A CRITICAL EXAMINATION OF SCHENKER'S
THEORY OF LINEAR PROGRESSIONS

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
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By

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*****

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DEDICATION

To Patricia, whose unwavering patience and willingness to sacrifice of herself never fail to amaze me. This dissertation is as much hers as it is mine, for without her strength it would not have been possible.
ACKNOWLEDGMENTS

I wish to express my profound gratitude to Gregory Proctor, whose ideas and insights influenced the writing of this dissertation to an extent far greater than is apparent from the few direct references to his work contained in it. He has helped shape not only my thoughts about Schenkerian theory, but my understanding of music in general. It is clear to me that even those ideas that I would claim as my own would not have been possible were it not for professor Proctor’s guidance and understanding.

I also wish to thank my parents, Madeline and Edward, who encouraged me to study music and who have supported me without question in my educational and professional pursuits.
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The concept of the linear progression is one of the most important principles in Schenker's theory of tonal structure. Yet, nowhere does Schenker present a single, comprehensive definition that accounts for both upper-voice and bass linear progressions occurring at all levels of structure. In this dissertation, a definition is proposed that interprets linear progressions as a connection between two voices of different structural rank. The structural inequality between the two voices distinguishes a linear progression from a line, whose boundary tones are of equal status. Based on this structural relationship, guidelines are proposed for determining when one of the boundary tones of a progression has been transferred to a new register, which in turn provides a mechanism for distinguishing between inverted progressions and those in their original form.

Schenker makes no provisions for the completion of upper-voice linear progressions in the bass, nor vice versa. A structural model is proposed in which the bass generates its own "inner voices" that are distinct from the inner voices of the upper parts, i.e., the alto and tenor. This results in the concept of separate "linear spaces" for the upper parts and for the bass, wherein each outer voice of the fundamental structure serves as the source of linear progressions in its own "linear space."
A set guidelines governing the formation and interaction of linear progressions on different levels of structure is proposed. Within each linear space, each level restricted to having a single moving linear progression at any given time. Schenker's two-part fundamental structure is compared with a model that allows for more than one structural upper voice. Schenker's concept of leading and following progressions is examined in light of the definition of linear progressions presented in this dissertation. Finally, the role of the fundamental structure is redefined as specific means by which the conditions necessary for the existence of linear progressions are established.
CHAPTER I
INTRODUCTION

Interest in Schenker’s theory in the United States has steadily climbed since the introduction of his ideas to this country over a half century ago, and particularly since the publication of the English translation of Der Freie Satz. In recent years Schenker’s ideas have had as great or greater an influence on the development of music theory in the United States than those of perhaps any other theorist.

It is well known that Schenker dictated much of Free Composition to his wife. As Oster points out in the preface to the English edition, one consequence of this is that “. . . the general effect often remains that of spoken language with its inevitable omissions and poorly chosen words.” This, coupled with Schenker’s parsimonious presentation of highly complex theoretical concepts, often renders his explanations incomplete and difficult.


2 A full bibliography is not included in this paper, since Schenkerian theory covers a wide range topics, many of which are not directly related to the issues considered here. The list of references at the end of this dissertation contains only those works that are directly cited throughout the course of the paper. For a more comprehensive listing of writings on Schenkerian theory, see David Beach, “The Current State of Schenkerian Research,” Acta Musicologica 57 (1985):275-307; and David Beach “Schenkerian Theory: Bibliography,” Music Theory Spectrum 11.1 (Spring, 1989):3-14.

3 Schenker, Free Composition, xii.
to fully grasp, leaving plenty of room for speculation as to their exact meaning. This dissertation examines Schenker’s theory of linear progressions, the importance of which has yet to be fully explored, largely due to its less-than-precise explication. Much of the discourse centers around Schenker’s written comments regarding the concept, the most extensive presentation of which appears in *Free Composition*. The goal here is to propose an interpretation of linear progressions that is internally consistent, as well as being compatible with other concepts that make up the whole of Schenker’s theory of tonal structure.

Still, the focus remains on linear progressions throughout this paper. The role of lines or diminutions is not examined in detail. This is not intended as a valuation in any sense. And even though terms such as “principal” and “subordinate,” or “higher-ranking” and “lower-ranking” are used in connection with certain events, they describe only the structural place and function of the those events relative to each other, rather than assessing their importance. I consider all events that make up the whole of a composition, from the shortest grace note to the largest linear connections, to be of equal importance.

The view of linear progressions put forth in this paper necessitates the recasting of certain aspects of Schenker’s theory. In particular, a definition of linear progressions shall be proposed that does not view the fundamental structure as paradigmatic. Instead, Schenker’s first-order progressions are taken to be the prototype. This is a significant departure from Schenker’s view of the role of the fundamental structure, which has generally been accepted with little question. Still, it is a necessary deviation given the numerous differences between the forms of the fundamental structure and linear

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4The terms “linear progression” and “line” are defined in appendix A.
progressions, especially those occurring in the later levels of the middleground. It will be argued that the fundamental line differs sufficiently from linear progressions as to suggest that it is not a linear progression at all, or at least not in the same sense as are those progressions occurring in the middleground. In light of this, the role of the fundamental structure shall be redefined as being the means by which the conditions necessary for the existence of linear progressions are established, and ultimately, as the bridge between nature and art.

Viewing first-order progressions as paradigmatic makes possible the formulation of a definition that accounts for upper-voice progressions and bass progressions alike, and which is equally applicable to all progressions regardless of the level of structure on which they occur. It also allows for the creation of specific guidelines for determining when one of the boundary tones of a progression has been transferred to a new register. This, in turn, reveals when a progression is inverted and when it appears in its original form, a determination that bears directly on the functional meaning of a progression and the decision as to the level on which it resides.

The essential characteristics of bass progressions are the same as those of upper-voice progressions. Still, it is useful to consider bass progressions separately for several reasons, some of which are listed below, while others will be presented later. First, one of the primary tasks performed by the bass is to project chord roots; as such, the bass is unique among all voices in its capacity to function both melodically and harmonically. Second, since the bass is usually the lowest voice, it cannot receive the type of contrapuntal support that it provides the upper voices. Finally, I will suggest that the bass generates its

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5Beginning with the second level, all of the remaining levels of the middleground Schenker calls the later levels. For a detailed discussion of the relationship of the middleground levels to one another, see Gregory Proctor and Herbert Lee Riggins, "Levels and the Reordering of Chapters in Schenker's Free Composition," *Music Theory Spectrum* 10 (1988): 102-126.
own “inner voices” that are distinct from the inner voices of the upper parts. That is, the “alto” and “tenor” properly belong to the upper parts while the bass generates its own inner voices. As a result, linear progressions originating in the bass are to be kept separate from those originating in the upper parts. And although Schenker nowhere expressly prohibits the interaction of upper-voice linear progressions and those originating in the bass, several of his statements in *Free Composition* suggest at least a tacit adherence to this idea. From this emerges the concept of separate “linear spaces” for the upper parts and for the bass.

Schenker’s theory is based on a fundamental structure that assumes a single structural upper voice. I shall consider the theoretical basis for and the structural implications of a fundamental structure that allows for two (or more) structurally equivalent upper voices. Both positions will be examined with particular attention given to their consequences for linear boundaries. A set of guidelines for the formation and interaction of linear progressions on different levels of structure shall be proposed that includes, among other things, a consideration of Schenker’s concept of leading and following progressions.

***

The concept of the linear progression is one of the foundational principles upon which Schenker’s theory rests, and represents the principal means of generating content. Through the linear progression new voices are introduced, which were previously not directly tied into the structure of a composition, or which existed only as potential inner voices. Each member of a linear progression can assume the role of progenitor, spawning new events and achieving new registers and levels of structure, thereby providing still further opportunities for the generation of content.

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*6 The relationship between the inner voices and the fundamental line are discussed in detail in Chapter II, beginning on p.38.*
It is not surprising then that Schenker views the linear progression as the "primary means of coherence" throughout the transformational levels of the middleground. What is surprising is the paucity of attention this vital structural principle has received in the Schenkerian literature. At least part of the reason underlying the absence of any systematic, formal examination of linear progressions has to do with the nature of Schenker's comments concerning the concept. In Free Composition, as well as in other of his writings, Schenker describes the features of linear progressions occurring at different levels of structure, but nowhere does he present a single, comprehensive definition that holds true for all linear progressions regardless of the voice or level in which they occur. And while linear progressions occurring on different levels often share common features, the absence of a uniform set of criteria for determining precisely what constitutes a linear progression has allowed researchers to seize upon one or another of these features as the essence of the linear progression, while ignoring the rest. The result is a general lack of agreement among scholars as to what distinguishes linear progressions from lines.

Even more problematic than Schenker's descriptions of linear progressions is that, in his desire to demonstrate an "organic" link between the fundamental structure and the linear progressions of the middleground, Schenker strongly implies that the fundamental structure is the model for all linear progressions. For example, in discussing the closure of linear progressions he states:

Descending fifth-progressions come to an end only when they reach the fundamental tone (and not in the middle of the progression, at the third, even if a change of harmony occurs there). This is a natural outgrowth of the fact that all fifth-progressions are modeled after the fundamental line, which, regardless of its division, closes only with 7.7

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7Schenker, Free Composition, 77-78.
Similarly, in his discussion of the characteristics of first-order progressions, he states:

The relationships between the new upper voice of the linear progression and the new bass must be clearly defined, exactly as in the case of a fundamental structure.\(^8\)

He then refers the reader to the following passage, presumably to clarify the nature of the relationship between the new upper voice and the new bass.

If after the dissonant the asserts itself as a consonance—as a tenth or third above the root—the semblance of a subdivision immediately arises. In this context the first part of the fundamental line has more the effect of a transiently filled space of a third; it is not quite like a linear progression of a third that is worked out with the help of a counterpointing bass progression.\(^9\)

Thus, Schenker suggests that a linear progression requires the contrapuntal support of the bass. This has led some authors to propose that each member of a line must receive contrapuntal bass support in order for it to be considered a linear progression.

As the term implies, a linear progression is a stepwise succession of notes. Although the fundamental line is always descending, a linear progression may occur in either direction, and need not span the same interval as the fundamental line. Normally each note of a linear progression is harmonized. This last fact distinguishes the linear progression from the stepwise diminution.\(^10\)

Aside from the obvious problem that the requirement of contrapuntal support presents in connection with bass progressions, two of Schenker’s three forms of the fundamental structure fail to satisfy this requirement without reference to some later level. The fundamental line descending from contains two notes which receive no contrapuntal support from the bass, while the fundamental line from presents an unsupported stretch of five notes. It is therefore questionable whether the essential feature of a linear

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\(^8\)Ibid., 44.

\(^9\)Ibid., 20.

progression is a trait not shared by the three purported models for all linear progressions, the forms of the fundamental structure.

Schenker's view of the fundamental structure as paradigmatic has given rise to other assumptions concerning linear progressions as well. Most notably, the idea that the boundary tones of a linear progression must belong to a single harmony at some level or stage has been widely accepted.\textsuperscript{11} Each form of the fundamental structure represents a self-contained unit that is ultimately expressive of a single harmony, the tonic. It is reasonable then to assume that the linear progressions of the middleground, if they are modeled after the fundamental structure, are also expressive of a single harmony. This has led to a conception of Schenker's theory as being predominantly harmonic in nature. However, as Carl Schachter notes, "the widespread idea that for Schenker music is basically harmonic is, at best, an oversimplification."\textsuperscript{12} Nonetheless, Schenker himself seems to encourage this line of thinking throughout \textit{Free Composition}, and elsewhere.

We recognize in the dissonant passing tone the most dependable—indeed the only—vehicle of melodic content. While in first species the melodic line still unfolds laboriously, chord by chord, in second species we see it move ahead within the framework of a sustaining vertical sonority. Therefore even two-voice counterpoint shows the beginnings of melodic \textit{composing-out}—that is, the \textit{simultaneous development of the same single harmony in both vertical and horizontal directions}.\ldots\textsuperscript{13}

Schenker does allow for the possibility that the boundary tones of a progression may reside in two different chords: "Descending linear progressions in the upper voice

\textsuperscript{11}I borrow the distinction between stage and level from Proctor and Riggins, \textit{Levels and Reordering}: 104. In short, the background, middleground, and foreground are stages. Levels occur only in the middleground stage.


signify a motion to an inner voice of the same or a subsequent chord..."14 This provision has far-reaching consequences for the formation of linear progressions in general, and particularly for those occurring at later levels of structure. Still, it is important to note that Schenker does not treat the concepts of "harmony" and "chord" as synonymous, the latter representing the compositional realization of the former.15

Harmony undoubtedly plays an integral part in the formation of linear progressions, although there is hardly a consensus as to precisely what its role is. This is perhaps no more evident than in the following exchange. James Marra, in his review of the Forte and Gilbert text, follows the authors in distinguishing between upper-voice and bass linear progressions on the basis of the harmonic membership of the boundary tones of the progression. However, the guidelines he proposes for bass progressions are in direct opposition to those which Forte and Gilbert propose.

The interval spanned by a linear progression will be a component of a harmonic function relevant to the context. The test for the validity of a linear progression rests, therefore, on whether the interval between its starting and ending points agrees with the harmonic goal of the passage.

With respect to linear progressions in the bass, the crucial distinguishing factor is that the interval spanned by such a progression cannot correctly be verticalized under normal circumstances. . . . Thus the difference between the two

---


Any simultaneously operating collection of pitches constitutes a chord, or at least a simultaneity (Zusammenklange). Chords are the result of the application of the operations of counterpoint. A harmony, on the other hand, is the abstraction of the pitches of some chord into a pitch-class collection for the purpose of establishing boundaries for the subsequent generation of new pitches and chords. . . . Musical presentation of more than one part at a time depicts pitches and displays counterpoint. A harmony, as an abstraction, literally appears nowhere in the piece but is represented by pitches in the counterpoint.
main categories of linear progressions, upper voice and bass, resides in the simple fact that the bass supports, while the upper voices are the ones supported.\footnote{Forte and Gilbert, \textit{Introduction}, 237-40.}

Marra counters,

It may be pointed out that one difference between upper-voice and bass linear progressions is that in the former both boundary notes must agree with the harmonic goal of the passage and receive harmonic support. In the latter, only the final note must agree with the harmonic goal.\footnote{James Marra, review of \textit{Introduction to Schenkerian Analysis}, by Allen Forte and Steven E. Gilbert, in \textit{Music Analysis} v.2 No.3 (October 1983): 285.}

While this is just one instance of contradictory criteria for linear progressions, it illustrates the larger problem of the absence of a method for distinguishing linear progressions from lines that is equally applicable to both upper-voice and bass progressions. I shall compare Schenker's comments concerning linear progressions occurring at various levels of structure with those of other writers on the subject. In doing so, the validity of some long-held assumptions concerning the nature of linear progressions shall be examined more closely. Those characteristics that are common to all linear progressions shall be utilized as the basis of a comprehensive definition.
CHAPTER II
CHARACTERISTICS OF LINEAR PROGRESSIONS

Although linear progressions can possess unique characteristics as a result of the level on which they appear, there are features common to linear progressions at all levels of structure.\(^1\) In order to isolate these traits, each of Schenker’s characterizations shall be considered separately, beginning with his comments concerning first-order progressions.

Characteristics of First-order Progressions as Presented in *Free Composition*

Example 1. Figures 33 and 34 from *Free Composition*.

\(^1\)This discussion pertains only to upper-voice progressions. Linear progressions in the bass will be considered separately beginning on p.51.

Schenker differentiates between the levels of the middleground on the basis of their order of generation. Hence, the first level of the middleground results from some operation performed on the content of the background, the second level results from operations performed on the content of the first level, and so on. In this way, each level is derived directly from the material contained on the immediately prior level. The term "prior" is defined in Appendix A.
An ascending or descending linear progression of the first order must, by definition, be related to a tone of the fundamental line. This can be any fundamental line tone. In the case of a descending line, the fundamental line tone will be the primary tone, the point of departure; in an ascending line, it will be the goal tone.\(^2\)

As a result of the continuing presence of the primary tone ... a descending linear progression of the first order which departs from a tone of the fundamental line involves a progression from the upper voice to an inner voice; in the case of the third-progression, to the closest inner voice; in the case of a fifth-progression, to the second inner voice. The linear progressions present a horizontalization of the originally vertical intervals of the fundamental structure: 3 (10), 5. They form a new upper voice, which can only be understood as an offshoot of the fundamental structure.\(^3\)

From these descriptions, the criteria for descending linear progressions of the first order can be summarized: the progression must occur between two voices, the fundamental line and some inner voice, with the boundary tones of the progression indicating the specific inner voice involved; there must be a prior level or stage, in this case the fundamental structure, at which the boundary tones of the progression reside in separate, independent voices; since the boundary tones represent a horizontal projection of the originally vertical intervals of the fundamental structure, the progression itself is expressive of a single harmony; and finally, the new upper voice created by the linear progression is to be understood as an offshoot of a previously existing voice, the fundamental line.

To this set of criteria may be added the requirement that all linear progressions contain passing motion. "The linear progression always presupposes a passing tone; there is no linear progression without a passing tone and no passing tone without a linear progression."\(^4\) It is by means of the passing tone that linear progressions generate

\(^2\)Schenker, *Free Composition*, 43.

\(^3\)Ibid., 44.

melodic content; "... a linear progression is, above all else, the principal means of creating content in passing motions, that is, of creating melodic content."\(^5\)

Schenker permits two types of ascending first-order linear progressions, initial ascent and motion from the inner voice. With two exceptions, all that was said regarding descending first-order progressions obtains for ascending first-order progressions as well. The first difference is that the I-V-I bass support provided for descending progressions is not always possible in the case of initial ascent, because initial ascent "... makes an onward movement of the bass possible, so that the first tone of the fundamental line appears over a degree other than I."\(^6\) Example 2 (p.13) illustrates that, as a result of initial ascent, the first tone of the fundamental line can also appear over a harmony other than the tonic.

Motion from the inner voice at the first level differs from initial ascent only in that the former can proceed to a first-order neighbor note or to any fundamental line tone other than the first. Aside from this, it is guided by the same rules of conformation as those governing initial ascent. The second difference between descending and ascending first-order progressions is that while descending progressions are said to imitate the fundamental structure, first-order ascending progressions "represent a basic conceptual contrast to the fundamental line."\(^7\)

\(^5\)Schenker, *Free Composition*, 73.

\(^6\)Ibid., 46.

\(^7\)Ibid., 45.
Example 2. Figure 39.2 from *Free Composition*
Characteristics of Later-level Progressions as Presented in *Free Composition*

Schenker presents the following description of later-level linear progressions.

In the succession of voice-leading transformations we move farther and farther away from what was the new upper voice and so gain new levels. Consequently, the purpose of the linear progressions undergoes a change, as the new goals dictate. Whatever the goal may be, the qualities inherent in the fundamental line and in the linear progressions at the first level remain the same at the later-levels.\(^8\)

Schenker does not specify the nature of the change in purpose that later-level progressions undergo, though a comparison between the characteristics of first-order progressions and those of later-level progressions reveals some important differences. Recall that the boundary tones of first-order progressions are understood to reside in separate, independent voices at a prior level or stage. This is true of all upper-voice progressions regardless of the level at which they occur. First-order progressions create a new upper voice that is understood as an offshoot of a previously existing voice; again, this is true of all upper-voice progressions.

Only third and fifth-progressions are permitted at the first level. Beginning with the second level, any interval may be spanned by a linear progression. The restriction to third- and fifth-progressions at the first level, coupled with the origin of the first-order progressions in the prior vertical intervals of the fundamental structure, constrains first-order progressions to composing-out a single harmony. Example 3a shows a descending fifth-progression from the head tone of the fundamental line. As a first-order progression, its boundary tones originate in the prior vertical interval of the tonic chord of the fundamental structure, as shown in example 3b. The linear progression connecting these two voices therefore represents the horizontal composing-out of the tonic harmony.

\(^8\)ibid., 73.
Example 3

The notion that the boundary tones of first-order progressions originate in a prior vertical state has led some writers to propose that all linear progressions ultimately represent a vertical interval. For example, Jonas states:

All voice leading, insofar as it is to have meaning and coherence, must serve the unfolding and elaboration of a triad. Every horizontal motion, every linear progression, stands for a vertical interval conception. The composing out of such vertical conceptions constitutes music. From this standpoint it is idle to speak of polyphony versus homophony. The contrapuntal basis of a Bach fugue is no different from that of a Mozart sonata or a Schubert song. The conduct of the voices is always governed by that contrapuntal basis and by the triad for which those voices speak.⁹

Clearly, the progression in example 3 fulfills Jonas’ requirements. However, because later-level progressions are not restricted to spanning the intervals of the third or fifth, and due to the greater freedom in the number and nature of the possible goals of linear progressions at the later levels, later-level progressions do not necessarily span a prior vertical interval from a single harmony. The boundary tones of later-level progressions can either be members of a single harmony or members of two different harmonies. In light of this, it is possible that Jonas is referring to the ultimate tonic triad as the vertical conception from which all linear progressions issue. Otherwise, linear

successions such as the one shown in example 4 could not be considered linear progresses simply because the boundary tones cannot coexist in a single harmony.

Example 4

If Jonas is to be taken literally, the boundary tones of the progression, G and D, must be interpreted as standing for a vertical interval conception. If first-order descending progressions are taken as a model, the boundary tones of the progression should belong to the harmony in which the progression originates, since this is a characteristic of all descending first-order progressions. However, D is not a member of the C harmony. In all other respects, this example satisfies the conditions necessary for linear progressions: it contains passing motion, it connects two notes that lie in separate voices, and the new voice created by the linear progression is understood to be an offshoot of the upper voice. It differs from first-order progressions only with respect to the harmonic membership of its boundary tones.

Forte and Gilbert propose an alternative criterion for harmonic membership of the boundary tones of a linear progression. They require only that the boundary tones be in agreement with the harmonic goal of the progression.

Every linear progression in an upper voice is prolongational; the general rule is that prolongational lines, whether ascending or descending, prolong their topmost structural note. Recall also that “structural” means, essentially, that the note in question is in agreement with the underlying harmony. The interval spanned by a linear progression will be a component of a harmonic function relevant to the context. The test for the validity of a linear progression rests,
therefore, on whether the interval between its starting and ending points agrees with the harmonic goal of the passage.\textsuperscript{10}

Elsewhere, Forte and Gilbert state that “a linear progression spans an interval between two notes of a single harmony.”\textsuperscript{11} This suggests that the harmonic goal of the passage could be interpreted as being either the harmony instanced by the chord that contains the initiating note of the progression, or the chord that contains the final note of the progression.\textsuperscript{12}

In at least one case, Forte and Gilbert explicitly cite the concluding harmony of a progression as the goal harmony. In reference to example 5 (p.18), they state that “Unlike the foreground descents of a seventh, this is a true linear progression, whose interval (the sixth D-F#) is contained in the goal harmony V.”\textsuperscript{13} Since this interpretation is consistent with the other examples of later-level progressions they provide, it can be assumed that the “harmonic goal” is the harmony that contains the final note of a linear progression, see example 6.

In citing the differences between upper-voice and bass linear progressions, Forte and Gilbert state that “the crucial distinguishing factor is that the interval spanned by such a [bass] progression cannot correctly be verticalized under normal circumstances.”\textsuperscript{14} This states that the interval spanned by upper-voice progressions can be verticalized. However, this requirement prohibits linear progressions from connecting harmonies that

\begin{quote}
\textsuperscript{10}Forte and Gilbert, \textit{Introduction}, 237.
\end{quote}

\begin{quote}
\textsuperscript{11}Ibid., 240.
\end{quote}

\begin{quote}
\textsuperscript{12}Passing tones of a linear progression are subordinate to the boundary tones of the progression. Therefore, the harmonies that contain the passing tones are subordinate to the harmonies that contain the boundary tones. As such, the harmonies containing the passing tones cannot be construed as the harmonic goal of the progression. See p.81 for a discussion of the structural relationship between boundary and passing tones in a linear progression.
\end{quote}

\begin{quote}
\textsuperscript{13}Forte and Gilbert, \textit{Introduction}, 243.
\end{quote}

\begin{quote}
\textsuperscript{14}Ibid., 239.
\end{quote}
Example 198. Mozart, *Symphony in G minor, K. 550*, I

Example 5. Example 198 from *Introduction to Schenkerian Analysis*. Mozart, symphony in G minor, K.550, I.
Example 195


b. Mozart, *Piano Sonata in Bb major*, K. 333, II


Example 7
have no common tones. As a result, progressions such as the one in example 7 cannot be considered true linear progressions, since the boundary tones can be verticalized in neither the initial nor the concluding harmony. It is important to note that Schenker raises the issue of a prior vertical condition of the boundary tones of linear progressions only with regard to first-order progressions. No such generalization can be made concerning the disposition of the boundary tones of all later-level progressions. Moreover, on at least one occasion in Free Composition Schenker explicitly distinguishes between linear progressions that prolong a single harmony and those which represent a connection between two harmonies.

If one can use a special bass arpeggiation with the first segment of the fundamental structure (in the case of $\sharp$ and $\hat{8}$), then one can also apply the same principle when the arpeggiation serves linear progressions that prolong individual harmonies.\textsuperscript{15}

Schenker then refers the reader to the discussion of transferred forms of the fundamental structure. The point here is that the boundary tones of linear progressions in transferred forms of the fundamental structure by definition originate in one and the same harmony.\textsuperscript{16} Were the boundary tones of all linear progressions to originate in a single harmony, Schenker’s singling out linear progressions that prolong individual harmonies would be redundant.

**Upper-Voice Linear Progressions as Voice Connections**

An alternative to requiring specific harmonic membership for the boundary tones of linear progressions is to view upper-voice progressions as a connection of voices,

\textsuperscript{15}Schenker, Free Composition, 34.

\textsuperscript{16}See p.31 for a complete discussion of transferred forms of the fundamental structure.
rather than a filling in of a single chordal interval.\textsuperscript{17} Schenker reinforces this view with his statement that “Descending linear progressions in the upper voice signify a motion to an inner voice of the same or a subsequent chord, and ascending ones a motion from inner to upper voice.”\textsuperscript{18} Thus, a “voice” contains multiple notes that are members of different harmonies, yet the “voice” is not synonymous with any member of any particular harmony.

At the level at which a progression appears and for all subsequent levels, all members of the progression reside in a single voice, the voice that initiates the progression. It is only in reference to the prior level that the progression is understood as a connection between two separate voices. (The following discussion assumes reference to multiple levels). Since the voices connected by a linear progression are restricted to stepwise motion, they can move in relation to one another in one of three possible ways: parallel motion, contrary motion, or oblique motion. The number of intervals formed between these two voices depends on whether or not the boundary tones of the progression lie in a single harmony or in two different harmonies. If the boundary tones lie within a single harmony they form a single interval. If they lie in two different harmonies they form two separate intervals.

\begin{tabular}{cccc}
  a) & p \{1\} & b) & p \{2\} \\
  & q \{1\} & c) & p \{1\} \\
  & & d) & p \{2\} \\
  & & q \{1\} & q \{2\} \\
  & & & q \{2\}
\end{tabular}

Figure 1

\textsuperscript{17}The terms “upper” and “inner” are used here in a relative, rather than an absolute, sense. One voice can serve as a structural upper voice to another voice, while not necessarily being the topmost voice. For more on the relationship between voices see pp.38-43.

\textsuperscript{18}Schenker, \textit{Counterpoint}, 59.
Figure 1 shows the possible combinations of voice members between an upper voice, p, and an inner voice, q. The number in the brackets represents the number of notes contained in each voice. Where a voice contains only one note, there is no linear motion in that voice. In such cases, the progression either completes its course within a single harmony or the voice with only one note contains a common tone between two different harmonies. Where each voice contains a single member, the linear progression represents a connection between two stationary voices. The presence of two notes in a single voice indicates a change of harmony. However, because there is no restriction on the direction in which each voice can move, there are two possible modes of motion for any voice that contains two elements.

Example 8 illustrates the contents of figure 1 in notation for descending linear progressions. At a) each voice contains a single note, G and C, respectively. There is no linear motion in either voice and the progression connecting the two voices begins and ends in the same harmony. At b) voice p contains two notes, while voice q contains a single note. Since voice p can move either up or down, both possibilities are shown. Regardless of the direction in which the upper voice moves, it proceeds in oblique motion against the stationary lower voice. At c) voice p has a single note, voice q) has two notes. Again, the result is oblique motion, and voice q can either ascend or descend; both possibilities are given. Finally, at d) each voice contains two notes. Example 9 illustrates the contents of figure 1 in notation for ascending linear progressions.
for a)  

for b)  

or  

for c)  

or  

for d)  

Example 8. Descending linear progressions for Figure 1.
Example 8 continued. Descending linear progressions for Figure 1.

Example 9. Ascending linear progressions for Figure 1.
Example 9 continued. Ascending linear progressions for Figure 1.
Schenker typically discusses linear progressions in light of multiple levels, so that “Each previous level vouches for the succeeding one, thus guaranteeing the indivisibility and unity of the linear progressions at the later-levels.” As Schachter notes, the result is that

A linear progression—say one that descends a fifth from the 2 of the fundamental line—may appear “all at once” at the first middleground level rather than in stages (the arpeggiated fifth first and the stepwise connection only later). As a result, Schenker’s levels tend to depict coherent tonal structures—complete linear progressions, arpeggiations, couplings, unfoldings, etc. rather than the fragmentary “reductions” of some later analysts.

Although Schachter correctly groups linear progressions and unfoldings together as complete tonal structures, there is an important difference in the manner in which each type of event is generated. Linear progressions represent a connection of voices, but their boundary tones are not required to exist in a prior vertical state. The result is that the progression can in fact appear all at once, rather than in stages. Unfolding, on the other hand, must originate in a vertical state and thus requires a series of stages for its generation—representation of the vertical interval followed by the arpeggiation of the interval. The conditions Schenker requires for unfolding to exist expressly begin with a vertical condition.

Unfolding occurs in the following situations:

1) When the vertical condition of a single chord is transformed into a horizontal condition in such a manner that a tone of the upper voice is connected to a tone of the inner voice and then moves back to the upper voice;

2) When in a succession of several chords a similar connection from the upper to the inner voice takes place.

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19 Schenker, *Free Composition*, 73.

20 Schachter, *Commentary*, 118.

21 Schenker, *Free Composition*, 50.
Harmonic Requirements for Linear Progressions

The view that linear progressions are not required to span an interval of a single harmony does not exclude a harmonic component from the formation of linear progressions. Rather, it seeks to generalize the harmonic requirements, making them applicable to progressions at all levels of structure. In order for a linear progression to exist, there must be a change of harmony within the progression. The change can either occur prior to the completion of the progression, or concurrent with it, and there are no constraints concerning which harmony in particular must occur, beyond those stylistic considerations governing acceptable patterns of harmonic progression.

Descending first-order progressions illustrate a change of harmony occurring prior to the completion of the progression. Example 10 shows a descending first-order fifth-progression. At the penultimate note, the dominant harmony enters, providing the necessary change of harmony. Example 11 shows the change of harmony occurring simultaneously with the completion of the progression.

Example 10

Example 11

In light of these harmonic requirements, Schenker’s distinction between a linear progression of a third and the transiently filled space of a third takes on greater meaning.
Recall that in the absence of consonant harmonic support for scale degree 4, Schenker states:

In this context the first part of the fundamental line $\hat{5} - \hat{4} - 3$ has more the effect of a transiently filled space of a third; it is not quite like a linear progression of a third that is worked out with the help of a counterpointing bass progression.\(^{22}\)

Implicit here is that both $\hat{5}$ and $3$ are contained in the tonic harmony, while $\hat{4}$ remains outside that harmony. Since no change of harmony occurs, no linear progression exists.

Thus far, the role of the bass in the formation of upper-voice linear progressions has not been considered, although there is good reason to focus on the bass, particularly if one accepts the fundamental structure as the model for all linear progressions. After all, Schenker based the determination of the fundamental line squarely on the contrapuntal support of the bass.

Those new to the concept of musical background tend to turn their attention exclusively to the fundamental line, because it is the upper voice. They all too hastily accept any tone series as the fundamental line, without determining whether it rests securely upon the counterpoint of the lower voice.\(^{23}\)

This has led some writers to propose that bass accompaniment is the decisive factor in distinguishing linear progressions from lines.

Normally each note of a linear progression is harmonized. This ... fact distinguishes the linear progression from the stepwise diminution, and places it generally within the realm of the middleground.\(^{24}\)

In accordance with the view of the fundamental structure as the model for linear progressions, Schenker attributes to first order progressions "... all of the

\(^{22}\)Ibid., 20.

\(^{23}\)Ibid., 11.

\(^{24}\)Forte and Gilbert, Introduction, 237.
characteristics of a fundamental line as found in the case of $\hat{3} \rightarrow \hat{7}$ and $\hat{5} \rightarrow \hat{1}$.\textsuperscript{25} The fundamental line $\hat{5} \rightarrow \hat{1}$ is not included as a model for first-order progressions. The following comment reveals that Schenker understands octave-progressions in the middleground to serve as filled in register transfers of a single note: “I conceive the horizontal unwinding of an octave as a prolongation of the notion of direct octave coupling.”\textsuperscript{26}

The Role of the Bass in the Formation of Upper-voice Progressions

Example 12. Figures 33 and 34 from Free Composition.

Schenker’s requirement that “the relationships between the new upper voice of the linear progression and the new bass must be clearly defined, exactly as in the case of a fundamental structure” partly explains his inclusion of the I-V-I bass arpeggiation in his Figure 33, see example 12.\textsuperscript{27} However, as his Figure 34 illustrates, he does not

\textsuperscript{25}Schenker, Free Composition, 44.

\textsuperscript{26}Quoted in Jonas, Introduction, 80.

\textsuperscript{27}Ibid., 44.
consistently show bass accompaniment for first-order progressions, even though descending first-order progressions typically, if not always, receive such support.

One of the main tasks performed by bass accompaniment is to indicate a change of harmony necessary for all linear progressions. The absence of bass accompaniment in Schenker’s Figure 34 does not necessarily preclude the possibility of a linear progression, since bass accompaniment can occur at a level subsequent to the level on which the progression resides. This idea is not unlike Schenker’s requirement of contrapuntal support for fundamental line members, which in the cases of fundamental lines from 5 and 6, necessarily arises in the middleground or foreground. Still, as example 13 illustrates, I-V-I bass arpeggiation cannot be viewed as a requirement for descending linear progressions at all levels of structure, much less for all linear progressions. The descending fourth progression, G—D, neither requires nor can accommodate a I-V-I bass arpeggiation given the harmonic context of the progression.

![Example 13](image)

Aside from indicating a change of harmony and generally clarifying harmonic context, the bass performs two other main functions in conjunction with upper-voice linear progressions: 1) it helps to articulate the boundaries of the progression; and 2) it

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28See p.27.

provides the minimal conditions necessary for the occurrence of transferred forms of the fundamental structure.

Schenker acknowledges the importance of the role played by the bass in articulating the boundaries of upper-voice progressions, and suggests that the bass is a necessary component of all such progressions.

Within the limits defined both by nature and by the arpeggiation of the fundamental structure, diminution in the bass employs the entire array of prolongational techniques. The bass participates in the formation of all unified configurations of the upper voice, of whatever nature they may be, and decisively determines their beginnings and endings.\textsuperscript{30}

Although bass accompaniment is an integral part of all upper-voice progressions, only transferred forms of the fundamental structure require specific bass patterns. Schenker recognizes two types of transferred forms of the fundamental structure, complete and incomplete. In the case of complete forms, an upper-voice progression is accompanied by the full I-V-I bass arpeggiation, see example 14.

![Example 14](image)

Example 14. Figure 109a,1 from \textit{Free Composition}.

Incomplete forms, on the other hand, require only the final V-I in the bass, see example 15.

Even though the bass form which begins with I is the only true image of the fundamental structure, the bass can, if the synthesis requires, occasionally start with the V, provided a fifth-progression in the upper voice defines the specific harmony. The meaning remains the same even when the I appears as soon as the 3 sounds, thus subdividing the fifth-progression of the upper voice; in any event

\textsuperscript{30}Ibid., 102.
the bass, with descending fifth-motion, finds true completion only when the \( \hat{1} \) is reached in the soprano. It is apparent that the abbreviated form V—I can be applied to any descending fifth in a given tonality, whatever the harmonic degrees.\(^{31}\)

Example 15. Figure 92.2 from *Free Composition*.

As their name suggests, transferred forms of the fundamental structure can also have third or octave-progressions in the upper part as well as fifth-progressions. In all cases the minimal requirements remain the same: 1) the upper-voice progression must contain \( \hat{2} - \hat{1} \) within the harmony defined by the context; and 2) \( \hat{2} \) must appear over V and \( \hat{1} \) appear over I. Because transferred forms of the fundamental structure possess the same properties as the original forms of the fundamental structure, they constitute “a self-contained structure within which the upper and lower voices delimit a single tonal space.”\(^{32}\) Like the fundamental structure, transferred forms of are expressive of a single harmony.

That Schenker presents the incomplete bass arpeggiation of incomplete forms of the fundamental structure in conjunction with an upper-voice fifth-progression is significant. Schachter notes that one of the basic assumptions of Schenker’s theory is that “the interval of the fifth defines triadic roots and tonic notes.”\(^{33}\) In a descending fifth-progression, the final note of the progression is thus considered the root of the triad

\(^{31}\)Ibid., 88.

\(^{32}\)Ibid., 87.

\(^{33}\)Schachter, *Commentary*, 124.
expressed by the progression. Although Schachter’s assumption generally holds true, in certain contexts the fifth does not define triadic roots and tonic notes, see example 16.

![Example 16](image)

Example 16

If, as Schenker argues, “all fifth-progressions are modeled after the fundamental line. . .” the progression in example 16 would be expressive of an A minor triad.\(^{34}\) That is, the final note of the fundamental line from \(^\ominus\) represents the root of the harmony expressed by the line, the tonic harmony. The boundary tones of the progression in example 16 lie in the C and F harmonies, respectively. This is a significant difference between this progression and a fundamental line from \(^\ominus\), in which both boundary tones are members of the same harmony.

More importantly, in order for this fifth-progression to represent A minor, the final two notes of the progression require V—I bass accompaniment, which the harmonic context precludes. Upper-voice descending fifth-progressions require a transferred form of the fundamental bass arpeggiation—complete or incomplete—in order to express a single harmony. Where such bass accompaniment is present, the final note of the progression is understood to be the root of the triad represented. In cases where the proper bass accompaniment is not possible, the progression does not express a single harmony, nor is it a transferred form of the fundamental structure.

\(^{34}\)Schenker, *Free Composition*, 78.
Although Schenker attributes to descending first-order progressions all of the characteristics of the forms of the fundamental line, this is true of only three of his four first-order progressions. Specifically, the fifth-progressions from \( \hat{5} \) and \( \hat{2} \) and the third-progression from \( \hat{3} \), all fulfill the requirements of transferred forms of the fundamental structure as presented above. The third-progression from \( \hat{2} \), on the other hand, fails on two counts to satisfy these requirements, see example 17.

![Example 17](image)

Example 17. Figure 34 from *Free Composition*.

The third-progression in example 17 occurs entirely within the dominant harmony, and as such, constitutes \( \hat{5} \rightarrow \hat{2} \rightarrow \hat{3} \) in that key area. This precludes the possibility of the upper voice containing \( \hat{2} \rightarrow \hat{4} \). Because of this, \( \hat{2} \) does not occur over \( V \), nor does \( \hat{4} \) occur over \( I \), and the progression is not a transferred form of the fundamental structure.

Transferred forms of the fundamental structure occupy a special place among linear progressions because of their unique characteristics. They are, in a sense, more closely allied with the fundamental structure by virtue of the characteristics shared by both. However, these characteristics are not shared by all progressions, and cannot therefore be taken to represent the essence of a linear progression.

**The Requisite Characteristics of All Upper-Voice Linear Progressions**

A comparison between first-order and later-level progressions reveals that the features common to both types of progressions are: the necessity of passing motion, the
need for harmonic change, and the connection of two separate voices. All other characteristics are either unique to progressions on a single level or apply only to certain types of progressions, i.e., 3rd-, 4th-, 5th-progressions. Yet in a statement intended to reveal "the essential characteristic of a genuine linear progression," Schenker remarks that "At the later-levels, too, a genuine relationship must exist between the first and last tones of a linear progression, a relationship determined by the earlier levels." It is important to recognize that Schenker points to a single characteristic as the essence of the linear progression, and that this characteristic is to be found in the relationship between its boundary tones.

It has already been demonstrated that no single criterion based on the harmonic membership of the boundary tones of linear progressions is applicable to all upper-voice progressions at all levels of structure. Since the boundary tones of upper-voice progressions by definition reside in separate voices, the relationship between upper voices shall be examined in order to uncover the nature of the "genuine relationship" that Schenker requires for linear progressions.

In distinguishing between the forms of the fundamental structure and cadences of conventional harmony, Schenker makes it clear that, from the outset, inner voices are subordinate to outer voices.

In the cadences of harmonic theory the voices are led mechanically, according to the rule that common tones are to be retained. Since this rule is no longer valid even in thoroughbass, how much less must it apply to a fundamental structure where the inner voices are subordinate to the outer voices, that is, to the fundamental line and the bass arpeggiation.  

35Ibid., 74.

36Ibid., 17. As an outer voice, the bass voice is essential to the differentiation of inner voices from outer voices. Still, the discussion here pertains only to upper-voice progressions, bass progressions shall be considered independently beginning on p.51.
In light of this, descending linear progressions, which signify motion from an upper to an inner voice, represent motion from a higher-ranking voice to a lower-ranking voice. Similarly, ascending linear progressions, which signify motion from an inner to an upper voice, constitute motion from a lower-ranking to a higher-ranking voice. As a result, the designations “upper” and “inner” voices can be used not only to describe the spatial alignment of two voices—the upper voice being above the inner voice—but also to imply a structural relationship wherein the “upper” voice is understood to be superior to the “inner” voice, regardless of the registral disposition of the two voices.

The genuine relationship essential to all upper-voice linear progressions is a relationship between the boundary tones, wherein, by virtue of the voice in which each note resides, one of the boundary tones is understood to be principal while the other is subordinate. This relationship exists between the boundary tones of linear progressions that occur within a single harmony as well as those that connect two different harmonies. As such, the imposition of constraints requiring specific harmonic membership of the boundary tones is superfluous.37

Schenker does refer to a harmonic relationship between the boundary tones of linear progressions. However, it seems clear that he is using the term harmonic to differentiate between motion within a single voice (melodic motion) and motion between two voices (harmonic motion), rather than implying that the boundary tones belong to the same chord.

Where a relationship of this kind is lacking, the succession is not a genuine linear progression. Therefore, a succession of passing tones, even if it is subdivided, does not constitute a linear progression if its ultimate result is only the interval of a second above or below. . . . In connections of this kind there is indeed

37See the discussion of Forte and Gilbert’s harmonic requirements for linear progressions, beginning on p.16.
a goal, but there is no harmonic relationship between the point of departure and the final tone.  

In order for two voices to share in a structural relationship of principal to subordinate, each voice must have its own independent content. That is, a voice must contain a succession of notes that is not simply a doubling of the content of another voice. This requirement is at the heart of the distinction between genuine and illusory progressions. Schenker discounts, as illusory, linear progressions that span the intervals of a ninth or a seventh when, due to either inversion, register transfer—or both—these intervals stand in the place of seconds. Even though passing motion is present, the line is understood to lie in a single voice. It is the absence of a connection between two independent voices, and the consequent impossibility of a structural relationship between the boundary tones, that distinguishes illusory seventh-progressions from genuine seventh-progressions.

Example 18. Figure 62,1 from Free Composition.

Example 18 shows figure 62,1 from Free Composition, which Schenker presents as an instance of a genuine seventh-progression. He indicates the presence two separate voices by including the implied B♭ in the upper voice in m.65. The A♭ in m.123 originates in B♭₅, while the subordinate inner voice (as indicated by the unstemmed

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38Schenker, Free Composition, 74.
inner-voice notes) initiates a seventh-progression that connects the inner voice with the upper voice. This progression fulfills the criteria necessary for linear progressions: 1) it contains passing motion; 2) a change of harmony occurs; 3) it connects two discrete voices; and 4) the voices share a structural relationship of principal to subordinate.

In contrast to this, in Fig. 82,1 (ex. 19), which represents an example of an illusory ninth progression, the boundary tones of the line do not lie in two different voices. By means of a register transfer, they constitute a descending second, which by definition lies in a single voice.

Example 19. Figure 82,1 from Free Composition.

It is important to note that the boundary tones of linear progressions do not have to reside on different levels, although they may. They must simply be of different structural status. Structural status is based on the order of generation of the elements in question and their place within the tonal hierarchy. The underlying assumption here is that higher-ranking elements are generated prior to lower-ranking elements, even if the events being compared appear on the same level.
The Structural Status of Inner Voices

It was stated that the meaning of the terms "upper" voice and "inner" voice is relative, rather than absolute.\(^{39}\) This idea can now be examined more fully. In an unpublished paper, Gregory Proctor and Herbert Lee Riggins make the following observations concerning the structural status of inner voices in two analytical graphs (see exx. 20 and 21) contained in *Five Graphic Music Analyses*:\(^{40}\)

Observe that the first line [of the Bach Prelude], marked "Ursatz," contains inner voices. . . . This suggest that inner voices may arise in the background, between the voices of the fundamental structure. . . . Thus, the background contains not only the fundamental structure but also inner voices, at least potentially.

Inner voices are absent in this analysis [Bach Chorale] from both background and first level of middleground. An inner voice, beginning with Ab, appears first in the second level, and together with the upper voice provides the boundaries for the subsequent unfolding shown in the third level. It would seem therefore, on the basis of these two closely affiliated graphs, that inner voices appear in the level immediately prior to the level in which they are used in a \(^{\wedge}\) prolongation. When they appear in a level subsequent to the background, are they to be understood as already implicit in the background but not worth mentioning until they are needed. If so, what is the theoretical status of components that seem to lie outside of the structure but at some point are tied into it.\(^{41}\)

The idea that inner voices exist potentially at any stage of structure gains support from Schenker's comment regarding fundamental line forms that "\( \hat{\Phi}-\hat{\Delta} \) or \( \hat{\Phi}--\hat{\Delta} \) represents the whole triad, exactly as does \( \hat{\Phi}-\hat{\Delta} \)."\(^{42}\) Thus, both outer and inner voices are implicitly present in the fundamental structure. Although Schenker distinguishes between the status of the outer and inner voices, there remain questions concerning the

\(^{39}\)See p. 21.


\(^{42}\)Schenker, *Free Composition*, 14.
Example 20. J.S. Bach Prelude No.1 in C Major, from Five Graphic Music Analyses
Example 21. J.S. Bach Chorale: "Ich Bin's, Ich Sollte Bussen," from Five Graphic Music Analyses
status of the inner voices relative to each other. Are inner voices of the same status throughout the entire structure? How is the status of inner voices determined?

Inner voices are of equal status until a structurally superior voice interacts with one of the inner voices, thereby elevating the status of that voice. Example 22a shows a principal upper voice, as indicated by the beam connecting E to D, and two inner voices.Because neither inner voice is directly interacting with the upper voice, they are of equal status. Even if the space between the inner voices is filled in with passing motion, as in example 22b, this is still not a linear progression. In order for a linear progression to exist, the voices in which the boundary tones of the progression lie must be of different structural status. If it is not possible to determine which of the boundary tones of a line has structural priority, then no linear progression exists and the line is to be understood as counterpoint. Schenker typically slurs contrapuntal lines such as this one in order to show proper articulation and boundaries, and reserves the term “Zug” for linear progressions.

![Example 22](image)

Once an inner voice has been drawn into a structural relationship with a principal upper voice, the inner voice can then initiate a linear progression that connects it with another inner voice, to which it would be the principal upper voice. Example 23 shows a

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43See p.35 for a discussion of the structural relationship between outer and inner voices.

44The term “Zug” is defined in Appendix A.
third-progression connecting the upper-voice E to the subordinate inner-voice C. Subsequently, a fourth-progression connects C to a second inner voice. The subordinate inner-voice G and the now principal upper-voice C share in the structural relationship necessary for linear progressions. Content is generated by means of the transference of this structural relationship of principal to subordinate to different pairs of voices.

Example 23

In his descriptions of both first-order and later-level progressions Schenker insists that descending linear progressions represent motion from an upper to an inner voice, and ascending progressions motion from an inner to an upper voice. Salzer rejects this notion and cites the Beethoven sonata shown in example 24 to support his position.

In the Beethoven Sonata . . . we find a descending line moving to the first structural tone. This proves that descending melodic progressions do not always indicate motions into the inner voice.45


Salzer is correct in that a linear progression can literally descend to the "upper" voice. However, this interpretation construes the meaning of "upper" and "inner" voices in the most limited sense, as denoting only the spatial alignment of voices. As was noted earlier, the terms "upper" and "inner" also describe a structural relationship between two voices. It is in this broader sense that the full meaning of Schenker's observations concerning the relationship between voices connected by descending and ascending linear progressions is revealed.

The model for descending linear progressions is a motion from an upper voice to an inner voice or, put another way, a motion from a higher-ranking voice to a lower-ranking voice. If a progression proceeds from a higher-ranking to a lower-ranking voice, it constitutes a motion from an upper to an inner voice regardless of the actual direction it takes. Similarly, the model for ascending progressions is a motion from a lower-ranking inner voice to a higher-ranking upper voice. If a linear progression proceeds from a lower-ranking voice to a higher-ranking voice, it constitutes a motion from an inner to an upper voice, again regardless of the direction in which the progression proceeds.

Register Transfer and Inversion

Schenker's distinction between the voice connections formed by descending and ascending progressions provides a model for determining when one of the boundary tones of a linear progression has been transferred to a new register. Before pursuing this idea further, it will be helpful to examine Schenker's treatment of register in the middleground. Schenker's definition of obligatory register in the background provides the framework for his treatment of register in the middleground as well.
The succession of tones of the fundamental line must be understood to lie within one octave, which I term the *obligatory register* of the fundamental line.\textsuperscript{46}

The principle of obligatory register applies not only to the upper but also to the lower voice. In the upper voice it is usually the register of the first tone of the fundamental line which is later confirmed as the true register.\textsuperscript{47}

Like the register of the fundamental line, the initiating note of a descending linear progression in the middleground establishes the upper registral boundary for the progression. Any note placed above the head tone of the progression resides in a different register from the progression. Similarly, the initiating note of an ascending linear progression establishes the lower registral boundary of the progression. Any note occurring below the head tone of an ascending progression resides in a different register from the progression.

![Example 25](image)

Example 25

A sixth-progression connects the principal upper voice with a subordinate inner voice in example 25a in accordance with Schenker’s model for descending progressions. Since the progression in example 25b also originates in a higher-ranking voice and proceeds to a lower-ranking voice, the structural relationship between the two voices is unchanged, even though the progression ascends rather than descends. In both examples, the progression proceeds from an upper to an inner voice. The change in the

\textsuperscript{46}Schenker, *Free Composition*, 12. Emphasis original.

\textsuperscript{47}Ibid., 107.
direction of the progression in example 25b stems from the fact that the goal tone of the progression has been transferred to a new register.

The guidelines for determining when one of the boundary tones of a linear progression has been transferred to a new register are:

1) The model for descending linear progressions is a motion from a higher-ranking voice to a lower-ranking voice. A progression that ascends from a higher-ranking voice to a lower-ranking voice involves the register transfer of one of its boundary tones.

2) The model for ascending linear progressions is a motion from a lower-ranking voice to a higher-ranking voice. A progression that descends from a lower-ranking voice to a higher-ranking voice involves the register transfer of one of its boundary tones.

Let us consider example 24 (p.43) in light of the structural implications of the terms “upper” and “inner” voices. Salzer states that “we find a descending line moving to the first structural tone.” As the head tone of the fundamental line, the goal tone of the progression is of a higher structural rank than the initiating tone of the progression. Thus, the progression proceeds from a lower-ranking voice to a higher-ranking voice, or put another way, from an inner to an upper voice. The direction of the progression is the result of a register transfer at the prior level.

Example 26. Example 265 from Introduction to Schenkerian Analysis. Mozart, sonata in F Major, II: Reprise, Theme 2 and Closing Theme.
Forte and Gilbert refer to progressions such as the one in example 24 as “prefix-type prolongations.”

Although... linear progressions usually prolong the topmost note, in certain situations a progression may best be regarded as a prefix-type prolongation of the goal note of the progression. Example 265 [see ex.26] presents an instance. There a fifth-progression that begins on C in m.9 has as its goal F in m.19. This F, which is ♭ locally, represents the primary melodic tone ♭. As a component of the fundamental line it therefore takes precedence over the head note of the linear progression, C.48

One of the advantages of being able to determine when one of the boundary tones of a linear progression has been transferred to a new register is that it becomes possible to distinguish between inverted progressions and progressions in their original form. In commenting on the relationship between the boundary tones of a genuine linear progression Schenker states:

This interval relationship must be at least the size of a third, for not only the fundamental line, but every linear progression must contain a passing motion. The same applies to a fifth-progression, to a fourth-progression when it is equivalent to a fifth-progression, and to octave-progressions.49

This raises the question of exactly when a fourth-progression is equivalent to a fifth-progression, and when is it distinct from a fifth-progression. Although functional equivalence does not necessarily imply that one progression is the inversion of the other, elsewhere Schenker makes this type of relationship explicit. For instance, example 27 (p.48) shows figure 89,4 from Free Composition, about which he states “... the sixth-progression here is to be understood as the inversion of a third.”50 Based on the relationship between the boundary tones of this example, guidelines can be formulated

48Forte and Gilbert, Introduction, 238.

49Schenker, Free Composition, 74. Emphasis added.

50ibid., 77.
Mendelssohn, Wedding March (Midsummer Night's Dream), mm. 6-13

Example 27. Figure 89,4 from Free Composition
for determining when the interval spanned by a linear progression is to be understood in terms of its inversionsal equivalent and when it is not.

Like the progression in example 24, the goal tone of this progression is also the head tone of the fundamental line, as indicated by the graph at the right of the example. As such, it is of a higher structural status than the initiating tone of the progression. It was determined that in a linear progression that descends from a lower-ranking voice to a higher-ranking voice, one of the boundary tones of the progression has been transferred to a new register. In the present case, the subordinate inner voice member, C⁵, has been transferred to the register above the fundamental line. The interval spanned by the progression, a sixth, is to be understood as the inversion of a third. The guidelines for determining if a progression is inverted or not are:

1) The structural relationship between the goal tone and the primary tone of a linear progression remains the same, even where one of the two tones has been transferred to a different register and the direction of the progression reversed.

2) The model for descending linear progressions is a motion from a higher-ranking voice to a lower-ranking voice. A progression that ascends from a higher-ranking voice to a lower-ranking voice is inverted, see example 28.

Example 28

3) The model for ascending linear progressions is a motion from a lower-ranking voice to a higher-ranking voice. A linear progression that descends from a lower-ranking voice to a higher-ranking voice is inverted, see example 29.

Example 29
4) The function of the interval spanned by an inverted linear progression is to be understood in terms of its inversional equivalent. Thus, the progressions in examples 28 and 29 both functionally represent the interval of a sixth.

5) The inversion of a progression adds one theoretical level to the structure because it signifies a register transfer of either the head tone or the goal tone of the progression. The transfer occurs one level before the level on which the inverted progression appear, with context determining the precise level on which the inverted progression can appear. If the descending fifth-progression in example 30 is understood to be a first-order progression, the earliest level at which its inversion, the ascending fourth-progression, can appear is the second level.

Example 30

Similarly, if the highest ranking voice in example 31 is taken to represent the fundamental line, then the ascending sixth-progression would be interpreted as motion from the inner voice at the first level. Consequently, its inversion, the third-progression that descends to the fundamental line tone, would be interpreted as motion from the inner voice at the second level.

Example 31
CHAPTER III
BASS LINEAR PROGRESSIONS

The discussion of linear progressions in the bass is presented separately from the discussion of upper-voice progressions for a variety of reasons, some of which were already mentioned on p.3. First, Schenker’s presentation of linear progressions in Free Composition is almost exclusively aimed at the upper voices, although the bass voice is at times referred to in the discussion of upper-voice progressions. Second, his characterization of bass progressions is far less detailed than his descriptions of upper-voice progressions, the former comprising but a single paragraph. Finally, as a result of the harmonic component of bass function, the bass possesses unique properties that influence the formation of certain types of linear progressions that require special consideration.

General Differences Between the Bass and the Upper Voices

Schenker points to several important differences between the bass and the upper voices. When considered in conjunction with bass linear progressions, these differences suggest that the bass is singular among voices and should conceptually be kept separate from the upper voices. Before examining the formation and interaction of linear progressions in the bass, it will be helpful to consider Schenker’s comments concerning the
bass voice in general and its relation to the upper voices. To begin, Schenker points to the registral differences between the bass and the upper voices.¹

Even in the fundamental structure, the fundamental line presents its arpeggations filled in with seconds, whereas the bass presents its arpeggiation bare. This is because of the general difference between high and low register. The difference between fundamental line and bass arpeggiation makes itself felt in all levels, including the foreground. Because of its low register, the bass diminution always remains more restrained than that of the upper voice.²

It should be pointed out that while register typically plays an important role in the separation of the bass from the upper parts, this is not always the case. The bass can also occupy the same or even a higher register than the upper voices. On the other hand, the harmonic function of the bass is unique among all the voices.

Even the constant tendency of the bass to imitate the melodic characteristic of the fundamental line with seconds does not alter the fact that it must constantly and exclusively be concerned with the arpeggiation through the fifth.³

Even though the bass is free to employ all of the prolongational techniques available to the upper voices, “a descending [bass] linear progression can never simulate a fundamental-line progression, since the bass and the fundamental line are separate entities.”⁴ This not only distinguishes the bass from the fundamental line, but also from the inner voices; inner voices can freely simulate the fundamental line and, when they do, are attributed “... a special charm: the deceptive effect of a fundamental line ...”⁵

¹The meaning of register here differs from the registral constraints imposed on individual linear progressions as described on pp.40-45. Here the meaning is broader, conveying a general sense of high versus low register. Register as defined by individual progressions is more specific and usually limited to a range of a single octave.

²Schenker, Free Composition, 15.

³Ibid., 31.

⁴Ibid., 75.

⁵Ibid., 44.
Differences Between Bass Linear progressions and Upper-voice Linear Progressions

The capacity of the bass to function both melodically and harmonically compounds the difficulties encountered in attempting to arrive at a definition of linear progressions that is equally applicable to the bass and to the upper voices. Schenker highlights this dual function of the bass in his comments concerning example 32.

When the fourth-progression occurs in the bass, the counterweight of the harmonic degrees is less perceptible, less powerful. The unity of the fourth-progression is determined more by its melodic succession than by the clear statement of harmonic degrees. It is as if the progression took place in an upper or inner voice which moved above implied harmonic degrees far below.\(^6\)

Example 32. Figure 87,3a from *Free Composition*.

It was noted earlier that Forte and Gilbert distinguish between upper-voice and bass linear progressions according to whether or not the interval spanned by the progression can be verticalized.\(^7\) Their discussion of bass linear progressions can now be considered in its entirety.

With respect to linear progressions in the bass, the crucial distinguishing factor is that the interval spanned by such a progression cannot correctly be verticalized under normal circumstances. A look at what is probably the most common linear bass progression, the descending fourth, will demonstrate why this is so [see ex.33]. As we see here, the motion from C down to G supports a harmonic progression from I to V... It can be seen that while the tonic and dominant notes can coexist within a single vertical, the harmonies which they support cannot. Thus the difference between the two main categories of linear progressions, upper voice

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\(^6\) Ibid., 76.

\(^7\) The complete discussion of Forte and Gilbert's presentation of the requirements for upper-voice linear progressions begins on p.16.
and bass, resides in the simple fact that the bass supports, while the upper voices are the ones supported.⁸

The lack of a requirement of harmonic or contrapuntal support for linear progressions in the bass is a significant departure from the constraints Forte and Gilbert impose on upper-voice progressions: “Normally each note of a linear progression is harmonized. This . . . fact distinguishes the linear progression from the stepwise diminution.”⁹ While it is a valid point that members of bass progressions support rather than are supported, this still does not differentiate between linear progressions in the bass and stepwise diminishations. To say that the boundary harmonies of the progression in example 33 cannot be verticalized is to say that they are different; the only context in which the boundary harmonies of a linear progression can be verticalized is when the first and last harmonies are the same and the boundary tones reside in separate voices.¹⁰

James Marra acknowledges the conflict in Forte and Gilbert’s presentation of linear progressions and offers the following observations as clarification:

It may be pointed out that one difference between upper-voice and bass linear progressions is that in the former both boundary notes must agree with the harmonic goal of the passage and receive harmonic support. In the latter, only the final note must agree with the harmonic goal.¹¹

Marra apparently interprets the “harmonic goal” of a progression in the same way as do Forte and Gilbert, since he does not differentiate his use of the term from their use of it; Forte and Gilbert treat the final chord of a progression as representing the harmonic goal of the progression. Thus, Marra’s sole requirement for linear progressions in the bass is that

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⁹Ibid., 237.

¹⁰See p.65 for a discussion of the possibility of multiple voices in the bass.

the final note of the progression be a member of the final harmony of the progression. Beyond the fact that this constraint will not preclude very many stepwise successions in the bass from being linear progressions, it raises the question of why the requirements of harmonic membership for bass progressions differ from those of upper-voice progressions. Schenker does not provide separate criteria of harmonic membership for the formation of bass progressions and upper-voice progressions, nor does he state that the harmonic implications of bass progressions differ in any way from those of upper-voice progressions.

Another inconsistency in the Forte and Gilbert presentation of bass progressions is that not all bass linear progressions exhibit the characteristics of the progression in example 33 (p.54). Marra comments:

Concerning the verticalization of spanned intervals, it should be noted that, while the 4th progression in the Chopin Etude does not compose out an interval which can be verticalized, such is not always the case with linear progressions in the bass. In fact, a counter-example (a 3rd progression prolonging I) occurs in their analysis of Beethoven’s E Major Piano Sonata, Op.109,iii.12

The passage to which Marra refers and Forte and Gilbert’s analysis are shown in example 34 (p.57). The third progression begins in m.5 and concludes in m.8. Since the boundary tones of the progression are both members of the tonic harmony, not only can the interval spanned by the progression be verticalized in the goal harmony, but the harmonies which the boundary tones support can also be verticalized.

The Means of Generation for Bass Linear Progressions

The attention paid to harmonic membership and the imposition of a vertical condition on the boundary tones of linear progressions in general, and for bass progressions in particular, is not wholly without precedent. It was shown that Schenker

12Ibid., 285.
Example 278. Beethoven, Sonata in E major, III: Variation 6

derives the boundary tones of first-order descending linear progressions from the originally vertical intervals of the fundamental structure. Similarly, in his brief characterization of bass linear progressions, Schenker states that “Linear progressions can also appear in the bass when the spaces of its arpeggiation are filled in with interpolations and passing tones.”¹³ This suggests that two nonadjacent members of a single harmony are disposed horizontally, and that when the space between them is filled in with stepwise motion, a linear progression results. This interpretation is in accordance with Schenker’s characterization of the bass arpeggiation of the fundamental structure.

*Fundamental line* is the name which I have given to the upper voice of the fundamental structure. It unfolds a chord horizontally while the counterpointing lower voice effects an *arpeggiation* of this chord through the upper fifth.¹⁴

The bass progressions in examples 33 and 34 both conform to the set of conditions Schenker proposes for the formation of bass linear progressions. In example 33 both C and G are members of the tonic harmony. However, while arpeggiation is commonly taken to imply a prior vertical state for the arpeggiated elements, this condition is neither necessary nor possible in all cases. Even the bass arpeggiation of the fundamental structure originates only conceptually in a vertical disposition. Since the fundamental structure is the first compositional stage, the fundamental bass arpeggiation cannot be notated in a vertical state at any prior stage.¹⁵ The boundary tones of the progression in example 34 also belong to a single harmony but, unlike example 33, can be verticalized.

Schenker’s characterization of bass progressions as originating only by means of arpeggiation is somewhat misleading. Since the term arpeggiation implies the horizontal disposition of two members of a single harmony, this seemingly excludes bass

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¹³Schenker, *Free Composition*, 75.

¹⁴Ibid., 4. Emphasis original.

¹⁵This idea is discussed in greater detail on p.94.
progressions whose boundary tones cannot be shown to originate in the same harmony.

Nonetheless, Schenker lists as a first-level possibility just such a progression. Example 35 (p.60) presents Figure 14 from Free Composition, which shows the possibilities for filling in the space created by the fundamental bass arpeggiation. In Figure 14,2c Schenker slurs the roots of the tonic and subdominant harmonies, and offers the following explanation:

Exx.2a and 2b present the filling-in of the paths shown in Ex.1 [his Figure 1]. The filling-in can also take on other meanings, depending on the position of the tones of the fundamental line, as shown in Exx. 2c and 2d. When, as in Ex. 2c, the fourth bass tone F is emphasized by a tone of the fundamental line, we then have, within the I—V motion, a linear progression of a fourth, C—F, with the effect of I—IV... The V is the goal, the IV represents the subsidiary contrapuntal-melodic step of a second.16

According to this, linear progressions not only result in the bass when the space created by an arpeggiation is completely filled in, but can also arise between one of the original arpeggiated notes, in this case $\dagger$ or $\&$, and one of the passing tones that fill in the space created by the arpeggiation. In example 35, F does not result from an arpeggiation of the subdominant harmony, it originates in the passing motion that fills the space between I and V. In order for the boundary tones of the progression, C and F, to result from an arpeggiation of an interval from a single harmony, both notes would have to be members of the F harmony at a prior level or stage. That the subdominant harmony is not part of the fundamental structure—the only level or stage prior to the first level of the middleground—precludes this as a possibility.

Bass linear progressions, like upper-voice progressions, can either connect two members of a single harmony or members of two different harmonies. This suggests that there is no single harmonic principle that governs the formation of all bass linear progressions. Although the goals of linear progressions in the bass differ from those of upper-voice progressions as a result of the function of the bass to project chord roots, the

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16Schenker, Free Composition, 30.
Example 35. Figure 14 from *Free Composition*.
essential qualities of bass linear progressions are the same as those of upper-voice progressions: there must be passing motion; a change of harmony must occur either prior to or concurrent with the completion of the progression; and finally, and most important, the boundary tones of the progression must exhibit a relationship of principle to subordinate.

The relative status of the boundary tones of bass progressions can be determined according to the order of generation of each note. For example, in the fourth progression in example 35, C is structurally superior to F, since C originates in the fundamental structure, while F is a first-order element. At the first level every bass linear progression must have as one of its boundary tones one of the members of the fundamental arpeggiation. This insures that a structural distinction will exist between the boundary tones of the progression. Were two of the passing tones that fill in the bass arpeggiation to serve as boundary tones, no difference in status would exist, nor would there be a linear progression.

Example 36 shows figures 15, 16, and 18 from Free Composition, which illustrate the remaining ways in which the fundamental bass arpeggiation can be filled in at the first level for each of the three fundamental line forms. In each of the examples, Schenker uses slurs to show articulations and, as the discussion of figure 14 reveals, to indicate the boundaries of a linear progression. Significantly, of the sixty-seven possibilities shown, Schenker does not slur pairs of passing tones as though they could serve as the boundaries of a linear progression. Where a passing tone is shown as a boundary note of a linear progression, it is without exception paired with one of the notes of the fundamental bass arpeggiation.
Example 36, continued. Figure 16 from Free Composition
Example 36, continued. Figure 18 from Free Composition
Bass Linear Progressions as a Connection of Voices

The only characteristic of upper-voice progressions that has yet to be examined in conjunction with bass linear progressions is the connection between two voices. Marra comments on this issue:

... linear progressions in an upper voice generally prolong the upper structural voice and represent a motion from outer voice to inner voice or inner to outer voice. Linear progressions in the bass cannot obviously prolong an upper structural voice... 17

It was stated that the outer voices of the fundamental structure are considered superior to the inner voices. 18 In this regard, the bass is a structural voice in the same sense as is the fundamental line. Admittedly, Schenker does at times imply that the fundamental line has privilege over the fundamental bass arpeggiation.

Within the octave, this first adjustment [the filling in of the arpeggiated tonic triad] resulted in a relatedness of the whole structure to a single tone, the fundamental of the chord. The series of tones thus created in the upper voice, the fundamental line, represents diatony. In the narrowest sense, diatony belongs only to the upper voice. But, in accord with its origin, it simultaneously governs the whole contrapuntal structure, including the bass arpeggiation and the passing tones. 19

However, in terms of their position in Schenker’s model, the outer voices of the fundamental structure are treated as structurally equivalent. As structural outer voices both the bass and the fundamental line can generate linear progressions. And although bass notes are generally assumed to reside in a single voice, bass linear progressions can also represent connections between two voices.

A distinction should be made here between the meaning of the term “inner voice” as it is commonly understood, and in the particular sense in which it is being used in

18 See p.38.
19 Schenker, Free Composition, p11.
connection with the bass voice. In a typical four voice structure the soprano and bass voices are considered the outer voices and the tenor and alto are considered the inner voices. However, it is also possible for a single voice to take on a compound melodic structure, wherein multiple strands are implicit in the construction of that voice. Schenker discusses the idea of an implicit compound melodic structure in the bass: “Voice-leading may also arrive at roots by actually adding (inner-voice) tones that are implicit in the context, that is, by placing them underneath the lowest voice.”

Example 37 shows an excerpt of the continuo part from Handel’s *Judas Maccabaeus*. Although the part is written as a single voice, there are at least two separate strands or “voices” implicit in its construction.

![Example 37](image)

Example 37. Handel *Judas Maccabaeus*.

Example 38

In example 38 stem direction indicates membership in either the lower voice—downward stems—or the upper voice—upward stems. The lower strand comprises the neighbor motion F–E–F. The upper strand originates in A and proceeds by step to C, which could be understood to reside in yet another strand. In this way, it is possible to construe the bass as generating its own “inner voices,” which are subordinate to the

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20Schenker, *Free Composition*, 90.
structural bass voice. For example, in regard to the bass part in example 39, Schenker states:

The arpeggiation Bb—f—d—Bb belongs exclusively to Bb. The tension of the long fourth-progression is resolved only with the terminal tone Eb.\footnote{Ibid., 76.}

Example 39. Figure 87, 3c from *Free Composition*.

The tie connecting the two $B^\flat$'s signifies that $B^\flat$ persists through the arpeggiation of the triad. And even though F and D properly belong to the bass voice, in this context they are members of separate “inner voices” that are generated by the structural bass voice of which $B^\flat$ is a member. The inner voices of the bass belong solely to the bass and are distinct from the inner voices of the upper parts.

Schenker stresses the need to “distinguish between ascending and descending linear progressions; both forms have, as always, their respective primary tones and goal tones.”\footnote{Ibid., 75.} Implicit in the notion of the primary tone is that it persists throughout the entire course of the progression. Although the following statements by Schenker are in reference to upper-voice progressions, they are equally applicable to bass progressions.

The implicitly retained head-tone of a falling linear progression maintains the real register of the upper voice; that of a rising progression becomes an inner voice. To continue the content, it suffices to pick up the head-tone of a descending linear progression once more, as if no linear progression had intervened.\footnote{As quoted in Jonas, *Introduction*, 82.}
When these statements are considered in conjunction with the idea that a linear progression introduces a new voice that is to be understood as an offshoot of a previously existing voice, the sense in which bass progressions represent a connection with an “inner voice” becomes clear. Example 40 illustrates a bass linear progression that connects two voices of a compound melodic structure. The structural bass voice is represented by those notes that counterpoint the members of the fundamental line. The fourth-progression initiated by B♭ in m.5 stands as an interpolation between two notes of the structural bass voice. As such, it connects the structural bass with an inner voice of the compound melodic structure. The head tone of the progression, B♭, is mentally retained throughout the course of the progression and is not displaced by C until m.7.

Example 40. Figure 87.3b from Free Composition.

The sense in which E♭ resides in an inner voice belonging to the bass part must not be confused with an inner voice that belongs to the upper parts. Example 41, which presents the passage that is analyzed in example 40, reveals that the boundary tones of the fourth progression are not notated as though they belong to separate voices. It is only with regard to the structural implications of the linear progression that they are understood to reside in separate voices. In Schenker’s structural model, the inner voices of the upper parts are explicit, while the “inner voices” of the bass are implicit. This points to one of the main differences between bass linear progressions and upper-voice progressions. The boundary tones of upper-voice progressions explicitly reside in separate voices and can be
notated as such at the level immediately prior to the level on which the progression appears. The boundary tones of bass linear progressions reside in separate voices only implicitly and cannot be notated in separate voices at a prior level. Rather, they appear at the prior level, if at all, as leaps within a single voice.

Example 41. Handel, Chaconne in G Major, Variation 12, mm.1-8.

The Structural Implications of Schenker’s Prescribed Motion for the Outer Voices of the Fundamental Structure

Although bass progressions possess the essential characteristics of upper-voice progressions, there is one other significant way in which these two types of progressions differ. While descending progressions provide the model for motion from the upper to the inner voice in upper-voice progressions, in the bass the direction is reversed; ascending bass progressions provide the model for motion from the “upper” to the “inner” voice. It is important to remember that the terms “upper” and “inner” are used not only to describe the

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24 The relationship between the boundary tones and passing tones of linear progressions is explored in greater detail in chapter IV, beginning on p.79.
spatial alignment of two voices, but also the structural relationship between those voices.\textsuperscript{25} In this sense “upper” refers to the higher-ranking or principal voice, while “inner” refers to the lower-ranking or subordinate voice. Provided that a progression is not inverted, \textit{ascending} bass progressions proceed from a higher-ranking note to a lower-ranking note; \textit{descending} bass progressions proceed from a lower-ranking to a higher-ranking note.

The reversal of direction in the structural models for motion between the principal and subordinate voices of the bass is necessary in order to conform to Schenker’s conception of the “natural” motion of the fundamental line and fundamental bass arpeggiation.

The upper voice of a fundamental structure, which is the fundamental line, utilizes the descending direction; the lower voice, which is the bass arpeggiation through the fifth, takes the ascending direction. As in the natural development of the arpeggiation, the ascending direction is the original one.\textsuperscript{26}

Whether one accepts Schenker’s justification for the direction taken by the outer voices of the fundamental structure, the fact that he restricts the fundamental line to the descending direction and the fundamental bass arpeggiation to the ascending direction has serious consequences for the remainder of the theory.\textsuperscript{27} Moreover, these distinctions can reveal subtleties that might otherwise go unnoticed. For instance, in the discussion of the fourth progression in the Chopin piece shown in example 42 (p.71), it was revealed that if the boundary tones of the progression were to be verticalized, a second inversion triad would result.

\textsuperscript{25} See pp.38-43 for a complete discussion of the structural implications of the terms “upper” and “inner” voices in connection with upper-voice progressions.

\textsuperscript{26} Schenker, \textit{Free Composition}, 10.

However, if the boundary tones of the progression are considered in light of the direction Schenker prescribes for the bass, it can be seen that the progression itself is inverted since it descends from a higher-ranking voice to a lower-ranking voice. In order to understand the structural meaning of the relationship between C and G, the inversion and the concomitant register transfer must be taken into account. For only when the inversion is considered will the difference between this fourth progression and the fourth progression in example 35 (p.60) become clear.


In summary, the fundamental line and the fundamental bass are independent structural voices. Each structural voice can generate its own linear progressions, and each has its own inner voices. The model for motion from a principle to a subordinate voice in the upper parts proceeds in the descending direction; in the bass the model proceeds in the ascending direction. Example 43 illustrates that as consequence of the opposition of these structural models the voices move in a mirror image of one another.

Example 43
The Concept of Separate Linear Spaces

The view of the bass as being capable of producing its own inner voices raises the question of how these bass inner voices interact with the inner voices of the upper parts. In his article “The Cadential Six-Four as Support for Scale-Degree Three of the Fundamental line,” David Beach presents an analysis that contains a linear progression that begins in the upper voice and ends in the bass voice. The implications and the feasibility of such a linear connection shall be considered in light of Schenker’s descriptions of linear progressions. The piece to which Beach refers and his analysis of the passage are shown in example 44 (p.73), his commentary is as follows:

The primary tone, d² (§), is reinstated in bar 10 and confirmed by its repetition in bar 12. This leads us to our first difficult decision, namely the interpretation of the c² on the downbeat of bar 13. Because of its harmonization, as seventh of the dominant four-three chord, we expect it to continue on to the b¹ over tonic harmony as part of the structural descent. Indeed the seventh does resolve, but not as expected. Instead of progressing in the normal manner, the resolution is delayed and transferred to the bass on the third beat of bar 14, as shown in Example 3 by the curved line and arrow. (One might argue that the resolution is taken by an inner voice, but that would not affect the larger interpretation.)

As Beach’s analysis reveals, his reading requires that C be interpreted as persisting through the arrival of the head tone of the fundamental line, even though C is structurally inferior to D. This not only conflicts with linear boundaries, but also with harmonic boundaries, since D appears in the context of a root position tonic chord. Thus, C must be interpreted as persisting through two beats of tonic harmony. Beach opts for the transferred resolution, though his alternative reading—C resolving in an inner voice—conforms exactly to Schenker’s prescribed goals for descending upper-voice progressions:

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29Ibid., 88.

30The issue of boundaries and linear progressions is discussed in Chapter IV, beginning on p.79.
Example 3. K. 545 (II), mm. 1-16

Example 44. Beach's example 3. Mozart Sonata, K.345, II, mm.1-16
As a result of the continuing presence of the primary tone . . . a descending linear progression of the first order which departs from a tone of the fundamental line involves a progression from the upper voice to an inner voice; in the case of the third-progression, to the closest inner voice; in the case of a fifth-progression, to the second inner voice.\textsuperscript{31}

The same is true in the later levels:

Whatever the goal may be, the qualities inherent in the fundamental line and in the linear progressions at the first level remain the same at the later-levels. . . . The descending linear progression always signifies a motion from the upper to the inner voice; the ascending linear progression denotes a motion from the inner to the upper voice.\textsuperscript{32}

The third progression in example 44 shall be considered in light of the criteria for and characteristics of upper-voice progressions, since it originates in the structural upper voice. As an upper-voice progression, its boundary tones are representable in separate voices at the level immediately prior to the level on which the progression appears. Since this progression does not correspond to one of the four types of first-order progressions Schenker allows, the earliest level on which it could appear is the second level. At the first level, then, the boundary tones of the progression would appear as in example 45.

\begin{enumerate}
\item \begin{music}
\f clef=treble \f clef= bass
\bar{\bar{\f x}}
\f z \f z \f z \f z \\
\f z \f z \f z \f z \\
\end{music}
\end{enumerate}

Example 45

\textsuperscript{31}Schenker, \textit{Free Composition}, 44.

\textsuperscript{32}Ibid., 73.
Since the space between the boundary tones of a progression must be completely filled in for a linear progression to exist, the filling in of the space between the boundary tones in example 45 requires a tenth progression, not a third progression. Yet, the actual music does not provide an opportunity to fill in the space of a tenth. This suggests that B has been transferred to the bass voice. Although Beach claims just such a transfer, he goes considerably further by suggesting that the resolution of C is delayed. That is, he does not show the completion of the progression and then a register transfer of B, rather he asserts that the note that completes the progression is transferred to the bass.

Example 46 shows that in order for B to be transferred to the bass, the progression must either complete its course simultaneously with the transfer, or first complete its course in the upper voices. When represented at the level prior to that on which the progression appears, the boundary tones span the interval of a third, the filling in of which can easily be traced in the actual music.

Example 46

Finally, Schenker provides no provisions for the completion of upper-voice progressions in the bass, nor for the completion of bass progressions in the upper voices. And while he does not explicitly prohibit linear progressions that span intervals larger than an octave, the octave progression is the largest progression he considers in his discussion.
in *Free Composition* of the individual linear progressions.\textsuperscript{33} Progressions that exceed the octave are generally understood to result from the register transfer of one of the members of the progression.

When taken together, the general separation between the bass and the upper voices, the absence in *Free Composition* of any provisions for the completion of upper-voice progressions in the bass or for the completion of bass progressions in the upper voices, the specific inner-voice goals that Schenker prescribes for all upper-voice progressions, and the reversal of the structural meaning of the direction of upper-voice and bass progressions, all suggest the possibility of separate "linear spaces" for the upper voices and the bass voice.

It was stated that a linear progression requires a relationship of principle to subordinate between its boundary tones. In order for this relationship to exist, one of the voices connected by the progression must be understood to be structurally superior to the other voice. Since the outer voices of the fundamental structure are structurally equivalent, each can serve as the source of linear progressions that connect a structurally superior voice to a subordinate inner voice in its own linear space. In the case of the upper voice linear space, the inner voices are explicit; in the bass, the inner voices are implicit. The upper-voice linear space includes all linear progressions whose ultimate structural source is the fundamental line. The bass linear space includes those linear progressions that originate in the fundamental bass arpeggiation.

While it seems possible that a linear progression originating in one of the upper voices, say the tenor, could complete its course in one of the inner voices of the bass, the absence of any mechanism for comparing the relative structural rank of the two voices suggests that such a connection is unlikely. That is, inner voices in the bass linear space

\textsuperscript{33}See *Free Composition*, pp.75-77.
derive their structural status from their relationship with the structural bass voice; inner voices in the upper-voice linear space derive their status from their relationship with the fundamental line or some other upper voice. Where two progressions begun in the upper voices and bass voice, respectively, converge on a the same pitch, they are to be understood as forming a unison, but not an identity.

![Musical Example]

Example 47

In Example 47a, a descending third progression originates in the tenor and an ascending third progression originates in the bass. Both progressions close on the same pitch, E. Example 47b shows that the closure of the two progressions forms a unison. If the upper-voice progression were to actually close in the linear space of the bass, the structural relationship of principle to subordinate that originated in the upper voices would then be transferred to the bass. This would result in the bass linear space containing more than one structural voice. Similarly, if the bass progression closed in the upper-voice linear space, there would be two structural upper voices. Were the two voices to separate again, it would be impossible to determine which voice is the structural upper voice and which is the bass.

The characteristics and requirements for separate linear spaces for the upper voices and for the bass voice can now be summarized. The fundamental line serves as the source of content in the upper-voice linear space. All progressions whose ultimate source is the fundamental line belong to the upper-voice linear space. The fundamental bass

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34 We shall consider the implications of multiple structural voices in the same linear space in chapter IV.
arpeggiation is the source of content in the bass linear space. All progressions that originate in the bass voice belong to the bass linear space. The inner voices of the upper-voice linear space are explicit, while those of the bass linear space are implicit. A linear progression must begin and end in the same linear space. Any time two progressions originating in separate linear spaces converge on the same pitch, they form a unison, but not an identity.
CHAPTER IV
BOUNDARIES AND LINEAR PROGRESSIONS

Boundaries are essential to Schenker’s structural model. Were it not possible to define the boundaries of linear progressions, for example, it would not be possible to speak of the nesting of tonal events so characteristic of Schenker’s theory. One of the principles upon which Schenker’s hierarchy rests is that lower-ranking events depend on higher-ranking events for their existence and, as a result, higher-ranking events contain lower-ranking events. From this idea issues a second, equally vital principle that obtains throughout all stages and levels of the theory: a note persists linearly until it is displaced by another note at the same or at a higher level.

The Concept of the Primary Tone

Schenker’s principle of the primary tone is based in large part on this assumption: “...the primary tone combines within itself a mental retention, that is, a motionless state, and an actual motion of the linear progression...”1 Although this definition does not explicitly assign separate levels for the primary tone and the subsequent passing tones of a linear progression, as Proctor notes, reference to multiple levels is an integral part of Schenker’s conception of linear progressions.

A passing motion always indicates the prior presence of the boundary members of the figure, and an analytic graph can then show these boundaries either as members of the same chord or as displacements of simultaneously generated voice

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1Schenker, Free Composition, 38.

79
representatives at some prior level. All displacements of passing note boundaries at other than the Ursatz level are therefore non-absolute, and allow graphic representation of these boundaries at higher levels.²

Because the primary tone represents one of the boundaries of a linear progression, it necessarily resides on a level prior to the level on which the passing note figure occurs. In a footnote in Free Composition in which he attempts to explain Schenker’s restriction of the fundamental line to the descending direction, Oster also alludes to the absolute displacement of fundamental-line members.

Like true overtones, they [fundamental-line tones] too seem to be generated by a fundamental tone, which in the fundamental structure is the I. And the “tensions” come to rest only when the Ā, Š, or Š have “gone home” — when they have returned to where they came from, that is, to the fundamental which created them.³

The “tensions” can only be understood to cease if Ā, Š, and Š are displaced absolutely in the fundamental line. This is in sharp contrast to Schenker’s characterization of the role of the primary tone as the source of linear progressions in the middleground.

The [implicitly] retained head-tone of a falling linear progression maintains the real register of the upper voice; that of the rising progression becomes an inner voice. To continue the content, it suffices to pick up the head-tone of a descending linear progression once more, as if no linear progression had intervened.⁴

Thus, when Schenker speaks of the primary tone combining within itself a mental retention in a motionless state and the actual motion of the linear progression, he is referring to two separate levels on which the primary tone is functioning. And although this dual function is carried out by a single structural fact, it can be pedagogically helpful to represent the primary tone such that the separate levels on which it functions are reflected notationally.

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²Proctor, Technical Bases, 33-34.

³Schenker, Free Composition, 13.

⁴Schenker, Jahrbuch II. p.15, quoted in Oswald Jonas, Introduction, 82.
Example 48a shows a descending third progression with the primary tone, E, shown as an open note head. In this way, the difference in structural rank between E and the remaining notes is reflected notationally. Scheaker often depicts multiple theoretical levels on a single notational level. Doing so, however, does not allow all the levels on which an event is functioning to be represented equally. One of the levels, typically the lowest, is obscured by the notation. For example, it is not difficult to construe E in example 48b as continuing on a prior level until the arrival of D, given that a note is understood to persist linearly until it is displaced by another note of equal or higher rank. Less obvious is the sense in which E participates in the linear progression on the lower of the two levels.

Example 48

At the level on which the linear progression appears, all of its members are of equal status. Each note of the progression, including the first, is displaced by the succeeding note at that level. It is only in reference to a prior level that the boundary tones of the progression are understood to be structurally superior to the passing tones, and it is only in reference to a prior level that the primary tone is understood to persist throughout the course of the linear progression.

Example 49
Example 49 shows both the deeper-level meaning of E, as represented by the beam connecting it with D, and its lower-level meaning, as a full participant in the formation of the linear progression. While this type of notation is useful as a pedagogical tool in that it helps to clarify the dual function of the primary tone of a linear progression, it would be far too cumbersome to be of practical use in a full-scale analysis. The employment of a new notational level for each new theoretical event would result in an excessive number of notational levels.

Linear Space as Defined by Attack Points of Members of Linear Progressions

Thus far the discussion of boundaries has focused exclusively on the first and last notes of linear progressions, as these notes represent the limits of the progression. But the attack points of adjacent members of linear progressions also delimit the space within which tonal events on subsequent levels can occur.

On the level at which a linear progression arises, its components are contiguous. It is only at subsequent levels, where individual notes of the progression can be elaborated, that members of the progression appear to be nonadjacent. Put another way, the space occupied by a note can be likened to a window, the frame of which extends from the onset of the note until its displacement by a second note of equal or higher rank, see example 50a.5

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5I borrow the idea of viewing the space occupied by a tonal event as a window directly from Gregory Proctor. In examples 50-56, the structural rank of notes is indicated by the type of notation used, with the highest-ranking elements being the open, unstemmed note heads, followed by the filled in, stemmed note heads, the flagged notes, and lastly, the unstemmed, filled in note heads. This structural ordering obtains for all levels, such that, notes of similar form are construed to be on the same level. The letters and accompanying horizontal lines above each example indicate the duration of the highest ranking pitch of each window.
Example 50

The window can be subdivided on subsequent levels with each new window likewise having a single governing note. Although the original window may contain many tonal events, all events generated in that window ultimately prolong the governing note, which persists throughout the entire window regardless of how many events occur. In example 50b, E persists until it is displaced by the open note head D, even though a lower-ranking third progression intervenes. Each member of the intervening third progression governs its own window, which can itself be subdivided. Example 50c shows the window governed by D expanded by means of another third progression. Since this third progression originates on D, it occurs one level later than the third progression shown in example 50b. Each member of this new third progression in turn governs its own window (example 51a), which subsequently can be subdivided (example 51b).

Example 51

The following set of guidelines are proposed in order to systematically consider the formation and interaction of linear progressions on different levels of structure. Each point will be considered independently in the ensuing discussion.
1) Attack points of adjacent members of a linear progression delimit the space within which linear progressions on the immediately subsequent level must complete their course.

2) Progressions in the same linear space can move simultaneously if they are on different levels, and only if one or both of the progressions is reaching its goal.\(^6\)

3) The structural rank at which a note first appears remains fixed throughout all subsequent levels.

A linear progression initiated by the first of two higher-ranking adjacent notes cannot extend beyond the attack point of the second note. To do so would require that the progression be interpreted as simultaneously prolonging two separate higher-ranking structural facts, since all of the material contained in a given window ultimately prolongs the governing note of that window. In example 52a, E initiates what appears to be a descending sixth progression. Understood in this way, the progression simultaneously prolongs E and D, since it occupies both of the higher-ranking windows, see example 52b.

![Example 52](image)

Example 52

Because no single event can prolong two separate higher-ranking events on the same level, at the point of intersection with the attack point of D, the progression initiated by E ends and a new progression originating on B ensues, see example 53a. This last progression is two levels removed from the highest-ranking progression, E-D-C. That is, the third progression initiated by B occurs one level later than the fourth progression E-D-C-B, which in turn occurs one level later than the highest-ranking third progression begun

\(^6\)See p.72 for a discussion of the concept of separate linear spaces for the upper voices and for the bass.
Example 53

on E. The progression in example 53b is equally possible. In this case, the progression initiated by E completes its course on C, and a new progression originating with B, which implicitly returns to C, ensues.

Based on these examples, it can be generalized that where a linear progression intersects with a higher-ranking note, the progression ends and a new progression begins that is at least two levels removed from the highest-ranking note.

Schenker’s first order descending linear progressions provide particularly clear examples of progressions that complete their course within the space defined by two higher-ranking adjacent notes.\(^7\) Example 54 shows Schenker’s figures 33 and 34. Figure 33 illustrates progressions of the first order from $\mathbb{3}$ and $\mathbb{6}$, respectively, and figure 34 shows the possible progressions from $\mathbb{2}$. Each of the four descending first-order linear progressions resides entirely within a single harmony, with all but the third progression from $\mathbb{2}$ constituting transferred forms of the fundamental structure.\(^8\) In figure 33, the first two tones of the fundamental line delimit the space for linear activity initiated by the head tone of the first-order progression, while in figure 34, the last two fundamental-line tones define the space available for the remaining first-order progressions.

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\(^7\)With the exception that there is no distinction made between the status of the first and last notes of the fundamental line, all of the boundary issues that arise in connection with middleground linear progressions obtain for fundamental line members as well. Hence, adjacent members of the fundamental line delimit the space within which first-order progressions can occur.

\(^8\)See p.34 for a more detailed discussion of the first-order third-progression from $\mathbb{2}$. Although Schenker does not show bass support for the fifth-progression from $\mathbb{2}$ in figure 34, he does so in figure 35. In any event, there is no theoretical rationale for precluding a transferred form of the fundamental arpeggiation here.
Example 54. Figures 33 and 34 from *Free Composition*.

It was stated that only one linear progression can move at a time in each linear space and that linear progressions can occur simultaneously only if they exist in different linear spaces. This statement can now be further refined to read that only one linear progression on a given level may move at a time in a single linear space. This qualification is necessary because progressions on different levels within the same linear space can share boundaries.

Schenker describes the dual nature of linear boundaries as both terminal points and as points of departure in the following quote.

The concept of **nodal point** (Knotenpunkt), which plays such an important role in the voice leading of free composition should perhaps be taken up first of all in connection with dissonant passing tones. Since the dissonant passing tone fills out the space of a third, it gives both of the consonant points the significance of beginning and end of a third-space that is to be understood as a unit; at the same time, it releases the concluding tone for service as the beginning of a newly adjoined tonal event.\(^9\)

In example 55, B serves as both the goal tone of the fourth progression from E and as the initiating tone of the subsequent third progression. In this way, both progressions

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are moving simultaneously in that their boundary tones overlap; or to return to the window analogy, contiguous windows share a common frame, as in example 56.

Example 55

Example 56

Since the attack points of adjacent members of linear progressions delimit the tonal space available for linear progressions on subsequent levels, the idea of shared boundaries can be extended to include the intersection of a boundary tone of a linear progression and the attack point of a higher-ranking note. Example 56 shows not only the overlapping of the boundary tones of the fourth and third progressions, but it also illustrates the intersection of a boundary tone of a progression with the attack point of a higher-ranking pitch. The completion of the fourth progression and the initiation of the subsequent third progression occur simultaneously with the attack point of D on the highest level. Again, the representation of multiple theoretical levels with a single notational level often obscures levels and status distinctions of this sort.

Example 57. Figure 88,4d from Free Composition.

Example 57 provides an example of some of the types of inconsistencies that can arise when an analysis fails to adequately account for linear boundaries. Schenker
describes the passage as a “. . . masterly interlocking of fifth progressions.”\textsuperscript{10} Stated another way, the passage presents two overlapping fifth progressions on the same level, moving simultaneously in the same linear space. This contradicts Schenker’s own concept of the leading progression, which demands that one of the two lines be viewed as a linear progression while the other is understood as a counterpoint to that progression.\textsuperscript{11}

Schenker does not differentiate notationally between the status of the two fifth progressions. As such, each note in the respective progressions governs its own window, and any content generated in that window prolongs the governing note. Because Schenker views each progression as independent, no tone of either progression is subordinate to any tone of the other progression. Yet he shows \( C \), the head tone of the second progression, occupying the same space as \( B^b \) of the first progression. Given that each note defines its own linear space, an overlapping of windows results, see example 58. Both \( C \) and \( B^b \) cannot simultaneously be interpreted as the governing note of a single space, since only one note can be the highest-ranking in a given space.

\begin{center}
\includegraphics[width=0.5\textwidth]{example.png}
\end{center}

Example 58

The brackets beneath example 59 indicate the spaces occupied by each member of the first fifth progression. Since Schenker ties the primary tone of the first progression to

\textsuperscript{10}Schenker, \textit{Free Composition}, 77.

\textsuperscript{11}The implications of linear boundaries for Schenker’s concept of leading and following progressions is considered in chapter \( V \), beginning on p.108.
the primary tone of the second progression, the former is not displaced until the arrival of
B♭ in the second progression. The bracket above the example indicates the resulting space
occupied by the primary tone of the first progression.

Example 59

There several possible explanations for the C that Schenker indicates as the primary
tone of the second fifth progression: 1) it is a re-articulation of the head tone of the first
progression, in which case the intervening B♭ can function as a neighbor note. 2) C
initiates two separate fifth progressions that reside on the same level, but which do not
overlap as Schenker suggests; and 3) the second C is of a lower status than B♭ in the first
progression and is not the head tone of the second progression. These last two alternatives
allow for the existence of two linear progressions without violating any boundaries. In
fact, they conform precisely to Schenker's model for derived linear progressions.

Example 60

In the first case, the two progressions share a common head tone, resulting in a
repeated progression, see example 60a; in the second case, the first progression resides
entirely within the space delimited by the attack points of the first two notes of the second,
higher-ranking progression, see example 60b. In this interpretation, the C that Schenker labeled the head tone of the second progression is assigned to a later level and does not participate in the formation of either progression.

The Three-Part Ursatz: Tonraum as a Basis

That it is possible to speak of nesting of events requires that linear boundaries be immutable. Otherwise, a previously subordinate event can potentially contain a higher-ranking event, even the event from which it originated. Schenker adheres to the idea that the structural rank at which a note first appears remains fixed throughout all subsequent levels. If, for example, a note enters the musical structure at the first middleground level, it remains a first-order event for the remainder of the composition; a fundamental-line tone remains such throughout the structure, and so on.

In his article, “The Three-Part Ursatz,” David Neumeyer proposes a model that views the structural status of notes as variable.\textsuperscript{12} Before considering the implications of such a model for a system like Schenker’s, the purpose of the three-part Ursatz (as stated by Neumeyer) shall be examined and the theoretical framework that makes it possible shall be compared with Schenker’s views concerning the same principles.

Neumeyer states that the impetus behind the three-part Ursatz is “the confusion between the roles of structural soprano and cover tone . . . .”\textsuperscript{13} Specifically, the three-part Ursatz is intended to resolve, or perhaps even eliminate, the question of which note is the head tone of the fundamental line in cases where no clear cut choice is evident.


\textsuperscript{13}Ibid., 5.
For some compositions, I find that three-part, not two-part, counterpoint produces the most satisfying explanation of tonal design. In particular, the three-part Ursatz is useful when one is uncertain whether the first tone of the Urfonie is $\tilde{g}$ or $\tilde{f}$. The problem in such cases is usually that both tones are emphasized through prominent presentation and methods of prolongation. And more often than not, I find that regarding them as equal—as structural soprano and alto—resolves the difficulty.\textsuperscript{14}

At the core of the three-part Ursatz lies a reinterpretation of the concept of Tonraum, which Neumeyer understands to be a pre-Ursatz concept that provides the “tonal space available for composing out” in the fundamental structure. He bases his conception of Tonraum on the writings of two of Schenker’s students, Felix-Eberhard von Cube and, to a lesser extent, Victor Zuckerkandl.\textsuperscript{15}

From Zuckerkandl Neumeyer takes the idea of octave and functional equivalence of duplicate note names in the overtone series. In his text, Sound and Symbol, Zuckerkandl distinguishes between acoustical space and dynamic space.

[Scalar motion] first takes place contrary to the direction of the active force [the tonic], has the kinetic meaning “away from” . . .; $\tilde{g}$ is the turning point . . . from here on the motion is in the same direction as the active force, has the meaning “toward”. . . . The last step especially is clearly audible as arrival, as reaching the goal; and the goal reached is nothing but the point of departure itself.\textsuperscript{16}

Neumeyer summarizes Zuckerkandl’s position as follows:

Acoustically speaking, “the goal is an octave higher than the start. Dynamically speaking, both tones say the same thing, $\tilde{f} = \tilde{g}$” . . . Where motion

\textsuperscript{14}Ibid., 4.

\textsuperscript{15}Although Zuckerkandl’s focus here is principally on the dynamic quality of tones, based on his concepts of functional and octave equivalence of duplicate note names in the overtone series, Neumeyer is able to extend the limits of tone-space to include the interval formed between any two members of the chord of nature, not just the fundamental and its upper partials. Given this, Neumeyer construes the tone-space $\tilde{g} - \tilde{f}$ to be equivalent to the tone-space $\tilde{f} - \tilde{g}$, thus providing the theoretical basis for the ascending Urfonie.

through the scale upward represents change of acoustical space (change of octave), it represents rise and fall in dynamic space (octave equivalence).\textsuperscript{17}

Acceptance of $\hat{1}$ and $\hat{6}$ as functionally equivalent affords greater flexibility in the forms of the three-part Ursatz, in that it provides a mechanism for the derivation of possible fundamental line forms from inversion.

Example 61

From von Cube Neumeyer takes the idea that Tonraum is one of several stages that exist prior to the first compositional stage, the fundamental structure. Neumeyer cites the schematic given in example 61 from von Cube’s The Book of the Musical Artwork, and offers the following commentary:\textsuperscript{18}

Level (a) shows von Cube’s musical Grundgesetz: the overtone series is the vertical axis, units of time the horizontal axis. Level (b) is the specific Tonraum for this composition (Chopin’s Prelude in E, op. 28, no. 9).\textsuperscript{19}

Thus, Neumeyer equates Tonraum with the intervals formed by the members of the ultimate tonic. As such, Tonraum can only be interpreted harmonically, since there are no

\textsuperscript{17}Neumeyer, \textit{Ascending Urlinie}, 280. Emphasis original.


\textsuperscript{19}Neumeyer, \textit{Urline from $\hat{6}$ as a Middleground Phenomenon}, 5-6.
“lines” in the overtone series, nor at any stage prior to the fundamental structure; lines are the product of art. Because he conceives Tonraum as a pre-Ursatz stage, Neumeyer sees no restriction on the number of lines that fill the space.

Instead of regarding the Ursatz as a first principle, a view that threatens to limit genuine background to the line from 3 and two-voice counterpoint, I suggest we consider the variety of possible forms that could grow out of the pre-compositional stages and expand the number of available models.20

If a single tone-space can be filled in different ways without destroying the unity of the Tonraum, then the members of the lines that fill the space do not displace the elements that define the Tonraum. Neumeyer’s conception of the relationship between the notes of the chord of nature and those of the fundamental structure seems strikingly similar to Schenker’s concept of the primary tone.

I brought up the apparent problem of the relationship of Tonraum and Urlinie as one device to justify the three-part Ursatz. Tonraum clearly has priority in what von Cube calls the biogenesis of a musical artwork; if so, can its upper tone really be extinguished when the Urlinie descends to 7? No. If so, at the point the Urlinie descends to 7, the upper tone will have much the character of a cover tone (though structural priorities could be confused if we actually called it a cover tone).21

This line of reasoning raises the issue of displacement in Schenker’s theory. Neumeyer views the relationship between the elements of the fundamental structure and those of the pre-Ursatz stages as analogous to the relationship between middleground events and background events. Just as middleground events cannot displace prior Ursatz events, Ursatz events cannot displace pre-Ursatz events. In terms of the order of generation, this logic is sound. However, there is an important difference between pre-Ursatz events and those of the fundamental structure and subsequent levels.


Recall that passing-note figures in the middleground always imply the presence of the boundaries of the figure on a level prior to that on which the figure appears (p.79). And although Schenker clearly characterizes the primary tone of the fundamental line in the same way as he does the primary tone of a middleground linear progression, as Proctor notes, there is a fundamental difference between the nature of passing motion in the fundamental line and that of the middleground.

Graphic notation is a notation of counterpoints. The Ursatz itself is such a counterpoint and is the composing-out of the tonic harmony over the span of the entire piece. This suggests that the tonic harmony, lying behind the first, i.e., background, graphic level, can only be indicated by name and not by notation. . . .22

To Schenker musical structure at the level of the ultimate tonic does not occupy time and participate in change. This leads us to declare the displacements in the Urlinie as absolute displacements.23

Although absolute displacement and Schenker’s characterization of the primary tone in the middleground are not compatible in the fundamental structure, absolute displacement is consistent with Schenker’s presentation of the concept of Tonraum.

In his discussion of the criteria for construing the fundamental line from $\hat{8}$ as a middleground phenomenon, Neumeyer invokes the concept of Tonraum. In so doing, he strongly implies that Schenker, too, equates tone space with the intervals of the chord of nature.

Another way of conceiving this is in terms of Tonraum (that is, more harmonically), rather than in terms of lines (more melodically). From the Urphänomen of the overtone series, a composer (as Schenker has it) “chooses” a tonal space for the upper part, the bass already being determined by the fundamental.24

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22 Proctor, Technical Bases, 33.
23 Ibid. 34. Emphasis original.
24 Neumeyer, The Urlinie from $\hat{8}$ as a Middleground Phenomenon, 8.
Yet Schenker makes it very clear that he conceives of Tonraum not as a vertical, harmonic space, but as a horizontal space. For him tone-space is not anterior to the fundamental line, but is concurrent with it. Prior to the fundamental line there exists the potential for tone-space in the form of an interval of the chord of nature. But tone-space expressly requires both the horizontal presentation of that interval and the subsequent filling of its space with passing tones.

By the concept of tone-space I understand the space of the horizontal fulfillment of the fundamental line. Thus, only the fundamental-line progression of the third 3–2–1 represents the tone-space 3–1; only the fundamental line of a fifth or an octave represents the tone-space of a fifth or an octave . . . Therefore, I repeat: tone-space is only to be understood horizontally.25

The conditions Schenker outlines are not met by nature, which neither projects its intervals horizontally nor knows of passing tones. Only the appearance of the fundamental structure, a contrapuntal event that disposes the tonic chord horizontally and fills in its intervals with passing motion, fulfills the requirements of tone-space.

If Tonraum is understood as being part of the structure of a composition, rather than lying outside of that structure, then it is theoretically consistent with absolute displacement in the fundamental structure. Absolute displacement in no way precludes the fulfillment of Tonraum through the horizontal succession of the members of the fundamental line. And while the potential for Tonraum in the form of the intervals of the chord of nature can never be extinguished by activity in the fundamental line, Tonraum itself is extinguished with the completion of the fundamental line, since “. . . the fundamental line is identical with the concept of tone-space . . . .”26

25Schenker, Free Composition, 14.

26bid., 16.
Practical Application of the Three-Part Ursatz Model

The view of *Tonraum* as a pre-compositional stage, as well as the principles derived from this view, are no more or less defensible than a conception of *Tonraum* as part of the compositional structure of a piece. The two positions do, however, have sharply contrasting consequences, consequences that are in some ways theoretically incompatible.

As Neumeyer points out, the principal benefit of the three-part Ursatz is that it better explains the tonal events of some compositions by interpreting as a structural a note that would otherwise be considered a cover tone. It is particularly useful for compositions that alternately, and often equally, emphasize both 3 and 6. One such work is the final movement of Mozart’s Piano Sonata in D major, K. 284. The theme from this theme-and-variations movement is shown in example 62 on page 97.

Example 63

Example 63 shows that the first three bars comprise ascending motions to both 3 and 6. Given the analytic choice of only a single fundamental line, the arrival on 2 over the dominant in m.4 suggests an interruption in a fundamental line from 3. While it is possible
to read a stepwise descent from $\hat{5}$ to $\hat{2}$ in mm.3 and 4, the B\textsuperscript{b} neighbor to A\textsuperscript{b}, which implicitly returns in m.4, weakens this argument.\textsuperscript{27} In any event, example 64 (p.99) reveals that the theme can be interpreted such that all structural linear motion is either initiated by or directed toward $\hat{3}$.

Based on this, the first two bars contain a reaching over in the service of an initial ascent to the primary tone, $\hat{3}$, with $\hat{5}$ understood to be a transferred inner voice. Scale degree $\hat{5}$ remains statically, yet nonetheless prominently, disposed above $\hat{3}$ throughout the majority of the theme. This relationship between $\hat{3}$ and $\hat{5}$ corresponds exactly with Schenker's definition of a cover tone.

A cover tone is a tone of the inner voice which appears above the foreground diminution. It constantly attracts the attention of the ear, even though the essential voice-leading events take place beneath it. Such a cover tone can remain above an entire piece . . . .\textsuperscript{28}

Still, while the concept of the cover tone can be invoked to explain the prominence of $\hat{5}$ throughout much of this theme, some of the linear activity initiated by or directed toward $\hat{5}$ suggests a deeper structural meaning for it than that of a cover tone. In fact, an interpretation of the structure of this theme as emanating from a fundamental line from $\hat{5}$ is no less tenable than a reading from $\hat{3}$.

In example 65 (p.100) scale degree $\hat{5}$, as the primary tone of the fundamental line, is achieved by means of an initial arpeggiation spanning the first seven measures. The descending fifth progression initiated by E in m.7 supports the register transfer of A to the inner voice in m.8, see example 66. Example 67 shows that the second half of the theme

\footnotesize
\textsuperscript{27}There are, of course, other possible interpretations of the structure of this theme. The readings presented here are intended to demonstrate the inherent ambiguity regarding the choice between $\hat{3}$ and $\hat{5}$ as the primary tone of the fundamental line, rather than representing a detailed analysis that considers the myriad voice leading possibilities.

\textsuperscript{28}Ibid., 107.
contains an interruption in m.12, followed by the retake of the head tone in m.16 to initiate the final descent.

Regardless of whether one interprets the structure of this theme as issuing from a fundamental line from $\hat{3}$ or one from $\hat{5}$, both readings reveal musically significant, yet conflicting, structural features. A reading from $\hat{3}$ seriously diminishes the structural influence of the linear activity surrounding $\hat{5}$. On the other hand, a reading from $\hat{5}$ necessitates different interpretations of the linear motion initiated by $\hat{3}$ in mm.4 and 12, even though these measures contain essentially the same material. And while both interpretations are defensible, the choice of one reading over the other excludes otherwise viable and musically interesting structural relationships revealed only by the unselected reading.

It is precisely such a dilemma — a choice between two readings, each of which has merit but neither of which adequately accounts for all of the structural features revealed by the other—that the three-part Ursatz is designed to alleviate. Viewing the lines from $\hat{5}$ and $\hat{3}$ as structural soprano and alto better explains the significance of each fundamental line for the tonal design of the piece.

In example 68 (p.102) the structural soprano comprises the linear descent from $\hat{5}$ to $\hat{1}$ and is represented by the open note heads with upward stems, while the structural alto, which descends from $\hat{3}$, is shown with open note heads and downward stems. Dual fundamental lines make it possible to show the interruption in m.4 in the line from $\hat{3}$, while retaining $\hat{5}$ in m.7 as the structural goal of the initial arpeggiation. The three-part Ursatz also allows for the final descent from both $\hat{5}$ and $\hat{3}$ to occur simultaneously in mm.16-17. In this way, the significance of each of the structural upper voices is revealed and neither voice is understood to be superior to the other.
Example 68
The Concept of Reassignment

One of the theoretical principles that makes the three-part Ursatz possible is

"reassignment," of which Neumeyer states:

More a matter of interpretation (maybe even just a subtlety of notation) than a
clear technique or hard-and-fast principle, reassignment means change in status from
background to middleground (usually temporary, but not necessarily) for either note
of a compound Urlinie.29

The examples that Neumeyer gives to illustrate reassignment suggest that linear
motion itself elevates the structural rank of a line. Conversely, the absence of linear activity
in one of the two structural upper voices necessitates a reassignment of that voice to the
middleground. Regarding his example 17, which is shown in example 69, Neumeyer
states "in $\frac{5}{3}$, 3 may become a subordinate voice or have no contrapuntal linear motion while
$\hat{3}$ moves (as in the first part of example 17), or $\hat{3}$ may deteriorate into a cover tone (as in
the second part of example 17)."30

Example 69. Neumeyer's example 17.

Neumeyer's suggestion that reassignment is "more a matter of interpretation (maybe
even just a subtlety of notation) than a clear technique or hard-and-fast principle" is well

29 Neumeyer, The Three-Part Ursatz, 19.

30 Ibid., 19.
founded. If reassignment is interpreted literally as a change in the status of a note from background to middleground or vice versa, it conflicts with one of the essential principles of Schenker’s theory. It is assumed that the principle that a note persists linearly until it is displaced by a note of equal or higher rank obtains for both a two-part and a three-part Ursatz. Without it there can be no nesting of events, wherein one event is the progenitor of other lower-ranking events that are contained by the higher-ranking event.

Example 70

Reassignment conflicts with this principle in that a background-level note that has been reassigned to the middleground can subsequently be displaced by what was formerly a lower-ranking note. Neumeyer’s example 21 (see example 70) shows two structural upper voices, with a fifth progression issuing from $\hat{3}$. There are two possible, yet mutually exclusive interpretations for this passage. According to the concept of reassignment, $\hat{3}$ can be understood to have receded to the middleground, as indicated by the dotted slur connecting $\hat{3}$ with the flagged B in m.4. Having been reassigned to the middleground, $\hat{3}$ is no longer structurally superior to the members of the fifth progression from $\hat{5}$. Consequently, $\hat{3}$ is displaced by A in m.2 and does not reside on the same level as $\hat{2}$ in m.4, as the beam connecting B (m.1) and A (m.4) implies.

On the other hand, if B is understood to persist until it is displaced by A in m.4, no fifth progression can exist from $\hat{5}$. Assuming that this fifth progression occurs at the first
level or later, the members of the progression are by definition subordinate to the structural alto. Recall that attack points of higher-ranking notes signify the end of lower ranking progressions at the point of intersection.\textsuperscript{31} When the progression from $\mathfrak{S}$ shown in example 71 intersects with B, the progression ends and a new progression initiated by B ensues.

\begin{center}
\includegraphics[width=0.3\textwidth]{example71.png}
\end{center}

Example 71

The possibility of a linear succession connecting two structural voices points to another concept with which the three-part Ursatz conflicts, namely, the definition of linear progressions proposed in this paper.\textsuperscript{32} If linear progressions are distinguished from diminutions based on the structural inequality of the progressions’ boundary tones, then lines that connect the structurally equivalent soprano and alto in a three-part Ursatz cannot be construed to be linear progressions.\textsuperscript{33} The line D-C-B in example 71 connects the structurally equivalent upper voices. Since there is no status distinction between the boundary tones of the line, there can be no linear progression. By allowing multiple

\textsuperscript{31}The discussion concerning the interaction of members of linear progressions of different structural status begins on p.79.

\textsuperscript{32}Admittedly, Schenker does not expressly define linear progressions in the manner proposed here. Nonetheless, as I have tried to demonstrate, a definition of linear progressions based on the structural relationship between the boundary tones of the progression is applicable to progressions at all levels of structure. Thus, while such a definition may not be directly attributable to Schenker, I understand it to be an integral component of the theory.

The possibility of connecting two structural voices in the same linear space shall be considered in the following chapter in light of Schenker’s concept of leading and following progressions.

\textsuperscript{33} See p.72 for the discussion of the relationship between structurally equivalent voices.
structural upper voices, lines that would otherwise be considered linear progressions, and which would have significant structural implications, are relegated to the status of simple diminutions.

In fairness to Neumeyer, it should be pointed out that in his Reply to Larson, he rejects the notion that the soprano and alto in the three-part Ursatz are truly structurally equivalent.

Early on, Larson writes that “Schenker recognized that the masterworks he studied create motion out of structural inequalities ... between notes or groups of notes.” Larson suggests that I have removed an essential inequality by producing an Ursatz model with two upper voices, whereas it should have been obvious to me that, if one finds a structural soprano and alto, the former must be structurally (as well as literally) superior. ... I did indeed write about regarding the structural soprano and alto as equal, but it should have been clear from the rest of the article that I consider the relationship of these two parts to be dynamic—even a bit unpredictable—and not the simplistic equating that Larson would saddle me with.34

The dynamic relationship between the soprano and alto may be evident in contexts where one or the other voice has been “reassigned” to the middleground. In such cases the moving voice is construed to be superior. However, the structural relationship between the two voices is far from obvious in contexts where both voices are moving simultaneously, (see Neumeyer’s examples 9 and 10). Similarly unclear is the mechanism by which one assesses the structural status of the soprano and alto. In his two-part fundamental structure Schenker makes it clear that the outer voices are superior to the inner voices. Since the alto is technically an “inner” voice, the same cannot be said of the three-part Ursatz.

Although the three-part Ursatz is defensible as a theoretical model and clearly reveals aspects of some compositions that the two-part fundamental structure obscures, it also conflicts with and even precludes certain concepts in Schenker’s theory. And while the differences between the two models neither validate nor invalidate either theoretical position, the importance of those concepts in Schenker’s theory with which the three-part

34Neumeyer, Reply to Larson, 34.
Ursatz conflicts must be weighed against the benefits produced by the three-part Ursatz model.

Ultimately, the three-part Ursatz cannot be viewed as simply another possibility within Schenker’s theory. That it relies on an interpretation of Tonraum as a pre-compositional stage places it outside of the principles of Schenker’s theory. Still, it is likely that the usefulness of the three-part Ursatz as an analytical tool will not be fully realized so long as it is considered only in the context of Schenker’s theory. It is possible, as Neumann suggests, that new principles based on the pre-compositional stages can lead to structural possibilities beyond those proposed by Schenker.
CHAPTER V

LEADING AND FOLLOWING PROGRESSIONS

In his discussion of linear progressions at the later levels, Schenker introduces the idea of the leading progression.

When two or more linear progressions are combined, it is essential to determine—from background, middleground, and foreground—which of them is the leading progression. In relation to this leading progression the others must be considered only as counterpoints, whether they proceed in parallel, oblique, or contrary motion, in outer or inner voices. Once one has decided whether the leading linear progression is in the lower or in the upper voice, one must understand the counterpointing progressions as upper or lower thirds, tenths, or sixths.¹

Before examining the implications of the concept of the leading progression, some terminological distinctions are necessary. It is important to note that leading and following progressions must first and foremost be genuine linear progressions. That is, both the leading and the following progression must exhibit the structural relationship of principal to subordinate between their boundary tones. This distinction is significant in that leading and following progressions are often accompanied by contrapuntal lines that lack a structural relationship between their boundary tones.

Prior to the analytical determination of which linear succession among two or more possibilities meets the criteria to be a linear progression, all such successions have the potential to be linear progressions. Therefore, in the discussion all linear successions are referred to as "lines" until the leading and following progressions are chosen. Finally, all citations of figures refer to examples from Free Composition.

¹Schenker, Free Composition, 78. Emphasis original.
It was previously noted that while the relationship of principal to subordinate can be transferred to different pairs of voices, only one voice can function as the principal voice at any given time. The principal voice can relate structurally to only one other voice at a time, since every linear progression has only two boundary tones. Implicit in this is the notion of an active relationship between the two voices connected by a progression. The principal voice relates to the subordinate voice directly through the motion of the linear progression. As a result, there can be only one moving linear progression on a given level at any time in the same linear space.

Example 72

Example 72a shows a descending third-progression originating with E. At the level at which the progression appears, its boundary tones possess the active relationship of principal to subordinate. Example 72b shows another third-progression interpolated between the first two notes of the original progression. On the level at which this subordinate progression appears, it possesses the active structural relationship. There can be only one leading progression on any level and it must exhibit this active structural relationship.

At the core of the concept of leading and following progressions is that two linear progressions move simultaneously. Because only one moving linear progression can

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2 See p.42.

3 Although Schenker allows for the combination of “two or more” linear progressions, based on the definition of linear progressions proposed in this paper, the number of simultaneously moving linear progressions is limited to two.
exist on any level in a given linear space, leading and following progressions must exist in separate linear spaces. That is, only two voices can actively participate in a structural relationship on a single level at any time in the same linear space. All other linear successions occurring in that linear space are understood to be lines. Genuine linear progressions can exist simultaneously in separate linear spaces because each linear space contains an independent structural voice that can generate linear progressions. As a result, two voices in each linear space can simultaneously share in an active structural relationship.

Example 73

Example 73a shows two upper-voice lines, only one of which can be a linear progression because the two are moving simultaneously. Since no structural distinction can be made between the boundary tones of the line initiated by G, it cannot be a linear progression. As a fundamental-line tone, E in the upper part is structurally superior to C. The boundary tones of the higher of the two lines therefore exhibit the relationship of principal to subordinate required of all linear progressions.

Example 73b shows two linear progressions moving simultaneously in separate linear spaces. Since each outer voice represents the structural voice in its respective linear space, both progressions exhibit the active structural relationship between their boundary tones. Once two simultaneously moving, genuine linear progressions in separate linear spaces are identified, the task then is to determine which is the leading progression and which is the following progression. In order to ascertain the criteria for choosing between
the two, we turn to Schenker's discussion of the examples of leading and following progressions that appear in *Free Composition*.

**The Role of Harmony in Determining the Leading Progression**

Schenker does not state precisely how the leading progression is determined. Nonetheless, several of his statements made in connection with examples of leading and following progressions provide clues as to the essential characteristics of leading progressions. For instance, in his discussion of figure 95,d1, which is shown in example 74, agreement with the underlying harmony seems to distinguish the leading progression from the following progression.

... lower tenths associate themselves with the leading sixth-progression in the upper voice, while the inner voice enters at the third. Thus, with the first of the tenths there arises a $\frac{5}{3}$ chord, which, however, in terms of the harmony of the leading sixth-progression, must be understood only as an appoggiatura 6 (—5).^4

![Musical notation image]

Example 74. Figure 95,d1 from *Free Composition*.

Schenker similarly focuses on the harmonic membership of the constituents of the progressions in his discussion of figure 95,e3, which is shown in example 75.

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^4Schenker, *Free Composition*, 79.


. . . we must consider the bass as the leading voice since it is subdivided at g. The upper voice e²–e¹ does prolong the primary tone of the fundamental line, but we cannot assume a subdivision at b¹ since this tone is foreign to the C harmony.⁵

Example 75. Figure 95,e3 from Free Composition.

Although Schenker does not directly state that the bass contains an octave-progression, the slur from C to C and his comment that the bass is subdivided at G imply that this can be the case. Jonas supports this interpretation by placing his discussion of this example under the heading “The Octave-Progression.” He offers the following commentary: “It shows the counterpoint in parallel tenths that accompanies the passing tones, and also the subdivision of the octave into a fourth- and a fifth-progression.”⁶ This implies that two progressions can be combined to form a single, larger progression. However, if a linear progression is required to exhibit a structural relationship between its boundary tones, and if only two voices can actively participate in this relationship at any given time in the same linear space, a conflict arises.

Example 76a shows an octave-progression in which C⁴, the initiating tone of the progression, is understood to be structurally superior to C³, the goal tone of the

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⁵Ibid. 80. Although Schenker shows only an arpeggiation in the upper voice, it is actually a complete octave progression. He presumably does not show the entire progression in order to highlight the internal articulation at B. For a complete analysis of this piece, see “Five Graphic Music Analyses” p.36.

⁶Jonas, Introduction, 80.
progression. If the progression is subsequently subdivided into a fourth- and a fifth-progression as in example 76b, the structural relationship of principal to subordinate is transferred to a different pair of notes. That is, C⁴ not only serves as the principal upper voice to C₃, but also to G, which in turn also serves as the principal upper voice to C₃. In this way, more than one pair of notes simultaneously shares in the active structural relationship. It can be concluded from this that two linear progressions cannot be combined to form a single, larger progression. In situations such as that presented in example 75, there are two possible interpretations: 1) the fourth- and fifth-progressions remain separate and independent, yet fill in the space created by the register transfer of C; and 2) an octave-progression is articulated internally, but no separate fourth- and fifth-progressions exist.

![Example 76](image)

Schenker’s statement in connection with figure 95.d1 (ex.74) that “with the first of the tenths there arises a \( \frac{5}{3} \) chord, which, however, in terms of the harmony of the leading sixth-progression, must be understood only as an appoggiatura 6 (—5),” implies that the leading progression is expressive of a single harmony. That a progression projects a single harmony may contribute to the determination of certain leading progressions. However, given that the boundary tones of linear progressions at the later levels as often as not reside in two different harmonies, Schenker’s observation here cannot be extended to include all leading progressions. Schenker acknowledges the possibility that the boundary tones of a leading progression can belong to two different harmonies and offers the following guidelines.
In a progression in parallel thirds (tenths) one must take into consideration whether it [the leading progression] remains within the same harmony or moves to another, as well as the dimensions and extent of the progression.\footnote{Schenker, Free Composition, 79.}

He maintains that in such cases there is only one primary or governing harmony.

In weighing the relative significance of the linear progressions in the upper and lower voices it is important to determine whether the motion of the inner voice agrees with the primary harmony throughout or whether it is opposed to it at the beginning or the end.\footnote{Ibid., 78.}

This raises the question of how one determines the primary harmony. As a result of the relationship between the boundary tones of linear progressions, a relationship of principal to subordinate also exists between the harmonies containing the boundary tones of a progression. (This of course applies only to contexts in which the boundary harmonies differ.) The determination of the primary harmony is based on which harmony contains the higher-ranking linear event. Thus, the primary harmony is that harmony to which the higher-ranking of the two boundary tones of the linear progression belongs. In this way there can only be one primary harmony for any linear progression.

Example 77 shows a descending fourth-progression whose boundary tones lie in two different harmonies. The leading harmony is C by virtue of the fact that it contains the higher-ranking of the two boundary tones.

Example 77
Agreement with the governing harmony may be sufficient to determine the leading progression in cases where one of the progressions begins and ends in the same harmony, while the other connects two different harmonies, as in example 74. However, harmonic membership as the sole, or even principal, means by which the leading progression is determined is not decisive in all cases. Provided that two progressions connect the same harmonies, the leading progression cannot be determined based purely on harmonic grounds. This is true regardless of whether the two progressions begin and end in one and the same harmony, or connect two harmonies.

Schachter cites an example of two progressions that begin and end in the same harmony and, as a consequence, questions whether there is in every case a single leading progression.

That there is always a leading progression might be open to question. In a counterpoint between scale degrees 3-2-1 and scale degrees 5-4-3, where both lines compose out tonic harmony, each might be a plausible candidate for leading progression, though context will sometimes suggest one or the other.9

Of course, Schachter is not necessarily working under the same set of assumptions as those put forth in this paper. And even though the criteria for linear progressions proposed here preclude the lines Schachter describes from both being linear progressions in the same space, his point is well taken; it is possible for two linear progressions to compose out the same harmony. In such cases, criteria other than those based on harmonic considerations must be invoked.

Example 78a shows figure 95,e4 from Free Composition, which contains two octave-progressions, one in the upper voice (E—E), and one in the bass (C—C). The governing harmony is clearly C minor. Schenker's rationale for choosing the bass progression as the leading progression is that he views the upper voice progression as

9Schachter, Commentary, 138. Emphasis original.
originating in an $A^b$ harmony. He maintains that this progression is to be interpreted in the same way as the one in figure 95,e2, which is shown in example 78b. Closer examination of example 78a reveals inconsistencies in Schenker’s position.

Example 78. Figures 95,e4 and 95,e2 from Free Composition.

The inner voice $A^b$ (at NB) is functioning as a neighbor to G. More importantly, it is part of an accompanimental line. By Schenker’s own definition of leading progressions, such lines must be viewed as counterpoint. Their harmonic implications are localized and cannot supersede the harmonic implications of leading progressions. Even if one argues that the harmony of the upper voice is altered by virtue of the inner voice $A^b$, then so too must the harmony of the lower voice be affected. Whether one views the upper and lower voices as beginning and ending in the C minor harmony or as originating in the $A^b$ harmony, both progressions connect the same harmonies and again the rationale behind designating the bass the leading progression is unclear.

Example 78a actually corresponds more closely to example 79 than it does to example 78b, yet Schenker treats example 78a entirely differently than he does example 79. In both examples the inner voice sixth above the bass arises as an upper neighbor, albeit an incomplete neighbor in example 79. Still Schenker expressly rejects any harmonic implications for f#—as indicated by his editorial comment “not $F\#^5_3$”—while simultaneously imparting to the inner voice $A^b$ (ex.78a) harmonic significance sufficient to
preclude the upper voice from being the leading progression. In both cases the inner voice sixth above the bass functions as counterpoint to the leading progression, and its harmonic meaning is accordingly subordinate.

Example 79. Figure 95,d3 from Free Composition.

**The Role of Structural Connections in Determining the Leading Progression**

In the absence of harmonic criteria that in all cases decisively distinguish the leading from the following progression, other factors must contribute to this determination. Schachter suggests that one such factor is the connection with deeper-level linear events. "The leading progression would be the one more directly connected with deeper levels; harmonic factors—agreement or disagreement with the governing chord—are often decisive in determining such a connection."\(^{10}\) Thus the leading progression will be the one that departs from or proceeds to the highest-ranking linear event. Inversion can play an important role in determining which of two possible candidates is the leading progression, since an inverted progression appears one level later than the level on which the uninverted form of the progression may reside. The lower status of the inverted progression can, in certain contexts, preclude it from being the leading progression. That the leading

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\(^{10}\)Ibid., 138.
progression agrees with the primary harmony is assured by the fact that the primary
harmony, too, is determined by its relationship with the highest-ranking linear event.

Aside from the problem of Schenker’s parsimoniousness in his discussion of the
means by which leading and following progressions are to be determined, his nearly
exclusive reliance on harmonic factors in determining leading progressions often results in
vague, sometimes contradictory, examples of leading and following progressions. In Free
Composition the examples of leading and following progressions are organized according
to the size of the progressions involved. Hence, third-progressions are presented first,
followed by fourth-, fifth-, sixth-, and octave-progressions, respectively. One or more
contrived examples, for which no broader context can be discerned, introduces each new
category of progressions and is followed by several examples from the literature. The
absence of a broader context for these paradigmatic introductory progressions is misleading
in that it completely ignores the role played by deeper-level linear connections and thereby
elevates the role of harmonic membership to that of the sole criterion for determining the
leading progression.

Curiously, even though Schenker provides no broader context for the introductory
progressions, he does differentiate notationally between their boundary tones.
Unfortunately, his inconsistency from one example to the next makes it impossible to draw
conclusions that can be extended to contexts beyond these individual progressions. For
instance, figure 95,1, which is shown in example 80, is intended to illustrate the
combination of two third-progressions, the lower of which Schenker deems the leading
progression. He uses flags to indicate the relative structural priority of the boundary tones
of each progression, but fails to distinguish between the status of the boundary tones of the
upper progression, as they are both flagged. The upper boundary note of the leading
(lower) progression is unstemmed, indicating its subordination to the initiating tone of the
progression.
Example 80. Figure 95,a1 from *Free Composition*.

However, his very next example contradicts this reading. Example 81 presents figure 95, 2, which again shows the combination of two third-progressions. Here, the upper progression leads, yet the status of its boundary tones relative to each other is indistinguishable. Schenker does differentiate between the status of the boundary tones of the following progression, although he does so presumably in order to emphasize that the note A does not agree with the governing harmony. As a result of this disagreement with the primary harmony, the lower progression is denied the position of the leading progression.

Example 81. Figure 95,a2 from *Free Composition*.

Still, in example 80 both progressions reside entirely within the C harmony, and the reason for the primacy of the lower one is unclear. In both cases, the absence of a larger context, particularly the absence of a clear determination of the structural relationship between the voices connected by the progressions, makes it virtually impossible to precisely state the means by which the leading progression is determined.
Scantness of context is equally troubling in attempting to decipher Schenker’s rationale for his choice of the leading progression in several of the examples that he cites from the literature. Example 82 shows figure 95,a8, which presents an excerpt of the Gavotte from Bach’s French Suite in E Major. It shows two third-progressions—E-D#, C# in the upper voice and C#-B-A# in the lower voice, with A# being transferred to the inner voice. Both progressions originate within the C# harmony and conclude in the F# harmony. The boundary tones of both progressions can be construed to belong to the F# harmony, with E in the upper part understood as the seventh of an F#7 chord. This agrees with Schenker’s law of the primary tone, according to which the initiating note of a linear progression persists throughout the entire course of the progression. Still, even if one were to try to determine the leading progression according to its agreement with the underlying harmony, the leading harmony could not be conclusively ascertained without consideration of its interaction with the deeper-level linear events.

Example 82. Figure 95,a8 from Free Composition.

Schenker complicates matters further by offering a different reading of this passage in figure 125,2 see example 83 (p.121). Here he shows a fourth-progression in the upper part, rather than a third-progression. Since the linear motion of the lower voice halts at a#, and the upper progression continues on to b, there is no question that the upper progression leads.
Example 83. Figure 125.2 from Free Composition
Schenker’s labeling of multiple linear progressions in a single linear space is misleading. In example 84 he shows a fifth-progression and a fourth-progression moving simultaneously in the upper voices. Even though both lines lie within the same harmony, only one of them can actually be a linear progression. Schenker maintains that the fifth-progression leads, but does not say why. There is insufficient context to determine the relative structural priority of the boundary tones of either progression.

Example 84. Figure 99,1b from Free Composition.

It should be noted that the representation of multiple linear progressions in a single linear space is not characteristic of Schenker’s graphing technique in general. To the best of my knowledge, of all the examples in Free Composition, Schenker shows multiple progressions in the same linear space in only one example that does not directly pertain to leading progressions (see figure 88,4d). In all others, he is careful to label only one linear succession as a linear progression in a given linear space, while simply slurring any other lines occurring in that space in order to indicate boundaries and proper articulation.

11 See p.87 for a detailed discussion of figure 88,4d.
Guidelines for Determining Leading and Following Progressions

Based on the preceding discussion, a set of guidelines for determining leading linear progressions and their interaction with accompanying lines can now be proposed.

1) A leading progression must exhibit an active structural relationship of principal to subordinate between its boundary tones.

2) There can be only one leading progression on any given level in a single linear space at a time.

3) Leading and following progressions must occur in separate linear spaces.

4) Given two progressions, the leading progression will be the one that departs from or proceeds to the highest-ranking element.

5) The leading progression will agree with the primary harmony.

6) The primary harmony will be the harmony that contains the highest-ranking active linear element.

In the end, even the combination of deeper-level linear connections and harmonic considerations fails to provide a mechanism for determining the leading progression that is decisive in all cases. It is possible that two genuine linear progressions in separate linear spaces can be equally viable candidates for the leading progression. Since each progression in example 85 (p.124) fulfills the requirements for linear progressions, and both compose out the same harmony, it is not possible to decide which progression leads. Nonetheless, as Schachter notes, “Even if it is not universally applicable, the concept of the leading progression is highly productive, for it enables one to get a clear idea of connections among the levels and of relationships between chord and line.”\(^{12}\)

It may be argued that since the bass arpeggiation of the fundamental structure is ultimately subordinate to the fundamental line, where two progressions occur on the same

Example 85

level in separate linear spaces, the upper-voice progression has priority.\textsuperscript{13} However, this does not seem to inform Schenker’s choice of the leading progression in any of the examples from \textit{Free Composition}.

Finally, the idea that the leading progression must exhibit an active structural relationship is reminiscent of Neumeyer’s basis for reassignment. Recall that in a three-part \textit{Ursatz} when one of the two possible structural upper voices becomes stagnant, it is reassigned to the middleground, while motion in a voice elevates its status. Still, the three-part \textit{Ursatz} further compounds the problem of choosing the leading and following progressions, since more than one candidate can exist in the same linear space. Each of the structural upper voices can generate its own linear progression. Since these progressions can reside on the same level and can move simultaneously, each can be a valid candidate for the leading progression.

\textsuperscript{13}See p.65.
CHAPTER VI
THE ROLE OF THE FUNDAMENTAL STRUCTURE

The Fundamental Line as a Linear Progression

The absence of a clear distinction between a line and a linear progression has resulted in ambiguity concerning the nature of the fundamental line itself, which is routinely treated as though it is linear progression in the same sense as those progressions occurring in the middleground.\(^1\) For example, Jonas states that “the fundamental line can be a third-progression, a fifth-progression . . . or even an octave-progression.”\(^2\) Elsewhere, however, Jonas characterizes the fundamental line as separate and distinct from middleground linear progressions.

The linear progressions of voice leading constitute the strata of the middleground, which connects the background stratum, the fundamental structure, to the foreground, the final manifest appearance of the work. The fundamental line moves, as the original passing event, above the original nature-born and chord-generating scale degrees; together with them, it forms the fundamental structure.\(^3\)

According to this, it would seem that linear progressions occur only in the middleground. Schenker’s own comments undoubtedly are the source of the confusion concerning the nature of the fundamental line, given that he refers to the it as a linear progression on numerous occasions in Free Composition. In fact, at times he seems to

\(^1\) Although Schenker uses the term Zug in reference to both the Urdlinie and to the middleground linear progressions, in this paper the term “linear progression” refers exclusively to middleground events.


\(^3\) Ibid., 137.
suggest that the fundamental line differs from linear progressions in the middleground only in terms of scope.

Anyone who, like the genius, can create the smallest linear progressions of thirds, fourths, and fifths abundantly and with ease, need only exert a greater spiritual and physical energy in order to extend them still further through larger and larger spans, until the single largest progression is attained: the fundamental line.4

The implication here is that the fundamental line is functionally synonymous with the linear progressions, in that the linear progression is the principal means of generating content and the fundamental line is the ultimate source of all upper-voice content. In this way the background is separated from the middleground only by virtue of the fundamental line’s superior structural status as the ultimate progenitor of all other upper voice progressions.

In order to determine the ways in which the fundamental line is synonymous with linear progressions and the ways in which it is separate and distinct from them, it shall be compared with both first-order and later-level linear progressions, considering separately elements common to the fundamental line and middleground progressions and elements unique to either the background or the middleground.

The simplest and most basic characteristic that the fundamental line shares with all linear progressions is the necessity of passing motion. “The space of a fundamental line must contain the linear progression of at least a third. . . .”5 The same holds true for all linear progressions. The linear progressions which most closely resemble the fundamental line are the transferred forms of the fundamental structure. It was previously stated that transferred forms, like the fundamental structure, have “. . . the effect of a self-contained

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4Schenker, Free Composition, 18-19.

5Ibid., 12.
structure within which the upper and lower voices delimit a single (tonal) space.” That is, both the fundamental structure and the transferred forms—complete and incomplete—are expressive of a single harmony.

Schenker takes great pains to reinforce the idea that the fundamental line is the model for the linear progressions of the middleground. He points to the parallel that exists between the intervals spanned by first-order progressions and those traversed by the forms of the fundamental line.

The [first order] linear progressions present a horizontalization of the originally vertical intervals of the fundamental structure: 3 (10), 5, . . . Thus, the fifth and third of nature manifest themselves not only in the fundamental linear progressions $\mathcal{F} \rightarrow \mathcal{F}$ or $\mathcal{S} \rightarrow \mathcal{F}$ and in the counterpointing arpeggiation of the bass through the fifth, but also in fifth- and third-progressions which descend from a tone of the fundamental line. This agreement with nature and with the fundamental structure reveals itself even in the linear progressions of the transformational levels.7

In this last statement, Schenker implies that the agreement with nature and with the fundamental structure extends beyond the first level. However, later-level progressions—excluding transferred forms of the fundamental structure—are not restricted to spanning the intervals of a fifth or a third, as in the case of first-order progressions. Nor do they necessarily represent self-contained tonal structures expressive of a single harmony. Nonetheless, Schenker maintains that “. . . the qualities inherent in the fundamental line and in the linear progressions at the first level remain the same at the later levels.”8

Fewer constraints on later-level progressions result in other significant differences between these progressions and the fundamental line. Recall that one of the consequences of fewer restrictions on later-level upper-voice progressions is the greater freedom of contrapuntal bass accompaniment. Schenker routinely shows later-level progressions with

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6Ibid., 87. The full discussion of transferred forms of the fundamental structure begins on p.29.

7Ibid., 44.

8Ibid., 73.
only the boundary tones receiving contrapuntal bass support. On the other hand, the
determination of which form of the fundamental structure underlies a given composition
depends in large part on whether each of the fundamental line members is counterpointed
by a consonant bass tone.

Those new to the concept of musical background tend to turn their attention
exclusively to the fundamental line, because it is the upper voice. They all too hastily
accept any tone series as the fundamental line, without determining whether it rests
securely upon the counterpoint of the lower voice.⁹

In the case of a Æ-line, Schenker states:

The tasks of the middleground and foreground are to eliminate the
unsupported stretch at the passing ₉ by making that ₈ consonant and composing it
out, and ultimately to establish and fulfill the structural subdivision ₈—₉—₉ or
₈—₄—₉.¹⁰

Similarly, in the case of an ₄-line,

The unsupported stretch must be eliminated in order to establish that the
fundamental line ₄—₉ actually exists.¹¹

It can be concluded from these statements that for a fundamental line to exist, each
of its components must receive consonant, contrapuntal bass support at some level. No
such requirement exists even for transferred forms of the fundamental structure, much less
for all later-level progressions.

A second characteristic distinguishing the fundamental line from middleground
linear progressions is that the fundamental line resides entirely within a single voice,
whereas linear progressions represent a connection between two voices. The fundamental
line comprises the horizontal projection and subsequent filling in of an interval from the

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⁹Ibid., 11.

¹⁰Ibid., 20.

¹¹Ibid., 21.
chord of nature. There are no voices in nature; voices are the product of art. All fundamental line members reside in the same voice.

This distinction has significant structural and functional implications in that linear progressions perform two tasks that the fundamental line does not. First, they introduce new upper voices that generate content and gain new levels. Second, since linear progressions connect two voices, the progression itself engages new voices into the structure of the composition. Because the boundary tones of the fundamental line are in one voice, it does not engage new voices into the structure of the composition, at least not in the same manner as do linear progressions.

That the fundamental line resides entirely in a single voice gives rise to other differences between it and linear progressions. It was stated that at the level at which a linear progression appears, all of its members are equal in rank. It is only reference to some prior level that difference in the status of the boundary tones is revealed. Because the fundamental line appears in the first compositional stage, the background, its boundary tones cannot be notated on any prior compositional stage or level and are therefore of equal status. Any distinction in status between the first and last tones of an fundamental line is a distinction only in reference to the ultimate tonic and not a distinction in structural rank. It may be possible to argue that $\hat{\mathfrak{f}}$, as the focal point of the entire structure, has a higher rank than the initiating tone of the fundamental line. However, in Schenker's structural model the first and last tones of the fundamental line are equivalent. In this regard, the fundamental line is unlike a linear progression whose very essence is the structural inequality of its boundary tones.

Finally, it was revealed that Schenker's characterization of the primary tone does not apply equally to the fundamental line and to linear progressions, since implicit in the concept is that the primary tone can be notated on a level or stage prior to the level on which
the linear progression appears.\textsuperscript{12} Because there is no compositional level or stage prior to the fundamental structure, the primary tone of the fundamental line cannot be equated with the primary tone of a linear progression.

\textbf{The Fundamental Structure as a Bridge Between Nature and Art}

If the fundamental line is not a linear progression in the same sense as those progressions that occur in the middleground, then its role in the structure of a composition needs to be clarified. One of the main functions of the fundamental structure is to serve as a bridge between nature and art. And, as Schachter notes, while one may be tempted to dismiss Schenker’s reliance on the overtone series as unnecessary for the remainder of the theory, to do so would be to lose a vital insight that informs much of the theory.

Schenker bases very little of his theory on the overtone series, but that little is of great importance. From it he derives the major triad and the triadic consonances. . . In the overtone series he sees a pattern in nature for musical composition; a piece of music is, among other things, a symbolic recreation, an image, of the relationships that exist in a single musical sound. Of course one can reformulate Schenker’s theory so that the overtone series does not figure in it at all; one would have to do little more than substitute “triad” for “overtone series.” Most of the theory would remain intact, but something important—even essential—would be lost: the connection between the simplest musical element, the single tone, and the masterpieces of the great composers in all their complexity.\textsuperscript{13}

\textbf{The Fundamental Structure Establishes the Conditions Necessary for the Formation of Linear Progressions}

If one accepts the interrelation of art and nature as part of Schenker’s theory, the ways in which nature becomes art are important. For Schenker, the linear progression is the principal vehicle for generating content, for creating art. The fundamental structure establishes the conditions necessary for the existence of linear progressions. The

\textsuperscript{12}See p.79.

\textsuperscript{13}Schachter, \textit{Commentary}, 119.
fundamental structure establishes voices, which do not exist in nature. The fundamental line takes two tones from the chord of nature, disposes them horizontally in a single voice, and fills in the space with passing tones. This voice and the fundamental bass represent the highest and lowest voices, respectively; they establish the structural upper and lower limits for the voices of a composition.

Each outer voice of the fundamental structure represents the original structural voice in its own linear space\textsuperscript{14}. Since the inner voices are subordinate to the outer voices, distinctions in structural status become possible. This in turn provides the conditions necessary for the generation of linear progressions, namely, that the boundary tones of the progression lie in two separate voices of different structural rank. In light of this, the following comments by Schenker concerning the role of the fundamental structure take on added meaning.

The combination of fundamental line and bass arpeggiation constitutes a \textit{unity}. This unity alone makes it possible for voice leading transformations to take place in the middleground and enables the forms of the fundamental structure to be transferred to individual harmonies. Neither the fundamental line nor the fundamental bass arpeggiation can stand alone. Only when acting together, when unified in a contrapuntal structure, do they produce art\textsuperscript{15}.

Finally, the fundamental structure imposes register on the outer voices, which allows for the expansion of content and the generation of new levels through register transfers and inversion. Through the fundamental structure the single sound of nature is transformed into art.

Viewing the fundamental line as distinct from linear progressions helps to clarify the relationship between the background and the middleground as structural stages\textsuperscript{16}.

\textsuperscript{14}The discussion of separate linear spaces for the upper and lower voices begins on pp. 72.

\textsuperscript{15}Schenker, \textit{Free Composition}, 11. Emphasis original.

\textsuperscript{16}See Proctor and Riggins, \textit{Levels and Reordering} for a detailed discussion of the relationship between the three stages of structure in Schenker’s theory.
Although the fundamental structure creates the conditions necessary for the generation of content, the content of the fundamental structure itself is expanded through the transformational levels of the middleground. Thus, each stage has a different role in the structure of a composition: the fundamental structure transforms the chord of nature into art by establishing conditions necessary for structural expansion, while the task of the middleground is the expansion of content itself. Schenker alludes to this difference in the function of the background and the middleground in the following passage.

This basic transformation of the chord of nature into an arpeggiation must not be confused with the voice-leading transformations of the fundamental structure which occur in the middleground.\textsuperscript{17}

\textsuperscript{17}Schenker, \textit{Free Composition}, 10.
CHAPTER VII
CONCLUSION

In closing, I present a summary of the principles and rules of conformation developed in this paper that govern the formation and interaction of linear progressions.

The concept of the linear progression is not synonymous with a line. A linear progression is distinguished from a line in that it possesses all of the following characteristics, while a line lacks one or more of them: passing motion; a change of harmony; a connection between two independent voices; and most importantly, the boundary tones of the progression must exhibit a structural relationship of principle to subordinate. These characteristics are features of both upper-voice and bass linear progressions, although the “inner” voices of the bass are implicit in Schenker’s structural model rather than explicit. Because a linear progression introduces voices, it expands the structure of a composition, whereas a line does not.

The fundamental line is not viewed as a linear progression for several reasons. First, all fundamental-line members reside in the same voice. As such, the fundamental line does not expand the structure in the same way as do linear progressions, but rather provides the frame of the structure, within which expansion through the linear progressions takes place. More importantly, the boundary tones of the fundamental line do not exhibit a structural inequality in the same sense as exists between the boundary tones of middleground linear progressions.

The role of the fundamental structure is twofold. First, as a bridge between nature and art, the fundamental structure places the tones of nature into voices and imposes
register on those voices. Second, the fundamental structure is the specific means by which
the conditions necessary for the existence of linear progressions are established. Because
Schenker explicitly differentiates between the structural rank of outer and inner voices,
connections between structurally unequal elements becomes possible.

One significant difference between upper-voice progressions and bass progressions
is that the models for motion from the upper (superior) voice to the inner (subordinate)
voice are reversed. In the upper voices, the model for motion from a principal to a
subordinate voice takes the descending direction. In the bass, motion from principal to
subordinate is exemplified by the ascending direction. This bears directly on the
determination of when a register transfer has occurred, which in turn reveals when a
progression is inverted. The guidelines for determining when an upper-voice progression
is inverted are listed below. The same guidelines apply to bass progressions, with the
exception that the direction of the models for motion between principal and subordinate
voices given under numbers two and three are reversed:

1) The structural relationship between the goal tone and the primary tone of a linear
progression remains the same, even where one of the two tones has been transferred
to a different register and the direction of the progression reversed.

2) The model for descending linear progressions is a motion from a higher-ranking
voice to a lower-ranking voice. A progression that ascends from a higher-ranking
voice to a lower-ranking voice is inverted.

3) The model for ascending linear progressions is a motion from a lower-ranking
voice to a higher-ranking voice. A linear progression that descends from a lower-
ranking voice to a higher-ranking voice is inverted.

4) The function of the interval spanned by an inverted linear progression is to be
understood in terms of its inversive equivalent.

5) The inversion of a progression adds one theoretical level to the structure because
it signifies a register transfer of either the head tone or the goal tone of the
progression. The transfer occurs one level before the level on which the inverted
progression appears, with context determining the precise level on which the
inverted progression can appear.

That each of the outer voices of the fundamental structure can serve as the source of
linear progressions, along with the absence in Free Composition of any provisions for the
completion of upper-voice progressions in the bass or for the completion of bass progressions in the upper voices, the specific inner-voice goals that Schenker prescribes for all upper-voice progressions, and the reversal of the structural meaning of the direction of upper-voice and bass progressions, all suggest the possibility of separate "linear spaces" for the upper voices and the bass voice.

The fundamental line serves as the source of content in the upper-voice linear space. All progressions whose ultimate source is the fundamental line belong to the upper-voice linear space. The fundamental bass arpeggiation is the source of content in the bass linear space. All progressions that originate in the bass voice belong to the bass linear space. A linear progression must begin and end in the same linear space. Any time two progressions originating in separate linear spaces converge on the same pitch, they form a unison, but not an identity.

Finally, an examination of Schenker's concept of leading and following progressions in light of the definition of a linear progression based on the structural inequality of its boundary tones has revealed the following:

1) A leading progression must exhibit an active structural relationship of principal to subordinate between its boundary tones.

2) There can be only one leading progression on any given level in a single linear space at a time.

3) Leading and following progressions must occur in separate linear spaces.

4) Given two progressions, the leading progression will be the one that departs from or proceeds to the highest-ranking element.

5) The leading progression will agree with the primary harmony.

6) The primary harmony will be the harmony that contains the highest-ranking active linear element.

7) It is possible for two equally valid candidates for the leading progression to exist. In such cases, it is not possible to determine which progression leads and which follows.
In the introduction to *Free Composition* Schenker proclaims the uniqueness of his theory: “I here present a new concept, one inherent in the works of the great masters; indeed, it is the very secret and source of their being: the concept of organic coherence.”¹ Throughout the text he empowers music with a living spirit, suggesting that tones possess a “will” of their own. He even goes so far as to invoke biological metaphors to reinforce his belief that musical events are organically related. “It should have been evident long ago that the same principle [of coherence] applies both to a musical organism and to the human body: it grows outward from within.”²

Schenker’s focus on the capacity of his theory to reveal the “unity” of middlegrounds and backgrounds underlying the “chaos” of musical surfaces has had a profound effect on the ways in which the theory subsequently has been viewed. The principal focus of many analyses is the illumination of unifying aspects of individual compositions, which often entails explaining away or at least diminishing the importance of discordant elements.³

Schenker has contributed perhaps more than any other theorist to our understanding of the organization and cohesion of tonal events on both the large- and small-scales. Still, he clearly recognized the importance of conflicting events and processes.

Ultimately it will be possible to set forth the highest principle which is common to all arts: the principle of inner tension and its corresponding outward fulfillment . . . .⁴

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¹Schenker, *Free Composition*, xxi.

²Ibid., 6.


⁴Schenker, *Free Composition*, xxiv.
Schachter describes the importance of structural inequality in Schenker’s theory in general, and the consequences of the juxtaposition of structurally unequal events for linear progressions in particular:

Schenker’s middleground levels, like the fundamental structure, show a combination of principal and subordinate elements. Of course the events carried over from a prior level will necessarily have higher rank than the “new” ones, but even among the latter, Schenker mixes together primary and dependent pitches.\(^5\)

Schenker regards linear progressions as the *sine qua non* of music as an art. Their coherence epitomizes his view of musical coherence in general. It is not a coherence that results from uniformity but one that is based on the interaction between contrasting elements—in the linear progressions between consonance and dissonance, between motion and goal, between “nature” and “art.” I believe that it is mainly to preserve the coherence of the linear progressions (that is to preserve their tension, their kinetic character) that Schenker tends to combine at a single level elements of obviously different rank.\(^6\)

Thus, even though the linear progression as a whole represents a unity and provides structural coherence, as I have tried to show throughout this paper, the essence of the linear progression is to be found in the structural inequality between its boundary tones. It is hoped that the interpretation of Schenker’s theory of the linear progression proposed here provides an alternative to focusing exclusively on concordant aspects of the theory and contributes to future dialogue of the sort Neumeyer calls for:

The notion of Schenker’s theory being driven by “structural inequalities” is quite a refreshing change from the usual insistence on organic coherence, which has led to some excesses (such as an over-reliance on motivic parallelism, for example). We, all of us, have tended to see the serene structures rather than the dynamic vitalism that, one might profitably argue, informed Schenker’s theory more than the *Ursatz*. It would be a challenge to create a model for analytic discussions that could incorporate this idea (so that analysis papers could be built around “See how this piece is animated?” rather than the usual “See how wonderfully it’s put together?”).\(^7\)

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\(^5\)Schachter, *Commentary*, 118.

\(^6\)Ibid., 120.

\(^7\)Neumeyer, *Reply to Larson*, 34.
APPENDIX A

GLOSSARY

Line - A stepwise succession of notes spanning at least a third.

Linear progression - Although in Schenkerian theory the term "linear progression" is commonly taken to be synonymous with the term "line," the two are not used interchangeably in this paper. Rather, the term linear progression is reserved for those linear successions spanning at least a third that exhibit all of the following characteristics: passing motion, a change of harmony, a connection between two independent voices, and a structural inequality between their boundary tones.

Prior - In comparing the structural position of two events, prior is used to describe the event that is closer to the background. It is synonymous with "earlier" and "higher." The opposite of prior is subsequent.

Subsequent - In comparing the structural position of two events, subsequent is used to describe the event that is closer to the foreground. It is synonymous with "later" and "lower." The opposite of subsequent is prior.

Zug - Oster translates "Zug" as "linear progression" in Appendix 5 in Free Composition. However, he also gives the terms "line" and "span" as equivalents. And although Schenker uses "Zug" in connection with the fundamental line as well as in reference to middleground linear progressions, in his analytic graphs he typically labels only middleground progressions as "Zuge." This issue is addressed on p.42.
REFERENCE LIST


