eb-Gb. This partitioning fully develops in the coda (mm. 200-219). The serial structure of Subsection II is based on I-8, P-3, and I-3, which is anticipated by the last row form (P-3) of Subsection I. In mm. 82-87, almost every measure completes the aggregate. Tetrachordal connections between combinatorially related rows facilitate the possibility of developing variation. As presented in Figure 5.10, there are three pitches and
semitonal neighboring tone to one of them that form a common bond between the
tetrachord formed through ordinals 7-8-9-10 of I-8 and ordinals 3-4-5-6 of its
combinatorial partner P-3.

Figure 5.10. Tetrachordal connection between combinatorially related rows

<table>
<thead>
<tr>
<th>Ordinals</th>
<th>I-8</th>
<th>B</th>
<th>A♭</th>
<th>A</th>
<th>G</th>
<th>C</th>
<th>B♭</th>
<th>C♯</th>
<th>D</th>
<th>F</th>
<th>E♭</th>
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<td>3 4 5 6</td>
<td>7 8 9 10</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>1-8 B</td>
<td>A♭ A G C B♭ C♯ D F E♭ E G♭</td>
<td></td>
<td></td>
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<tr>
<td>P-3 B♭</td>
<td>A♭ A G♭ B C♯ D C E♭ E G F</td>
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<td>10 9 8 7</td>
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The triplet accompanimental figure from Subsection I now appears in the flute in
mm. 86-88. The first trichord F♯-A-F of P-3 refers back to the same trichord in the
violoncello of mm. 44-47 (second trichord of P-5) and mm. 60-63 (first of P-3). It is
significant that in all the instances, the semitonal gesture F♯-F is articulated through
registral proximity. Thus, the dyad A5-F#6 is stressed through the lower neighbor F6. In
the next passage (mm. 88-91), the same dyad is transferred to the outer voices of the
accompaniment as A3-Gb5 formed through the boundary pitches of I-3 (H 1) (see Figure
5.11).
In the rest of Subsection II (mm. 89-103), brass instruments bring back the primary rhythmic motive (long-short-long) in *stretto*. In mm. 89-91, the strings accompany the brass melody comprising trichordal motives from the second hexachord of I-3 with its first hexachord. Note that this passage recalls all the primary dyads Gb-Eb, D-C, and E-C♯ of mm. 1-2. The top line of the accompaniment (violin I) features the dyads Gb⁵-Eb⁵, while the second hexachord of I-3 reprises the first linear theme of mm. 9-10 (ordinals 3-4-5-6 of P-0), expanded through the inserted Bb (see Figure 5.11). The metric accent of this passage refers to the P-3 statement, which precedes and follows this event. The longer notes of the second hexachord project the (0123) motive, D-C♯-B-C, which shares common pitch content with the tetrachord 7-8-9-10 of P-3, while the A-F-G-Gb of the first hexachord delineates the first tetrachord (0124) of P-3.

In the accompaniment, the upper voice may articulate Eb⁵ as the root of Eb minor. In that context, the vertical tritone Eb⁵-A₃ can be understood as the
verticalization of the dyad Eb-A that was prominent in the upper strand in Subsection I (mm. 74-80).

Subsection II ends with the dyad F#5-E6 approached by a half step from the dyad F5-Eb6 (mm. 102-103), thus reversing the motion of the same pair of dyads found in Subsection I. The final uppermost pitch (E6) forms another tritone relation with the closing high pitch Bb6 at m. 81 in Subsection I. A chromatic ascent between these pitches can be traced in the first violin (see Figure 5.12). Bb6 is picked up in m. 92 by Cb5 (violin I), which ascends by step to Eb6 (m. 101), connecting to the woodwind’s final resolution of Eb-E (m. 103). This tritone dyad Bb-E may be viewed as a linear unfolding of the vertical dyad at mm. 26 and 81. More importantly, it moves up a half step from the linear tritone Eb-A in Subsection I, unfolding the same succession of the vertical tritones found in Threatening Danger.

Subsection III (mm. 104-116)

Up to this point, the serial structure has been built upon the combinatorial and inversional pairs, in that the first ordinal of each row outlines a descending fifth motion. Accordingly, the Eb rows (P-0/I-0 and their retrograde) progressed down by a series of fifth to the B row (I-8) (see Appendix B). This subsection breaks this pattern by exploring the non-combinatorial fifth related pairs such as I-1 (E) and P-6 (A). The tritone related rows also start appearing at the outset of Subsection III as P-7 (Bb)/I-1 (E).
As in Subsection II, brass instruments continually play the *Hauptstimme* with the primary rhythmic motive. After the introductory statement of the second hexachord of P-7, the brass announces R-7 with a fragment of the rhythmic motive (short-long) in pairs of dyads (see Figure 5.13). In the introduction (mm. 4-5) this motive appeared as a preparation for the primary long-short-long figure of the first theme. The motive leads to the long-short-long pattern featuring the (013) trichord, using non-consecutive ordinals 12-7-2 of P-6, I-5, and P-10, respectively in mm. 111-116. In the ordered row, the (013) trichord appears as the last trichord (ordinals 10-11-12). It is also formed through ordinals 3-4-5, which is the first ordered subset of the referential tetrachord (0124). In the coda, this trichord becomes prominent through statements imitated at the perfect fifth.
Figure 5.13. Subsection III, mm. 104-116
As in the (013) trichord constructed by ordinals 3-4-5, the (013) trichords (ordinals 12-7-2) in the *Hauptstimme* (mm. 111-116) still stress the primary intervals of major second and minor third as ordered intervals.

The outer voice structure of Subsection III further establishes the priority of Eb as center along with its referential partner Gb/F#. The closing E6 in Subsection II once again resolves back to a lower register Eb5, assuring the return of Eb (m. 104). In m. 112, the dyad Eb6-F5 returns as ordinals 7-8 of P-6, moving to F#5-E6 with ordinals 11-12 of I-5 (m. 114), finally resolving back to Eb6-F5 (11-12 of P-10) in m. 116. Thus, the semitonal motion between these minor seventh dyads, which were formerly presented in the context of I-0 and RI-8, are preserved across the three different row boundaries (see Figure 5.14).

Figure 5.14. Prolonged Eb in the upper register through the dyads Eb6-F5 and E6-F#5

Along with the Eb center indicated by the upper voice, this subsection initiates the prolongation of an F# bass through the dyadic invariant F#-G (see Figure 5.15). The dyad F#2-G3 formed by ordinals 8 and 6 of P-7 (m. 105) is transferred an octave lower in m. 107-108. Note that an upper neighbor Ab3 embellishes G3 in m. 105. Then, the registral relationship between F# and G is switched when I-1 presents Gb3-G2 as ordinals
5 and 6 (m. 110). In mm. 109-112, the strings present I-1 and P-6 as a wedged figure. Continuity is restored through the dyadic invariant Gb-G formed through ordinals 5-6 of I-1 and 6-5 of P-6, respectively. Furthermore, the dyad F#1-G2 in m. 111 adumbrates this dyad in the same register in the ensuing Subsection IV (mm. 117-118), where the dyad is formed through ordinals 1 and 4 of P-3. Therefore, the dyad F#-G not only establishes the prolongation of F#, but also contributes to continuity among different row forms. The extended F#/Gb eventually leads to Eb just before Subsection V (m. 122), forming the enlarged referential dyad Gb-Eb. This is a linear unfolding of the outer voice dyad F#2-Eb5 at the beginning of this section (m. 104). As observed in the upper voice unfolded through the dyads Eb-F and E-F#, Eb and F# appear as separate entities. Subsection III finally conjoins two referential pitches in both the vertical and linear structures. The prolonged dyad Eb-F in the top forms the referential tetrachord (0124) with the dyad F#-G in the bass.

Figure 5.15. Prolongation of F# through the dyadic invariant F#-G

Even more revealing is the fact that the flute features the head motive of the first theme Eb-Gb-D at T6 with non-adjacent ordinals 3-11-5 of P-7 (A6-C7-G#6) in mm.
105-107, making a large-scale connection of the tritone Eb-A. Since this passage is superimposed on the Eb5, the tritone is also formed vertically. Thus, the last uppermost pitch E6 in Subsection II has a double meaning: an upper neighbor of Eb5 and a dominant of A6. This interpretation draws upon the nineteenth-century concept of tritone equivalency or substitution as found in the idea of *Mehrdeutigkeit* (multiple interpretations) of augmented sixth and dominant seventh harmonies.³

In addition to the focal dyad Eb-F#/Gb, the other members of a C diminished seventh chord, C and A receive prominence as well. C is highlighted as the highest pitch in this subsection with the octave coupling of C7 and C6. In mm. 109-110, C7 appears as a part of the primary tetrachord D-C-C#-E (0124) formed through ordinals 1-2-11-12 of I-1. Emphasis on C is further assured by the repeated triplet figure played by the bassoon and timpani. The C in the higher register coupled with the Eb6-E6 outlines the enlarged trichord C6-Eb6-E6. This trichord appeared as the first trichord of I-0 (m. 13) as well as the second trichord of I-10 (mm. 73-76).

Pitch-class A is articulated through the aforementioned motivic reprise in mm. 105-106. Moreover, the triplet figure of the bassoon and timpani on C3 proceeds to A3 in m. 112. These events allude to Subsection I (mm. 73-80) and further support the role of the Fear section, which exhibits the opposite polarity against the C# bass that was prominent in the Threatening Danger section.

Subsection IV (mm. 117-122)

Subsection IV functions as the first climactic point before Catastrophe. It consists of two parallel phrases (see Figure 5.16). The trumpet refers back to the two essential motives Eb-Gb and Eb-A, functioning as the *Hauptstimme* in mm. 119 and 122, respectively. It is notable that A2-Eb3 is also articulated by the timpani in mm. 117-118, as a registral compression of the same tritone in Subsection III. This tritone is once again followed by the dyad E-Bb in the trombone (m. 119). The triplet figure that emphasized C and A now appears on Eb in both ends of register as Eb5 (m. 119) and Eb2 (m. 122). A5 is also stressed through duration, register, and timbre with the right-hand piano and the viola and violoncello harmonics (mm. 120-121). This A5 shapes the enlarged statement of Eb5-A5-Eb5 in the higher registral strand (mm. 119-122).

The *Hauptstimme* in the strings contrasts the chromatic motive (0123), consisting of ordinals 7-8-9-10, with the whole tone subset (0246), consisting of ordinals 11-12-7-8. The head motive C-D-C# refers back to the non-adjacent partitioning of 3-5-6 at the outset of the second theme in m. 18.

At the beginning of this subsection, the F#1 bass is reasserted by P-3. This arrival is approached by its dominant C#1 (the last ordinal of P-6 in m. 112) and C#4 (the first ordinal of P-10 in m. 116). At the end of this subsection, the F# bass finally reaches Eb2, completing a large-scale unfolding of the opening motive. Although the B6 of the cadential dyad Eb2-B6 (m. 122) reflects upon the close of the Threatening Danger section and forecasts the catastrophic climax (m. 170) as well, the Eb bass implies that the structural bass C# has not yet returned. Instead, the dyad Eb-B formed by the boundary
pitches of P-8 leads into I-0 with the identical boundary pitches in Subsection V which follows. This dyad unfolds linearly in the bass through a stepwise ascent (mm. 125-127). Of particular interest is the fact that the Eb-B motion is also outlined by the row progression of a downward fifth, which is prominent up to Subsection III. All of the emphasized referential tones in this subsection belong to the first ordinal of the employed row forms, P-3 (F#), I-0 (Eb), I-6 (A), and R-8 (Eb-B).

Figure 5.16. Subsection IV, mm. 117-122
Subsection V (mm. 123-155)

This subsection temporarily brings back several essential characteristics of the exposition (Threatening Danger) including tempo, texture, row pairs, and motivic materials. The partial return of these features conveys a sense of false recapitulation. The premature arrival of B6 (m. 122) is not only suggested by the missing structural bass C#, but also by a lack of the chromatic ascent, G-B that appeared in Threatening Danger. At the outset, the tempo slows down (dotted half note = 72 with marking of *Etwas langsamer, beruhigt*), then it gradually reaccelerates toward the catastrophic climax. Relaxation of the tempo exaggerates the acceleration toward the highest point of the piece. Subsection V opens with the viola and violoncello *Hauptstimme*, tetrachord (0124), Gb-F-D-E, in which the primary intervals of the major second and minor third are brought out registrally as Gb3-E3 and F4-D4 (mm. 123-124).

At m. 125, the melody plus the accompanimental texture of Threatening Danger (as found in mm. 9-16) returns with the melody reprising the rhythm of the first theme (see Figure 5.17). Combinatorial pairs that have been absent in the previous Subsections III and IV come back as well. In mm. 125-130, Schoenberg employs a combinatorial pair simultaneously as he did for the second thematic group of the Threatening Danger section (mm. 18-43). Here, a pair of I-0/P-7 develops the first theme into “a strange dance-like passage,” as described by Joseph Auner.  

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Figure 5.17. mm. 125-130
Despite the change in character, the registral partitioning of the first hexachord of I-0 (retrograde) emphasizes a tonal connection with the first theme through the essential dyads D-C and Eb-Gb. As in Figure 5.18, the dyad D-C appears in the higher part, while the dyad Eb-Gb is featured through the chromatic descent Gb-Eb (mm. 125-126). In addition, P-7 (ordinals 12-11) echoes the dyad D-C in different registers as D4-C4 (m. 126) and D6-C6 (mm. 126-127) (see Figure 5.17). The first violin (mm. 125-126) reestablishes the recurrent gesture Ab5-G5 of the first theme (mm. 9-12) as if it reinitiates the G-B ascent with G5 as the starting pitch. The return of the militaristic rhythmic figure in the first violin also supports the partial reprise. Although the tempo of the Hauptstimme is tripled, the speed of the militaristic rhythm that is notated in eighth notes stays the same as in its first appearance (mm. 9-15). Thus, the level of the rhythmic conformity is higher than at the beginning of the piece. Along with the dyad Ab-G the second violin yields another gesture B-A#/Bb through ordinals 4-1 of P-7, which can be traced back to the first semitonal motion in the piece (m. 2).

Figure 5.18. Registrally emphasized dyads D-C and Gb-Eb, mm. 125-126
The metric structure of the *Hauptstimme* (mm. 125-129) suggests 4/2 starting on the second quarter-note of the notated 6/4. Thus, it is out of phase with the bass line, which is grouped as 4/2 starting on the first quarter beat (see Figure 5.18). The two voice counterpoint of the first hexachord recaptures a C diminished triad as a boundary harmony (mm. 125-126), which has been given prominence throughout the Fear section and was alluded to by the first vertical harmony in m. 2.

As shown in Figure 5.19, the perceived metric accent of the *Hauptstimme* (mm. 125-129) delineates familiar trichordal and tetrachordal motives of (026), (0123), and (0124). The retrograde statement of I-0 (H1) still unfolds the (026) trichord through the longer notes Gb-D-C, recalling the first statement of I-0 in m. 13.

Figure 5.19. *Hauptstimme*, mm. 125-129

Schoenberg also explores the dyadic and trichordal invariants between the row forms P-7 and I-10 to facilitate the possibility of developing variation. As shown in Figure 5.20, the combination of the first dyad and last trichord of P-7 yields the retrograde of the first pentachord of I-10. This property is applied to the bass line in mm.129-131, in which the second phrase is a variation of the first phrase. Figure 5.21

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illuminates that the combination of the above dyad and trichord of P-7 in retrograde order
is identical to the pentachord of I-10. Furthermore, Schoenberg places the semitonal
motion Eb-E in the same register for both phrases. As a result, the gesture Eb2-E2-G3 of
I-10 in m. 131 sounds as a registral variation of the statement Eb3-E3-G2 of P-7.

Figure 5.20. Dyadic and trichordal invariants between P-7 and I-10

<table>
<thead>
<tr>
<th>Ordinals</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<td>F</td>
<td>E♭</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>I-10</td>
<td>C♯</td>
<td>B♭</td>
<td>D</td>
<td>C</td>
<td>E♭</td>
<td>E</td>
<td>G</td>
<td>F</td>
<td>G♭</td>
<td>A♭</td>
<td>B</td>
<td>A</td>
</tr>
</tbody>
</table>

Figure 5.21. Violoncello and double bass, mm. 129-131

The recapitulatory character evident in the outset of Subsection V is soon replaced
by an agitated scale passage starting at m. 132. At m. 136, with the marking
_beschleunigend_ (accelerating), the piano initiates the final acceleration with repeated
dyad F♯6-E5 formed through ordinals 12-11 of P-11 (see Figure 5.22). This dyad links to
the previous row, I-5, through this invariant dyad. The descent of this dyad to F6-Eb5
(ordinals 11-12 of RI-4) at m. 138 recasts the recurrent event throughout the Fear section
with the change of the registral position between F#/F and E/Eb. The dyadic pair of F♯-
E/F-Eb proceeds to the pair of B5-A6 (12-11 of R-4)/Bb5-Ab6 (11-12 of RI-9) in mm. 139-141. The dyad B-A may be achieved as a result of a tritone mapping of the dyad F-Eb. The semitonal motion of B-Bb and A-Ab recollects the very first semitones in m. 2 (ordinals 7-8-9-10 of P-0).

In the string *Hauptstimme*, the linear statement of the combinatorial pairs projects the fifth relationship between the first ordinals. In addition, the melody consists only of ordinals 10 to 1, unfolding the stepwise ascending and descending fifths between these ordinals. As shown in Figure 5.23, in mm. 136-137, the violin statement of ordinals 10 to 1 of R11 outlines the interval of a perfect fifth brought out through the stepwise ascent of G4-D5. It is followed by the violoncello and double bass stepwise descent of D3-G2 (mm. 138-139). The second beat of m. 139 presents R-4, in which the linear statement of ordinals 10-1 stresses the ascending fifth of C5-G5.

In this instance, each melodic statement in the strings starts with (0123) tetrachord formed by ordinals 10-9-8-7. In mm. 138-140, this tetrachord in RI-4, R-4, and R-9 consists mainly of ordinals from the first hexachord of P-0. In the case of R-4, the 10-9-8-7 tetrachord has identical pitch content with the descending chromatic motive Eb-D-C#-C of P-0.
Figure 5.22. mm. 132-148
Of particular interest is that the bassoon and viola recall the first trichord of P-0, Eb-Gb-D in the different order of Gb-D-Eb in mm. 139-140. These pitches are extracted from ordinals 3-9-8 of P-4, a partition that Schoenberg does not use elsewhere in the work. In mm. 140-141, isomorphic partitioning of 3-9-8 continues under I-9, forming the trichord Db2-F2-E2, which was first presented as F4-E4-C#4 in mm. 2-3 and enlarged as E5-Db5-F5 in mm. 60-69.

After the agitated scalar presentation of rows, the primary dyads of minor third and major second as well as the rhythmic motive (short-long) from the introduction and mm. 105-107, prevail in mm. 145-148. This passage opens with the trumpet ascending minor third F#-A with the short-long rhythm, which is followed by the descent Eb-C in the double bass. Then, the flute and violins together announce the last tetrachord of P-3, C#-B-Ab-Bb, with the registral placement articulating the two minor thirds, a melodic C#6-Bb5 and harmonic B6-Ab6. More importantly, the dyad C#6-B6 in the flute foreshadows the climactic dyad at the catastrophic point (m. 170). In mm. 147-148, the melodic ascent Db-Eb (5-8 of I-8) by the horn and harmonic D2-F2 (6-7 of I-8) reinforce the primary intervals.
Not only abstract intervals, but also referential pitch-classes are recalled in this passage. The above-mentioned short-long rhythmic gestures (F#-A and Eb-C) outline the referential C diminished-seventh harmony. Similar to the I-0 statement in mm. 125-126, the first hexachord of P-3 emphasizes the focal dyad Eb-Gb through the descending chromatic gesture Gb-Eb played by the horn and trumpet (mm. 146-147). The bass line reverses the opening melodic gesture D-C as C2-D2 in mm. 145-148. The original register of the dyad D4-C4 is maintained through the harmonic statement in the piano, viola, and violoncello in mm. 146-147.

This subsection closes with the dyad Eb-Gb engaged with the last developing variation, featuring the melody in both high and low registral extremes in the context of the combinatorial pairs of I-0/P-7 and I-8/P-3 (mm. 149-153) (Figure 5.24). The activity here may best be characterized as liquidation of the primary motive. Schoenberg defines liquidation as “gradually eliminating characteristic features, until only uncharacteristic ones remain which no longer demand a continuation.”\(^5\) Here, the characteristics of the opening motive Eb-Gb – tremolo, register, and the short-long rhythm – are stripped away, and the motive is presented as a neutral half-note figure, culminating in the outer registral lines. The rest of the musical fabric is filled with the vertical dyad recalling the militaristic rhythmic pattern. In this passage, the row entries overlap, analogous to a \emph{stretto} effect. Both the liquidation and \emph{stretto} prepare the climactic Catastrophe.

\(^5\) Schoenberg, \textit{Fundamentals}, 58. See also \textit{Models for Beginners in Composition}, 11.
The saturation of the motive Eb-Gb reconfirms the emphasis on the opposite polarity of C# that is evident throughout the Fear section. The return of this primary dyad is highlighted by the quarter-note silence in m. 149, and the arrival of the Eb2 bass links this event to that in the second thematic group (mm. 22-23) where this bass pitch was approached in the bass by D2 and in the upper voice by the descent of A6-Ab6-G6. This combination of pitches can be also traced further back to the gesture in mm. 8-9. The only difference here is that the higher strand G6 (m. 148) continues to descend to
Gb6 (m. 150). In the lower strand, the triplet iteration of D4 still forms a tritone with Ab6 (mm. 146-147); then the D is transferred down to D2 leading to Eb2.

Figure 5.25 illustrates that the chromatic descent of A-Ab-G from mm. 22-23 is enlarged in the context of different row forms. This motive is embedded in the second hexachord of P-0 as found in the first theme (mm. 11-12). The melodic descent of A-Ab first appeared in m. 2, which is further expanded to the trichord through the recurring gesture Ab-G. As stated earlier, T6 maps the recurrent dyad Eb-F in mm. 138-139 into the dyad A6-B5 in mm. 139-140, which descends to the dyad Ab6-Bb5 in m. 140. This dyad is picked up again in mm. 146-147, which moves down to the dyad G6-A5 in m. 148, completing the two parallel descents of A-Ab-G and B-Bb-A. An interruption between the two dyads Ab-Bb in mm. 140 and 146 can be interpreted through a stepwise connection with the register transfer as shown in Figure 5.25. The closing dyad A4-B3 in the percussive piano statement (m. 144) reassures the starting dyad of this descending figure in the lower register. Thus, in this enlargement, the second hexachord of P-0 in m. 22 is transformed into motive x through the replacement of F5 by A5.

Figure 5.25. Long-range realization of the motive A-Ab-G, mm. 139-148
The dyad E-F#, which functions as an upper neighbor of the dyad Eb-F throughout the Fear section and initiates acceleration in m. 136, is transposed up an octave and superimposed on the dyad G6-A5 in m. 148. This dyad progresses to the dyad Eb-Gb, which is liquidated in mm. 150-153. Then, the Gb6 in the top line serves as a leading tone to the upcoming prolonged G5 (mm. 156-159), which initiates the ascent of G-B.

Immediately before Subsection VI (mm. 153-155), the final manifestation of the motive Eb-Gb is interrupted by the dyad B4-G#4/B6-G#6 and followed by the dyad E7-C#7, thereby forming a C# minor seventh chord. This event anticipates the return of C# priority along with the climactic B6.

Subsection VI (mm. 156-169)

In the last subsection of Fear, the tempo reaches its pinnacle, with the tempo marking of Presto (mm. 156-159). The intensity is built up toward the catastrophic climax through the extreme tempo and the dense twelve-tone texture (see Figure 5.26). Here, the aggregate is completed approximately every 0.6 of a second, while it had lasted about eight seconds at the beginning of the piece. Despite the rate of twelve-tone harmonic rhythm, the actual musical texture is rather static because of the repeated figures.
Figure 5.26. Subsection VI, mm. 156-169
In this passage, all the primary intervals return with different pitch-classes in the context of different row forms. The oboe’s *Hauptstimme* iterates the minor third dyad E-G in the context of four different rows (P-1, I-4, P-3, and I-2), echoing the saturated focal dyad Eb-Gb in the previous passage. The rhythmic motive of short-long recalls the Eb-Gb ostinato in the introduction leading to the first theme, but it is presented a half-step higher in the oboe rather than the original lower strings. The obliteration of tonal references may indicate a sense of the upcoming Catastrophe. In addition to the emotional representation, however, this dyad has a crucial function to bring the G5 as the highest pitch to initiate the G-B ascent similar to that of Threatening Danger. Flute tremolo features the major second intervals Eb-F and Ab-Gb, which form the (0124) tetrachord with the dyad E-G every measure. Violins liquidate the non-adjacent trichords (014) as well as the vertical minor seventh dyad introduced in m. 2 and formed through the second hexachord of P-1, I-4, P-3, and I-2, in which the chromatic ascent of minor thirds, Bb4-Db5 and C4-Eb4 are outlined in the outer voices. The dyad C-Eb can be viewed as a retrograde of the minor third descent of the first hexachord of P-0 of mm. 9-10. The last dyad C#-Cb/B in mm. 160-163 foreshadows the catastrophic dyad at m. 170. The violoncello line exhibits a sense of D major/minor with the octave coupling of D4/D3 as a boundary tone. This D comes from the last lowest sounding pitch in the previous subsection (m. 155), which is reached by the Eb2 in the liquidation (m. 151). Thus, the D functions as both the leading tone of Eb and the upper neighbor of the forthcoming C#.
Another notable event is the appearance of the chromatic (0123) motive with pitches of the BACH motive, in which the respective first beats of mm. 156-159 spell BHCA (see Figure 5.27). The first two beats of each top trichord in mm. 156 and 158 forms the motive in the correct order, while the combination of mm. 157 and 159 reverses it. More importantly, the first two vertical sevenths in mm. 156 and 159 form the motive as well. The pitch content of the BACH motive is inherent in P-0 as the ordered tetrachord 6-7-8-9. In Op. 31, Schoenberg consciously grants this motive a structural role that encompasses the entire piece. In Op. 34, although the motive (0123) serves an equally crucial constructive element, the BACH motive and its exact transpositions are rarely found in the immediate musical surface. Therefore, it is prudent to consider it a by-product of the chromatic motive.

In mm. 160-164, I-0 continues the liquidation of the (014) trichord with the repetition of the trichords G-Ab-Cb and A-Bb-Db in two different registers (Figure 5.26). The vertical dyad Db-Cb certainly adumbrates the climactic dyad C#/Db-B/Cb at m. 170. It is curious that the statement of I-0 lacks the first two ordinals Eb and C. In the published score, the violins play a tremolo of the dyad Ab5-Cb5 (G#-B) in mm. 160-163, while in the sketch, the pitches are C6-Eb6, which would logically complete an I-0 aggregate. This deviation allows an octave doubling of the dyad Ab-Cb in the published score. Schoenberg may have chosen the G#-B for its function as a dominant pedal

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leading to the return of C#2. Another possible explanation can be made through the voice leading connection. The Ab5 in the second violin can be viewed as the part of the chromatic ascent G-B, in which Ab5 connects G5 in mm. 156-159 and A6 in m. 164.

Figure 5.27. BACH motive in mm. 156-160

As demonstrated in the previous chapter, the first section (Threatening Danger) climaxes at m. 43, reinforcing the C# bass with the dyad C#2-B6 in the outer voices, with B6 reached through the chromatic ascent from G5 at m. 9, which is designated as motive x (see Figure 4.36). The upper voice ascent can best be understood as a large-scale reflection of the local chromatic motive implied throughout the first section. The catastrophic climax at m. 170 is also marked by the dyad C#2-B6, which is achieved through motive x starting at m. 156. Here, the ascent unfolded throughout Threatening
Danger is compressed into 15 measures at the end of the Fear section, reaching Catastrophe. Thus, the Threatening Danger section anticipates the upcoming events, which are realized at the beginning of Catastrophe.

When P-0 returns at m. 164 after its long absence during the development, the trombone brings back the structural bass C#2. The second hexachord supports the ascent toward B6 through the repeated gesture A-B-Bb prolonging Bb (leading tone to B). The two melodic lines, which are formed by ordinals 6-7-8-9 and 12-11-10-9, prolong Bb; the top line emphasizes Bb through the upper and lower neighbors B and A, and both lines end on Bb. Furthermore, the first pitches of these lines (C-G) are a perfect fifth apart, anticipating the contrapuntal event in the coda.

**Large-Scale Tonal Motion in the Middle Section**

In Threatening Danger (exposition), the conflict between the referential pitches C# and Eb was delineated by the recurring events on the musical surface, both at local and global levels. The large-scale bass motion of C#-Eb-C# established a prolongation of C# with a digression centering around Eb. The highest strand unfolded the chromatic ascent of G-B, presented in this study as the culmination of the prevalent chromatic motive.

The Fear section (development) further explores the implications of Threatening Danger through tonal emphasis on Eb-Gb/F#, A and C, which form a C/B# diminished seventh chord. Thus, the ternary structure of Threatening Danger is reflected upon and expanded into a ternary (A-B-A) trajectory for the entire composition, in which the B section (Fear) strengthens the remoteness from the home C#, supported by proliferation
of the members of its dominant harmony (B#67). At the same time, Fear further clarifies
the implication of the opening dyad Eb-Gb (from the Grundgestalt announced in m. 1) as
a part of the dominant harmony of C#. Throughout this section, the bass moves away
from C#2, replaced by F#1 as the new structural bass tone, accompanied by Eb6 in the
higher register.

As was illustrated in the foregoing discussion, another structural component
noteworthy in both Threatening Danger and Fear is the tritone relationship established in
the first theme as the distance between the two hexachords of the prime row. The vertical
tritone prevalent in Threatening Danger, unfolds as a linear interval in Fear. For
example, the repeated Eb6 in mm. 73-75 is further articulated by the upper neighbor
gesture Fb-Eb in mm. 76-77 (see Figure 5.28). This prolonged Eb6 forms a tritone with
A5 (m. 78), which leaps to A6 in m. 80. The vertical dyad E2-Bb5 in m. 26 unfolds
between the closing of Subsections I and II as Bb6 (m. 81) and E6 (m. 103).
Figure 5.28. Salient outer-voice events in Fear
The higher registral line in Fear continually elaborates that in Threatening Danger. At the end of Fear (mm. 156-170), the top line compresses the ascent of G-B, which spanned the entire Threatening Danger. Despite the linear tritone connection in the upper strand of Fear, the stepwise descent from B6 at the end of Threatening Danger to G6 at the end of Subsection IV may be traced. The closing top strand Bb6 of Subsection I is picked up by A6 (m. 105) at the beginning of Subsection III, then continues to Ab6 (m. 119) and G6 (m. 122), which immediately jumps back again to B6 without the stepwise passing tones. Although the B6 in m. 122 foreshadows the catastrophic climax at m. 170, the structural bass C#2 has not yet returned. Furthermore, the leap of G6-B6 in m. 122 predicts the ascent, but the absence of stepwise passing tones suggests a false return. This apparent B6 is followed by the semitonal gesture Ab5-G5 at the outset of Subsection V (mm. 125-126), which brings the top line back to G5 as in the beginning of the first theme at m. 9. In the rest of Fear, F# is also highlighted in the top voice as the lower neighbor to G. Percussive repetition of F#6 in the piano part that begins at m. 136 leads to the highest pitch of the work F#7 in m. 148. Saturation of the dyad Eb-Gb prolongs F#6/Gb in the top (mm. 149-154). Immediately before the arrival on G5 (m. 156), the piccolo presents the dyad E7-C#7 in the high register, foreshadowing the return of the structural bass C#2. The dyad E7-C#7 is preceded by the dyad B6-G#6, with the G# moving down to G6 in the clarinet (m. 155).

The bottom line supports the top line by forming several important intervals in the composition. At the end of Subsection I (m. 81), the top pitch Bb6 forms a tritone with the lowest pitch in the bass figure E2. The last pitch of this figure F#2 anticipates the
extended emphasis on F# that occurs in mm. 104-118. Coherence between the vertical and linear musical space is often found in the Fear section. For instance, the vertical dyad F#2-Eb in m. 104 is given a linear context as the extended F#2 (mm. 104-118) reaches Eb2 in m. 122. At the outset of Subsection V, the dyad Eb-F#/Gb is presented as a vertical sonority between the bass Eb and the first pitch of the *Hauptstimme*, Gb. Thus, the false recapitulation on Eb in m. 123 reinforces the priority of Eb through the voice exchange between the two vertical dyads Eb-F#/Gb in mm. 104 and 123.

Hexachordal division of the prime row is reflected in the outer voice counterpoint of Fear. As seen in Figure 5.26, the top line unfolds the chromatic ascent G-Ab-A-Bb-B, taken from the second hexachord of the prime row. The bass motion in Fear emphasizes C#-F#-Eb-C#, which belongs to the first hexachord of the prime row. Therefore, the hexachordal division of the prime form is still reflected in the difference in pitch content between the top and bottom lines as established in Threatening Danger.

**Conclusion**

Fear continues to develop the possibilities that are latent in the *Grundgestalt*. In terms of formal function, this section delineates a sense of imbalance with the agitated presentation of the fragmented motives in place of the complete thematic idea. A feeling of remoteness is created through marginalized tonal emphasis on C# in the bass. The notion of “departure and return” of the C# bass clarifies the function of Catastrophe that recasts priority on the structural bass supported by events that reaffirm the tonal priority in both the foreground and the upper voice leading.
CHAPTER 6

PART III, CATASTROPHE (RECAPITULATION)

This chapter reveals the final realization of all the tonal implications presented in the first two major sections of the work. Catastrophe functions as a recapitulation by restoring balance through the return of the primary tones in their original registers. However, the conflict between Eb and C# is not reconciled as it would be in tonal music; instead, the conflict is reinforced through superimposition of these tones, conveying a sense of catastrophe along with a reference back to Threatening Danger. Although the dyad Eb-Gb returns in its original register at the catastrophic point (m. 170), the members of the first hexachord appear only in a vertical sonority without a return of the first theme. All the activities in the development are dissolved into a sedentary recapitulation. The homophonic texture of Threatening Danger returns and the twelve-tone harmonic rhythm slows down as does the tempo.

Part 1 (mm. 170-199)

The recapitulation consists of two parts, with the second part functioning as a coda for the entire work with the reprise of the opening materials. The first part brings back the rhythmic gesture of the first theme with different pitch content. Most of the events in the recapitulation, particularly the main melody, stay in the low register, conveying the solemn mood of Catastrophe.¹

¹ Schoenberg no longer uses the Hauptstimme designation in Catastrophe. This seems to be due to the fact that the main theme is easily recognizable with the return of the prominent rhythmic motive with the clear distinction between the main melody and the accompaniment throughout this section.
The first part of the Catastrophe section continues the texture of the end of Fear in that the second hexachord of the prime row takes the theme, while the first hexachord appears as chordal accompaniment (Figure 6.1). The missing thematic return for the first theme is compensated for through return of its essential features: its rhythmic structure and referential motives. Immediately after the catastrophic point (mm. 171-177), the theme in the bass instruments (bassoon, bass register of the piano, viola, violoncello and double bass) sums up the climactic melodic motion of mm. 164-169 through presentation of ordinals 6 to 12 of P-0. In this passage, a sense of restatement occurs with focus on C#2-E4 as the outer voices. In addition, the leap of Ab2-F3 stresses the Ab-G gesture found in the first thematic statement (m. 12). This emphasized G2 forms a tritone with C#2 recalling the first structural tritone in Threatening Danger. The rhythmic structure of the melody is a slight variation of the first theme, and it is also characterized by the alternation between triple and duple meter.

The rallentando in mm. 175-177 leads to the opening tempo with the marking of Adagio at m. 178 (see Figure 6.2). This tempo retardation occurs with a subdued dynamic level. At m. 178, the outer voice dyad C#2-E4 continues to dominate as an outer registral boundary with the statement of I-5, and with the E4 transferred from trumpet to flute. In addition, because of the hexachordal invariant between the combinatorial pair I-5 and P-0, the pitch content of the accompaniment is kept intact. In this statement, the dyad C#-G# is projected clearly unlike the employment of the same row forms in the second thematic group (mm. 18-21) where the dyad Eb-Ab was
articulated. For instance, the starting pitch Ab/G# of the theme forms a perfect fifth above the prolonged C#2.

Figure 6.1. Catastrophe, mm. 170-177
Figure 6.2. mm. 178-191
Starting at m. 178, the pitch content of the second thematic group (mm. 18-21) returns with the rhythmic structure of the first theme. The chromatic connection between the boundary tones of the ascent G-B found in Threatening Danger is less obvious here because of registral separation between the boundary tones G2-Cb3/B2 and the chromatic passing tones Ab3-A3-Bb3. Nevertheless, the (0123) tetrachord is still projected by long durational pitches. The statement of P-5 (H1), on the other hand, still stresses the chromatic descent of G#-F as in the second thematic group (mm. 20-21). Rhythmic synthesis of the first and second themes takes place here, recapturing a hemiola relationship. The flute line E4 (mm. 178-180)-Eb4 (mm. 181-183) recalls the recurrent gesture of the top line in Fear; it forms an extended set (014) with G in mm. 184-187.

The remaining portion of Part 1 (before the coda begins at m. 200) employs the same sequence of the row forms (P-5, I-10, P-10, I-3, and P-3) as found at the beginning of the Fear section. The accompanimental chord in mm. 164-183 maintains the pitch content through the hexachordal invariant among P-0, I-5, and P-5. This is similar to dyadic, trichordal, and hexachordal invariants among combinatorially and inversionally related row forms served as a binding device to enhance the foreground connection in the Fear section.

At m. 184, the accompaniment changes the pitch content as well as timbre. The mood is changed by a new instrumentation in which woodwinds replace brass

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2 It is notable that the theme at m. 178 is an exact transposition of Beethoven’s “Muss es sein” motive. In fact, in his essay, “Composition with Twelve Tones (1),” Schoenberg refers to Beethoven’s motivic transformation found in the fourth movement of String Quartet in F major, Op. 135 (1826) to demonstrate the possibility of the twelve-tone method. This similarity is pointed out by Auner in “Dialogue & Extensions.” Program notes for American Symphony Orchestra. See also Schoenberg, “Composition with Twelve Tones (1),” (1941), in Style and Idea, 220-222.
instruments, further diminishing the dynamic level. As the result of the hexachordal exchange between the melody and accompaniment, the dyad C#2-G#3 between the ostinato bass and the respective first ordinals of I-5/P-5 in the theme switches its position as the bass G#2 with C#4 (the respective first ordinals of I-10/P-10), forming a voice exchange. In this passage, the accompaniment derived from the second hexachord of I-10 initiates the prolongation of the dyad G#2-F#5 in the outer voices. This dyad forms a quasi-dominant seventh harmony of C# along with the focal dyad Eb-Gb (D#-F#).

Although the double bass reiterates the flatted third B2 in the accompanimental chord, the leading tone B#/C appears in the theme as a 4-3 suspension (Db4/C#-C4/B#) above G#2 (mm. 184-185 and mm. 187-188). This quasi-dominant harmony does not resolve, but is interrupted by the dyad G1-F2 in the bass in m. 193.

In the theme of this passage (mm. 184-191), the first hexachord of both I-10 and P-10 features the primary dyads D-C and E-C# as a variant of the first theme. In mm. 192-199, I-3 and P-3 continually highlight these dyads through developing variation procedures. As shown in Figure 6.3, the theme (second hexachord of I-3) defines the dyad C-D as the boundary tones, in which the dyad C#-E appears between them. This passage can be understood as the retrograde of the focal tetrachord D-E-C#-C with the inserted pitches Bb and Cb. In addition, P-3 features C-D-C# as the head motive for the main melody starting at m. 195. The I-3 statement projects the (0123) motive, C-Cb-Db-D through the durational accent, giving a sense of duple meter in the notated 3/4. This metrically articulated tetrachord is reordered and initiates the ensuing P-3 statement.
The accompaniment in mm. 192-199 restates the opening Eb-Gb tremolo in the viola, anticipating the full return at m. 200. The prolonged G#2 in the previous section is echoed by the violoncello as the semitonal motion G#-A3. In mm. 196-199, the gesture G#-A continues with ordinals 11 and 2 of P-3. As a result, the G# (ordinal 11) appears in
both melody and accompaniment with the ordinal 5 (E) omitted from the aggregate completion. In the low register, the piano plays one of the primary intervals, the minor seventh (G1-F2), recalling the last dyad of P-0 presented vertically in m. 2 as G2-F4. This dyad along with the Eb-Gb ostinato forms the (0124) tetrachord, which is formed through ordinals 1-2-11-12 of P-0, serving as the harmonic background of the following section (coda). The prolonged G in the bass returns to the structural bass C# at m. 200 referring back to the first tritone relationship between the outer voices in the Threatening Danger section.

The Catastrophe section may be viewed as the recapitulation because it reaffirms the tonal conflict of C#/Eb rather than resolving this opposition. Although the structural bass C#2 returns at m. 164 and continues to sound until m. 183, the conflict of Eb/C# is further reinforced through the timpani’s repeated Eb3 appearing at the first time in the piece (mm. 170-175). Throughout the first part of Catastrophe, the focal dyad Eb-Gb manifests its vital role through its presentation in rising octaves. This treatment recalls the introduction (mm. 6-8) where the dyad C#-E is highlighted through its repetition with different instruments in multiple octaves. As was stated earlier, the catastrophic point (m. 170) recapitulates the original register of Eb3-Gb3. At m. 181, Eb3 alone moves up to Eb4 played by the flute. Then, the first hexachord of I-10 introduces an unexpected melodic leap C4-Eb5 (m. 185) in a relatively conjunct melodic profile in Catastrophe. This leaping Eb recalls the I-10 statement in mm. 76-78. Along with the Eb5, F#/Gb5 is reiterated in the accompaniment (oboe and piano) in the highest strand. Eventually, the statement of P-10 in mm. 188-191 brings the dyad to the next and highest register Eb6-
Gb6, and then lowering it to Eb4-Gb4 at the end of the phrase. The last trichord Gb-Eb-F (ordinals 10-11-12) of P-10 delineates the Eb minor tonal descent due to the linear reordering, Gb-F-Eb as seen in the flute, oboe, and clarinet lines (see the top staff of Figure 6.2). The flute ends with the descent Gb5-F4-Eb4 in mm. 190-191. The dyad Eb-Gb returns to its original register at m. 193 and stays there until the end of the piece.

**Coda (mm. 200-219)**

As illustrated in Figure 6.4, the coda brings back the opening *Grundgestalt* with the contrasting gestures of D-C and E-C#, which are integrated as the tetrachord D-E-C#-C (0124). The original order of the prime row is restored here starting with the bassoon at m. 202. This tetrachord is imitated through the different instruments until m. 211. In mm. 202-204, Schoenberg augments the sixteenth-note non-adjacent (014) trichords of the introduction (m. 2) with a tremolo providing the harmonic background along with the dyad Eb-Gb. In addition, the last dyad F-G of P-0 is extended along with the Eb-Gb tremolo forming the vertical prolongation of the (0124) tetrachord in the strings (mm. 204-209). Thus, the coda illustrates Schoenberg’s concept of a multi-dimensional presentation of the idea through the saturation of the (0124) tetrachord in both dimensions of the musical space (shown in the boxes in Figure 6.4). Furthermore, the tetrachord D-E-C#-C is imitated a perfect fourth below with A-B-Ab (ordinals 7-8-10) in mm. 205-208. Schoenberg omits ordinal 9 to accommodate this relationship.
Figure 6.4. Motivic synthesis in the coda, mm. 200-219
The durational emphasis on non-adjacent (014) trichords elucidates the tonal implication manifested in the musical surface. In m. 202, the first dyad A3-B2 of the second hexachord forms a B dominant seventh chord with the dyad Eb-Gb (D#-F#). This chord can be interpreted as an augmented sixth chord in the focal center Eb. In the subsequent measure, the dyad A3-B2 resolves down a half step to the dyad Ab-Bb, emulating the common resolution of the augmented sixth intervals B/Cb-A, in which the raised fourth scale degree A3 resolves to the seventh (Ab) of the Bb dominant seventh chord. However, here the suspended tones, Gb and Eb above the Bb, never resolves. On the other hand, the melodic descent C#-C in the same measure suggests another dominant seventh chord (Ab/G# ninth) with the ninth in the bass, functioning as V9 of C#. Thus, the foreground harmonic gestures support the tonal polarity of Eb/C#.

Throughout the coda, the dyad Eb-Gb imparts a dual function, suggesting both Eb and C# centricities. As in the introduction (m. 1), the first melodic gesture D-C in the coda may be viewed as the resolution of the suspended D to C forming a C/B# diminished triad with the dyad Eb-Gb (D#-F#), implying a dominant of C# (mm. 200-201). The augmented sixth chord with the parallel dyadic gesture B-A to Bb-Ab (mm. 202-203) hints at an Eb tonality. Then, the melodic motion C#-C (m. 203) makes the dyad Eb-Gb sound like a part of a G# dominant seventh harmony (V7/C#).

The final melodic statement of the second hexachord (mm. 212-216) again isolates F through the reordering, in that F is the final melodic goal not G. Thus, the pitch content of motive x appears in such a way that the (013) motive is projected as an overlapped statement of A-B-Ab (7-8-10) and Ab-Bb-G (10-9-11).
The last three measures of the piece clarify the role of Ab, which has been ambivalent until now. Here, the outer voices imply Ab/G#4 as the fifth of the lowest tone C#2, and it is notable that both pitches are approached by a semitone in contrary motion. This cadential gesture is further fortified by a C/B# fully diminished seventh chord formed by the outer voice dyad C/B#-A with the ostinato Eb-Gb, functioning as a dominant of the referential center C# (mm 211-212). Note that this harmony contains the dyad Eb-A, which played a significant role in both foreground and middleground levels in Threatening Danger and Fear. As shown in the last three measures of the piece (mm. 217-219), only the outer voice dyad C/B#-A resolves to C#-G#, while the ostinato Eb-Gb persists in the background. This partial resolution seems to embody the idea of catastrophe. At the same time, the conflict between the tonal centers of Eb and C# refers back to Threatening Danger in that the same tonal polarity is formed.

The coda concludes the tonal process of the entire work by encompassing three levels of syntheses. Beside the motivic synthesis of the dyads D-C and E-C#, the resultant tetrachord D-E-C#-C seems to compensate for the missing first theme in the recapitulation. In addition, Schoenberg transcends the boundary between the hexachords through the imitative statement of A-B-Ab. Before the coda, there is a distinct difference in character between the first and second hexachords in terms of the intervallic content and their function as the top and bottom strands. Therefore, the (0124) tetrachord in the coda synthesizes not only the contrasting motives, but also larger formal levels of hexachords and sections (recapitulation/coda).
The question posed earlier in this study regarding Schoenberg’s concept of *Gedanke* may now be answered. The conclusion of the tonal process in Op. 34 clearly demonstrates his statement about twelve-tone music: “Composition with 12 tones related only to one another . . . presupposes the knowledge of these relationships, does not perceive in them a problem still to be solved and worked out.”3 Thus, the tonal conflict at the beginning of the work persists at the end of the work without any tonal resolution. However, tonal hierarchy is undoubtedly delineated through the non-pitch parameters such as register and partitioning, and the resolution in terms of the outer voice leading is an essential part of the *musikalische Gedanke*, projecting a sense of departure and return.

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CHAPTER 7

CONCLUSION

Throughout this study, I have demonstrated how Schoenberg’s compositional philosophy, including his notions of Gedanke, comprehensibility, Grundgestalt, and developing variation, is manifested in his twelve-tone film music Begleitungsmusik zu einer Lichtspielszene, Op. 34. In this work, the musikalische Gedanke unfolds through the developing variation of the Grundgestalt that was presented in the opening measures. Schoenberg’s realization of the prime row in the introduction sets the criteria for the tonal relations that are explored throughout the work. The local emphasis on the two primary dyads C#-E and Eb-Gb is expanded into a contrast between the first and second thematic groups. The polarity between C# and Eb is further developed into a larger span of the work as the division between the first two major sections, Threatening Danger and Fear. As was demonstrated in Chapter 5, the Fear section exhibits tonal emphasis on the opposing polarity of the primary center C#; i.e., a B# diminished seventh harmony. The dyadic gesture Eb-E that projected the Eb center of the second theme in Threatening Danger comes back in the upper strand of Fear as the interaction between the dyads Eb-F and E-F#. Catastrophe revitalizes the C# priority in the bass along with its opponent Eb.

Counterpoint between the outer voices also serves as a part of the teleological tonal processes of the musikalische Gedanke. The duality of G/Ab presented at the beginning of the first theme (m. 9) is continually elaborated and expanded throughout Fear. Then, at the closing of the work, it is finally reconciled with Ab functioning as the fifth of the C# bass. Therefore, the musikalische Gedanke of Op. 34 may be understood...
retrospectively as a conflict between the tonal centers C# and Eb, a conflict that is partially reconciled through the large-scale outer-voice motion.

Based on the observations made in this study, Schoenberg’s own statements on the twelve-tone method can be reevaluated. As he states, foreground logic is guaranteed to some extent by the constant cycle of the row. The large-scale coherence, however, is determined through Schoenberg’s compositional realization of the row through the non-pitch parameters, and it transcends the boundary of the serial structure. As John Covach differentiates between the twelve-tone background and Schoenberg’s poetics, which reside beyond the mere technical aspect of the method, I also view Schoenberg’s twelve-tone music as a body of composition in which two separate dimensions are intertwined. The serial background is usually strictly enforced throughout a piece, while what Schoenberg wants to project is not confined to the row boundary. This multifaceted environment can be expressed in terms of Schoenberg’s notion of organicism, which is reflected in his concept of multi-dimensional presentation.

Schoenberg articulates organicism in terms of the moving and functional human body as reflected in his statement: “For the work of art, like every living thing, is conceived as a whole — just like a child, whose arm or leg is not conceived separately. The inspiration is not the theme, but the whole work.” The analogy of living being can be extended to a relationship between the composer and the row as the brain and the internal organ. In our human body, the brain can control and coordinate certain movements of the components, yet many internal organs function autonomously to

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maintain life without direction from the brain. The composer has control over the way
the basic row is realized through non-pitch parameters. At the same time, once the row is
constructed for a piece, the aggregate constantly appears in a quasi-regular manner as the
operation analogous to the living function of a heart that continuously pumps the blood.
Thus, not the row itself, but the composer determines the process of *musikalische
Gedanke* by exploring the row properties. As reflected in Schoenberg’s statement, “use
the method but to compose as they composed before,”2 the twelve-tone method is a
means to materialize the *musikalische Gedanke* rather than a system which determines
the musical discourse. The opposing view on his twelve-tone method in terms of
“method vs. system” thus is understood as the composer’s choice of row realization and
the properties inherent in the row.

The frequent cycle of the complete twelve-tone aggregate may have caused some
to assert a lack of a single tonal center in the repertoire. Babbitt describes the twelve-
tone system as “permutational,” in which each collection is identified through the order
of the pitch content, while the tonal system is “combinational,” in which each key is
defined by the pitch content selected out of the aggregate. Although in his writings
Schoenberg denies a single tonal center in his twelve-tone works, another means of
hierarchy different from the traditional tonality can be formed within the “permutational”

This study has illustrated several non-pitch parameters that influence our
cognitive and conceptual understanding of the *musikalische Gedanke* of Op. 34. By

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means of register, tonal centers C# and Eb are emphasized contextually throughout the work. The *musikalische Gedanke* of the work is delineated through the departure from and return to these referential centers. Thus, coherence and unity are maintained not only through the abstract intervallic relations, but also through the contextually emphasized absolute pitches. The prime row functions as an abstract idea from which the more concrete *Grundgestalt* is forged through compositional choices. In the course of musical discourse, absolute referential pitches are repeated in the context of different row forms emphasized by registral placement and metric accent. Thus, tonal hierarchy and functional implications are still evident in Schoenberg’s twelve-tone works, and they are essential for an understanding of the *musikalische Gedanke*.

An audible musical surface is not defined by the row itself but by the referential motives derived from the row, which often transcend the boundary of the serial structure. The enlarged realization of foreground motives such as the ascending motive x (G-B) is not easily perceptible; instead it should be understood conceptually, based on Schoenberg’s idea of spiritual and subconscious hearing. Perhaps only after several careful or attentive auditions can the conceptual complexities of this music become part of a well-informed listener’s intuitive perception.

Metric accent has a more direct effect on our cognitive understanding than the extended voice leading found in the outer voices. Perceived metric accent, established by the rhythmic motives (long-short and short-long), articulates the referential pitch motives, facilitating a connection among different row forms. One of the most prominent motives
in Op. 34 is the chromatic stepwise gesture, supporting a cognitive understanding of the musical idea through coherence between the micro- and macro-structures of the work.

As this study has demonstrated, Schoenberg’s realization of the row is based on the tonal thinking of eighteenth- and nineteenth-century practices. Registral disposition that facilitates the significance of the outer-voice motion, recurrent rhythmic motives, contrast between duple and triple meter, stepwise melodic gesture, and frequent use of the fifth and tritone relationships are all features of past tradition. For Schoenberg, tonal tradition is an integral part of his compositional thought. Contrary to the common belief that serialism and tonality are reconciled in Schoenberg’s later twelve-tone works, the analysis of Op. 34 has shown that his way of realizing the row is rooted in the traditional aesthetics of tonal composition even in his pre-American works. Schoenberg’s compositional philosophy discussed in Chapter 2 is an invaluable tool to understand his twelve-tone music.

In Op. 34, different levels of cognitive understanding are possible according to the multiple dimensions forged through metric accent and registral placement. The dichotomy latent in Schoenberg’s notions of Gedanke and comprehensibility is reflected in the two dimensions: the cognitive foreground forged by metric accent and its enlarged realization in the deeper level. Although the Schenkerian approach is useful for understanding Schoenberg’s notion of the multi-dimensional space that exists beyond the immediate musical surface, Schenker’s particular notion of voice leading is only one of many dimensions that are parts of Schoenberg’s conception of musikalische Gedanke.

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After one has examined the primary source – i.e., the music itself – one can make a discerning evaluation of the composer’s individual writings. Many of Schoenberg’s statements on the twelve-tone method may be understood as a reaction and defense mechanism against numerous criticisms regarding the validity of the method. Despite Schoenberg’s denial of tonal hierarchy in his twelve-tone music, his realization of a row in the compositions themselves delineates functional implications through non-pitch parameters. This study has also demonstrated that the *musikalische Gedanke* of Op. 34 transcends the boundary of the serial cycle, and as such constitutes what Schoenberg wants us to see: “What it is” rather than “how it is done.” The juxtaposition of physical vs. metaphysical and immediate vs. transcendental spaces may have originated from his preoccupation with both musical tradition and progress. His notion of musical progress continuously draws upon the eighteenth- and nineteenth-century tonal tradition.

**Emotional Content and Program**

The emotional trajectory of the piece is articulated through combination of the pitch relations inherent in the row complexes with non-pitch materials such as rhythm, tempo, register, instrumentation, and dynamics. In the middle section (Fear), intensity of fear increases when brass instruments take over the essential rhythmic motive along with the accelerated tempo, dynamics, and progressively intricate polyphonic texture. A sense of fear is also represented by the agitated fragmentary statement of the row. Emotional content can be associated in terms of the relationship between the row organization and the motivic return. For example, the catastrophic point (m. 170) can be understood as a return of the basic set P-0 without familiar motivic material. This may be viewed as
analogous to a false recapitulation or discrepancy between tonal and motivic arrival in the traditional sonata form of the eighteenth and nineteenth centuries.

The emotional content is also related to certain pitch content. For example, the hexachordal division of the prime row provides a source for the two-voice structure of the work. The first hexachord often appears in the lower register to provide bass support. By contrast, the second hexachord supplies the upper part. The build-up toward the climactic catastrophe emphasizes the second hexachord of the prime row. Immediately before the catastrophic point (m. 170), the prime row returns without the thematic statement of the first hexachord. In other words, the second hexachord takes the role of thematic presentation, while the first hexachord is subjugated to a chordal accompaniment. The point of catastrophe also coincides with the structural point of liquidation of the first hexachord. The first thematic statement never returns in its original manner, but only in its varied form. This may be interpreted as an emotionally charged example of liquidation.

As Dahlhaus and Hush state, Op. 34 indeed consists of various episodic sections, but it has a clear sense of teleological musical discourse, as I have illustrated in this study. Two different constructive elements work together to shape the trajectory of the piece; one is the design of the piece designated by the subtitle, which divides the work into three sections, another form generating force is the Grundgestalt principle realized through developing variation. As stated earlier, the structural division coincides with the emotional content. Therefore, not only through descriptive means such as dynamics and
tempo to depict the emotional content, but more importantly through the *musikalische Gedanke*, one can perceive the essence of the piece in a more complete way.

Despite the fact that his notion of *Gedanke* may entail extra-musical elements that reside beyond the idea of purely musical relations, plus the fact that a number of his works are inspired and based on the programmatic elements, Schoenberg’s aesthetics lie mostly in the realm of strict musical expression.\(^4\) In one instance, Schoenberg regards an act of composition as an expression of a composer’s own problem:

> [I]t has always been my belief that a composer speaking of his own problems, speaks at once of the problems of mankind. But he does it in a symbolical way, without having been able, up to now, to develop definite vocables [a defined vocabulary], expressing matters of philosophy, economy or problems of labour, society, or morals.
> Thus the ‘release of the creative spirit’ is always the subject of music and, subconsciously perhaps, the motive of every composer, regardless of his standard. Whether his is a high or a low mind, whether his thinking is sublime or even vulgar, whether his style of expression is complex or simple - always will he present his share.
> There is then, of course, only the possibility that one of my works is to be played and to let the audience find out for themselves what province of feeling and thinking has been touched by that which a composer can tell them.\(^5\)

In a deeper sense, the composition of Op. 34 may be understood as an embodiment of Schoenberg’s subterranean manifestation beyond a mere experimental project as accompanimental music for a film scene. Straub/Huillet’s film is their own visual interpretation of the program of Op. 34 as Schoenberg’s personal reaction against the social and political problems of the rising time of anti-Semitism. Their interpretation may be feasible considering the fact that numerous other works of Schoenberg were

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\(^4\) For an extensive discussion on Schoenberg’s programmatic works, see Walter B. Bailey, *Programmatic Elements in the Works of Schoenberg*.

motivated by his own identity as a Jew; nonetheless, for Op. 34 there is no proof that Schoenberg was inspired by his feelings toward any social events of his time.

Schoenberg achieved a higher unity of structural and emotional contents through the composition of Op. 34, in that he raised the standard of film music to another level.

In Op. 34, registral disposition and metric accent contribute to the teleological tonal process (*musikalische Gedanke*), which elucidates the formal structure of the work despite its episodic character. While it is not certain whether Schoenberg wrote this piece to express his own concern toward society or to experiment with writing for the new medium, this study has demonstrated that the unifying structure aids in comprehending both musical and emotional contents. The musical structure—with the tonal relation implied at the opening, realized in the course of the work, and reflected upon at the end—is analogous to the emotional progression suggested by the subtitle. In Op. 34, Schoenberg succeeded in synthesizing his notion of “heart and brain” and “style and idea,” preserving his *musikalische Gedanke* in a new musical style. Furthermore, the recurrent tonal relationship of the perfect fifth affirms Schoenberg’s historical connection to the eighteenth- and nineteenth-century tonal tradition even in his new compositional method. With the composition of Op. 34, Schoenberg confirmed his precepts: “An idea can never perish,”⁶ and “Everything of supreme value in art must show heart as well as brain.”⁷

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⁷ Schoenberg, “Heart and Brain in Music,” (1946), in *Style and Idea*, 75.
APPENDIX
A. Matrix for *Begleitungsmusik zu einer Lichtspielszene*, Op. 34

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- **Combinatorial pair**
- **Non-combinatorial pair in 5th**
I. Schoenberg’s Writings


II. Sources

III. Reference to Op. 34

A. Articles


B. Dissertation


C. Program Notes

IV. Secondary References Related to this Study

A. Books


B. Articles


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______. “Schoenberg’s Turn to an ‘Other’ World.” Music Theory Online 1/5 (September 1995).


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C. Dissertations


