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Textural Functions in Schoenberg's Second Chamber Symphony

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TEXTURAL FUNCTIONS IN SCHOENBERG'S SECOND CHAMBER SYMPHONY

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Even a century later, the "atonal" music of the Second Viennese School remains among the most challenging to interpret. The analyst confronted with this repertory must make his or her way without any of the tonal systems useful for understanding the common practice music that precedes it or the serial music that follows. But in many ways the music of the immediately preceding decades around the turn of the twentieth century can be even more opaque. Compositions by the like of the late Brahms and Wagner, Debussy, Bartok, or the young Schoenberg often have a key signature and may be largely consonant compared to the obvious dissonances of the 1910s and 1920s, but a search for functional tonality as we have narrowly come to understand it is often a vain quest. Meanwhile the set-theoretical tools we have developed to deal with atonal music seem equally out of place.

At the very center of this conundrum sit Arnold Schoenberg's two chamber symphonies. The first (Op. 9) was composed in 1906 just a few years before the point generally regarded as his break with tonality. But the second is even more deeply enmeshed in the problems of this transitional point in tonal development. Schoenberg, incredibly pleased with his first achievement, immediately began a second composition in the same style. But after completing most of the first movement (minus the coda) and about a hundred measures of the second, by 1908 Schoenberg set it aside indefinitely. This may have been a result of changing compositional interest leaning towards the more "progressive" style of the Second String Quartet but also, more practically, a fallout from the difficult circumstances of his private life at the time. In 1907 Schoenberg lost one friend and supporter when Mahler left for New York and found himself embroiled in a romantic tragedy when another, the young painter Richard Gerstl, began an affair with

his wife. Gerstl and Mathilde would ultimately elope together for a time before Webern convinced her to return for the sake of the children, leading to Gerstl's unfortunate suicide at the age of twenty-five.[1] The effect of these depressing events on Schoenberg's unsettled musical output over the next few years is undeniable.

Schoenberg never forgot the chamber symphony entirely, but it was nearly destined to be perpetually unfinished like other major works such as *Jakobsleiter* and *Moses and Aaron*. There is some evidence that he made attempts to return to it during his atonal years in 1911 and 1916. In an effort to restart his interest, these included radical suggestions to merge the two partially complete movements into one large part (and add a second) or to possibly convert the work into a melodrama on a spoken text he had written entitled *Wendepunkt* ("Turning Point").[2] But fairly little actual music was sketched in either period, and it was ultimately not until 1939 that Schoenberg would complete the two movements and declare the work finished. By then his style had evolved through twelve-tone serialism and seemingly emerged out the other side. In his later years he began to write some more overtly tonal pieces and this is perhaps connected to his willingness to finally return to the early style of the chamber symphony, which would ultimately become Op. 38. But he did so as a man changed by his experiences.

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[1] For this biography, see MacDonald 2008, 5–8.

[2] The sketch history of the piece is given exhaustively in Dale (particularly chapter 8, 144–58), MacDonald 181–3, and Frisch 149–50. Regarding the two alternative plans mentioned above, the first is suggested in a letter to Zemlinsky. Dale provides her own translation; for the original German see Weber 1995, 158–60. The second is derived from the folio containing this text inserted into the sketchbook at this point. See Schoenberg, *Sämtliche Werke*, Abteilung IV, Reihe B, Band 11, Teil II p 202. (All subsequent references to the complete works are to this volume, the sketches and commentary on the chamber symphonies, henceforth abbreviated B11/II.)

Thus the Second Chamber Symphony occupies a unique place in Schoenberg's oeuvre and thus indeed in the history of art music as a whole. It cuts across the entire stylistic development of a composer who changed music forever, and so has the potential to tell us much about the aesthetic principles and musical interests that stayed with Schoenberg regardless how radical the outward changes in his music may have seemed. But its difficulties for the listener and the analyst are undeniable. On the surface it may actually be more overtly consonant than its predecessor. But while the overwhelming majority of individual sonorities may be triads and seventh chords, they rarely follow conventional patterns of resolution or create well-formed harmonic progressions. The overall form of each movement is complex and debatable, and not easily fit into simple categories. And the instrumental genre itself is a source of confusion. The designation chamber symphony is an apparent oxymoron and the assembled instrumentation of 19 musicians is an unfamiliar one.[3] Schoenberg employs them in constantly varying ways, always exploiting the opportunity to generate new textural configurations.

It is thus not surprising that there has been little scholarly interest in this piece. The two main analytical attempts have been by Walter Frisch and Catherine Dale (Frisch 1993, 248–58; Dale 2000). Dale's book is highly valuable for its description of the historical and stylistc context of the two symphonies, and for documenting the particularly complicated genesis of Op. 38. But she does not endeavor to provide a

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[3] There is some uncertainty about Schoenberg's intended instrumentation. In the previously cited 1916 letter he strongly contemplated turning the piece into a symphony for standard orchestra. And the final form was in fact completed and performed as a commission for Fritz Stiedry's Orchestra of the New Friends of Music in New York. But Schoenberg maintained the designation Chamber Symphony, so it would seem he still thought of it as kin to Op. 9. The score itself gives no indication how many strings should be employed.

comprehensive analytical account of the piece's thematic and textural processes, and her account of the form is problematic. Frisch on the other hand confines himself exclusively to the first movement (as a greater percentage of it lies within his timeframe of "early works"), but he does give a substantial analysis of that portion. Consequently this investigation will focus on the under-discussed second movement (though we will later find it necessary to refer to some of the material of the opening). A brief look at just the first few measures will bring to light many of the analytical obstacles we will have to confront.

Example 1 shows a short score of the first phrase, mm. 166 through the downbeat of 170.[4] This introductory gesture surprisingly clearly establishes a G major tonic. The bassoons and two lowest string parts constantly reiterate that single triad. This is somewhat complicated in the second measure by the entrance of the cello, whose alternating neighbor notes touch on the tonic triad pitches B and D as the *embellishing* notes in weak metrical positions. The following first bassoon motive in m. 168 picks up on both the ideas of triadic arpeggiation and neighbor motion but rights the pitch hierarchy with regard to linear elaboration, with D as conceptually prior note for a dotted quarter note span elaborated by an upper neighbor E. However, the motive as a whole is in a metrically unstable position causing that D, although a consonant pitch, to begin on the third eighth and be held over onto the stronger fourth eighth. This motive thus continues the metrical displacement in the cello; in fact, the framing pitches B and D are

[4] The measures are numbered continuously between the two movements. The second movement thus begins with measure 166. Together with the thematic return of first movement material in the coda this confirms the integrity of the piece as a connected formal whole.

attacked at the same point in the bar by both instruments. But on the same beat as the two Ds the contrabass reenters on that pitch with an evenly paced arpeggio descending to the tonic on the next downbeat.

The metrical dissonance of the bassoon motive is then further compensated for when the flutes answer in m. 169 one beat later; the sixteenth notes are now heard as an anacrusis to beat two. But of course this description is oversimplified, in that the unstable bassoon version is also reiterated in this measure, and furthermore the even more dissonant cello gesture has also continued throughout rather than give way to the more normative version as it emerges. It is the increasing layering of parts and complexity of their interrelations, despite the static and (for this piece) remarkably clear tonal context, that gives the passage its sense of intensification and introductory quality. These are attributes of musical texture, which is a vital contributor to the shaping of form in any piece but is particularly active in Schoenberg and deserves a more substantial treatment.

It would obviously be desirable to have a consistent and sensitive vocabulary to describe the network of relationships discussed above. To that end, I begin by reviewing a variety of secondary literature that has engaged with texture, with an eye toward exploring the ways theorists employ terms and how they classify its constituent components. Following that investigation I will establish working definitions for the necessary vocabulary and a method for tabulating the quantitative values and configurations that make up any texture.

This theoretical background prepares the return to the analysis of the second movement of Op. 38. I divide the body of the movement into two parts; this division is both formal and chronological, roughly corresponding to the two main phases of

compositional activity. The analysis of Part One (mm. 166–251) relies heavily on the methodology developed in the preceding chapter to reveal its internal form and process, for just as texture was a vital contributor to the drama of the opening passage, it continues to be the strongest criterion for parsing the music that follows. But once the initial presentation has acquainted us with all of the musical ideas, the drama and attention can shift in the subsequent elaboration toward the treatment of the established material in a more expansive and developmental manner. Hence the focus of my analysis of Part Two (mm. 251–439) includes greater attention to motivic connections. At the end of the analysis I turn to the question of how the two parts together constitute a coherent form.

After dealing with the coda that rounds out the movement and the symphony as a whole, I pause to consider the significant place of this piece within Schoenberg's musical output. Despite its difficulties, this music certainly deserves and rewards close attention. It serves as a dramatic reminder that form is in practice a matter of process and function, and that such processes, particularly in expanded or non-tonal idioms, are enacted just as much through texture as in other domains.

Review of the Secondary Literature on Texture

Texture is at once one of the most obvious elements of music and also one of the least well understood. There seems to be general acknowledgement that we still lack a sufficient theoretical apparatus to describe the importance of texture or standard definitions needed to make and communicate accurate discriminations. We use words like "voice" and "line", and even "texture" itself, as if we will be understood, when in fact they are used inconsistently by different theorists or even by the same theorist at different times, even within the same essay. It can often take some work to puzzle out how writers think about texture and its components. This chapter will investigate assumptions and usages of terminology in several essays claiming to be about musical texture in some way. Afterwards I will attempt to formulate my own theory of texture based on whatever consensus (or compromise) may emerge.

A reasonable introduction is an article by Jonathan Dunsby (1989) titled simply "Considerations of Texture." As the title suggests, it is a short general essay on the broad usage of the term in the field and deals mainly with the kinds of problems already mentioned. Dunsby begins by investigating the origin of the word texture as it applies to music, which he describes as relatively recent and fairly specific to the English language. Whether or not this is specifically true, he does make a good point that it seems to refer to something that has become more important to modern commentators on music, and that this new interest is likely connected to the decreasing usefulness of traditional terminology for discussing contemporary music.

But though we may now be placing a greater emphasis on texture and its role in shaping musical experience, our theoretical discourse has not caught up. Dunsby

provides useful references but ultimately considered a bibliographic guide to texture impossible at the time. And he comments on a fact that shows up in the bibliographies of most of the scholarship I will mention: the higher percentage of such topics in dissertations compared to professional publications. But even there he claims "the large majority…turn out to be studies of the sonic aspects of music of the twentieth century, often of one composer or even one work" (46, n 2). We are missing many serious treatments of texture as a larger theoretical issue but go on talking about it in some specific cases as if our language is clear, a situation Dunsby refers to as a "conspiracy of meaning" (57).

Dunsby succinctly comments on the term's changing use (texture having often been used to refer to what we more commonly think of as form or contrapuntal procedures, such as fugue).[5] But he offers no clear definition in its place. It is clear that he believes it is connected to the "fabric of sound" and the relationship between parts of that whole. Consequently he does put forward four terms whose contribution to a definition he believes is "uncontroversial": monophony, polyphony, homophony and heterophony. While he does not specifically define what these mean to him, he helpfully points out that these are not always distinct categories and implies that they may exist on some kind of continuum. For example, the latter three have something in common compared to monophony, because they all "involve more than one strand of sound" (49). But here he has already introduced yet another undefined term, "strand". Although the

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[5] Examples are numerous in older sources but one that is interesting because it is relatively recent is John D. White (1995), *Theories of Musical Texture in Western History*. Despite its title, it has almost no relation to texture as I mean here, being instead about musical fundamentals and, ultimately, counterpoint.

context makes it reasonably clear that "strand" must refer to non-identical "parts" (as regards pitch-class), this is exactly the type of casual usage at issue and the kind of thing I will attempt to sort out in more detail as I examine other writings.

One of the sources cited by Dunsby that divides possible textures into categories similar to these four is Leonard Meyer (1956, 185–96). According to Meyer, "texture has to do with the ways in which the mind groups concurrent musical stimuli into simultaneous figures, a figure and accompaniment (ground), and so forth" (185). For Meyer, then, texture is about grouping, specifically of the vertical dimension in music (concurrent stimuli), and this corresponds to a psychological approach centered on the listener. The figure/ground distinction (borrowed from theories of visual experience) allows him to use the various combinations to define five main types of textures: one figure with no ground (monophony), more than one figure with no ground (polyphony), one or more figures with ground (homophony), superimposition of similar small motives with little independence (heterophony), and a ground alone, as in introductory gestures, where it is clear that the figure is not yet present (a possibility not given by Dunsby and for which we have no conventional name).

This last possibility makes it clear that for Meyer texture, like many other musical dimensions, is to some extent stylistic, something to which experienced listeners become acculturated. We must be able to know with some reliability which parts of the texture we should usually direct our attention towards if we are able to tell that a certain texture is incapable of being a figure and thus obviously incomplete.

We also must apply some form of psychological well-formedness principles to parse any given texture. For example, Meyer uses this demand for good shape to explain

what is conventionally called "compound melody": "If the overall articulation is simpler when a piece for a single instrument is understood as implying several 'lines' or voices, then this mode of organization is the one that will probably appear" (187). Meyer also tells us that in certain styles and genres listeners expect a greater degree of textural change than in others. And there may even be ambiguous textures where "the organization of the field is itself unclear" without weakening our sense of coherence, a situation that occurs in the works of "the great masters" (192). Ambiguity can in effect be the topic of the music, at least in such a passage.

One brief final remark about Meyer seems worthwhile. He provides the seemingly reasonable qualification that "texture does not as a rule act as an independent variable" (188). By this he appears to mean that texture cannot be considered in isolation, because it is a musical property amalgamated from pitch and rhythmic aspects as well timbre and registration. Consequently it cannot change without changes in other properties as well. But the converse is not true; Meyer acknowledges that "melody, tonality, instrumentation, and so forth may vary indefinitely while the basic textural organization remains constant" (189). This statement emphasizes texture as relationship of degree of interdependence between components of the field, allowing for it to persevere when the components themselves change. Certainly this must imply a certain degree of independence, even if it is one-sided, if texture has that autonomy of existence.

Janet Levy's article on "Texture as a Sign in Classic and Early Romantic Music" (1982), shares many similarities in its conceptual space with Meyer. Levy's thesis is that certain changes in texture can function as signs of where we are in a piece and what may happen next. These can be either contextual signs, referring to events within the piece, or

conventionalized ones. Contextual signs include examples such as "false recapitulations" in sonata forms, where, in addition to being in the wrong key, the theme might appear in an unusual texture or instrumentation that we understand to be the "wrong" one for this theme. Levy points out the flaw in her categories, for a contextual sign like the removal of a ground from a theme cues us to understand an unstable, non-presentational statement partially because such a change participates in a type of conventional sign that tells us to do so.[6] Such conventional knowledge is probably partly at work in all contextual signs except the simple case of textural "identity", where we are meant to recognize the similar presentation of two ideas occurring at different points in the piece. Perhaps as a result, the bulk of her article lies in the study of conventional signs.

The principle of conventionalized signs is connected to Meyer's observation of the inferences a cultured listener can make from certain textures in certain styles.[7] Levy discusses examples of three types of conventional signs, which she admits is a very small sample of the many which likely exist and of which we may be unconsciously aware. All three are "homophonic" in some sense, and accordingly she asserts somewhat similar functions for each. The first is the entrance of an accompaniment pattern. While "accompaniment pattern" is somewhat hard to pin down exactly, it must be "regularly measured" with a "well-defined pulse." Those that have become true conventions, such as the Alberti bass, are clearly the most easily recognized. Also, in every one of her examples the accompaniment pattern is in the lowest part, and this may be statistically

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[6] Levy 1982, 484 note 5. See also 517 n 56.

[7] Another similarity with Meyer is the suggestion that texture is an "auxiliary variable", "dependent on melody, harmony, and rhythm, and affected by orchestration, register, and so forth" (482). The last two do not so much affect texture, as they are in fact parts of it.

most common (and perhaps psychoacoustically predisposed), but it is certainly not necessary and counterexamples can be found.[8]

In addition to Meyer's textural type of introductions with ground but no figure, Levy adds the possibility of a texture of figure but no ground, where the texture is incomplete and awaiting the entrance of some appropriate ground. Levy claims that the entrance of an accompaniment pattern adds stability and can signal the start of a formal section, giving a sense of "true beginning." The suggestion here is that, as opposed to the simple equation of monophony with a texture of one figure and no ground, there are in fact gestures that might be ineligible or unlikely to be understood as a figure in the absence of a suitable accompaniment. Levy makes the important observation that in many Chopin character pieces, particularly in slow tempos, the melody may be broken and improvisatory and generally of such a character that it is only the presence of a regular accompaniment that tells us to think of it as the "main line of discourse" (493).

The other two textures discussed are solos and unisons. Solos ("a single performing voice in a single line") imply beginnings or lead-ins to activity and can consequently also be used to keep things open, as in a cadenza (497, n 22). Unisons (which as a texture include octave, but only octave, doublings) are a kind of "supercharged sign" which can have many more functions, but always command attention due to their unnatural homogeneity. They can be used to signal the start of a section, but they can also be used to rein in activity towards a close. Even if one ignores the diversity of signals Levy wants to attribute to this last category, it is still a little odd

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[8] As one interesting kind of example, Dunsby mentions in his discussion of textural "illusion" that in tonal songs with male vocalists the voice is frequently below the instrument but is not heard or understood as a bass line (51).

that all three types should frequently signal beginning of some kind. Is it really simply that strong textural *change* (of any kind) marks a division and thus a start of something new? This possibility seems to creep in to Levy's own article thanks to a composer's perspective in a quote from C.P.E. Bach. "Imagine a situation: A composer works industriously ... At a certain point he feels that his audience must be roused with something different. He searches enthusiastically for a passage whose splendor and majesty shall be pronounced and striking."[9] In this hypothetical situation Bach's composer goes on to select a unison texture, but it seems to me that other equally drastic changes might have served his purpose just as well, just as long as it is rousingly different.

Case studies that deal with textural concepts in a less methodological way can also be useful for raising other considerations encountered in music; Camilla Cai's essay on texture in the piano music of Felix Mendelssohn and his sister Fanny Mendelssohn Hensel is such a case (1997). Cai argues that the differences in the way the siblings treat texture represents a fundamental gendered distinction in their composition. In fact, she considers the element of texture as a whole to have historically been given feminine connotations, leading to its being considered a "surface feature" and undervalued. This is due to association with the tactile experience of music that is most obvious to performers but present in the imagination of all listeners. It is also represented by the words we use to describe texture such as "thread", "fabric", and "woven", connected to the feminine activity of spinning and weaving.

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[9] Bach 1947, 313-14. quoted in Levy 1982, 510.

The difference Cai sees in Hensel and Mendelssohn's textures is essentially of her greater freedom contrasted with his formal consistency. Both use a three-part texture as their basic model for piano writing, which Cai identifies as melody, accompaniment, and an independent inner voice. This is an interesting statement, as there are multiple instances in Cai's examples where the "inner voice" contains more than one simultaneous pitch. There might be two or three supporting chord tones in this "voice", and when the number is consistent, they could be said to form multiple contrapuntal lines. So "part" here is not a literal musical part or single voice in the usual sense, but a component of the texture whose elements have the same function. Cai suggests that Hensel treats these inner parts with slightly less independence and linear identity in other ways as well. In one example the bass pitch is a member of both the bass and middle voice.[10] The left hand plays an upward arpeggio of which the lowest notes occur on the beat and form a bass line. Though these notes are stemmed in both directions, the score lacks rests in the lower register to clarify the continuity of the voice. This is not an extremely unusual texture, but it does raise the question of whether our definitions can allow a single pitch-event to belong to multiple voices or lines.

The other kinds of freedom and instability Cai cites illuminate the breadth of what she considers to be textural. She compares the same example to a Mendelssohn piece that sets up an accompaniment pattern as ground for two and a half measures before the melody enters; the Hensel piece, by contrast, brings in the melody after only half a measure. Cai thus describes the opening of the Hensel piece as less stable and considers this a textural effect (though she mostly discusses tonality and this time-span effect). The

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[10] Cai 1997, 65 Example 3.1b. This point is discussed on page 68.

final section of her article is largely about the greater frequency of textural changes and the sense of "developing texture" in Hensel's works. That is, Hensel's textural plans are, according to Cai, more organic and developmental than Mendelssohn's, which are either more homogeneous or conform to traditional formal divisions. These issues are largely rhythmic, but this change over time is considered part of the music's texture. Cai in fact explicitly stresses her belief that texture is horizontal as well as vertical. "The horizontal components of texture are described by the frequency of the sounds in time and the patterns of their changes in quality or density. These would include melodic pacing, harmonic rhythm, rhythmic drive, and formal structural properties" (54). In my view this makes texture into too much of a catchall category; texture is one element, which certainly has rhythm, but harmonic rhythm is specifically the rhythm of a totally different element. Still, the point is well taken.

Next I turn to an essay by Richard Delone (1975) that appeared in an anthology called *Aspects of 20th Century Music,* which, in keeping with the earlier observation of the importance of texture in discussions of contemporary music, has a lengthy section on "Timbre and Texture." While Delone provides no precise definition of texture, he does tell us that "it should be apparent that musical textures represent the coordinated activity and interaction of all four parameters of music" (pitch, duration, loudness, and timbre) and that "the invention of a musical texture is composition itself" (67). Thus the importance and wide-ranging nature of texture is asserted, and although the parameters mentioned are perhaps too broad, we again see that texture is about a whole constructed from individual elements combined in different relationships.

Of these parameters, Delone places the greatest significance on timbre, because of the wider variety of timbral effects possible in modern music. Although he turns to the interaction of different textural components and the familiar categories of monophony, homophony, and polyphony, some interesting new distinctions arise, particularly in his description of monophony. One special case of monophony is a hocket-like texture. "Activity shifted between two or more instruments with each sounding alternately alone, although by strict definition a type of monophony, is also a type of polyphony, since more than one voice participates" (99). This statement sets up an intriguing textural hierarchy where at one level we are aware of the difference between voices (which is apparently a timbral distinction for this author) and so perceive polyphony, but on a deeper level fuse these non-overlapping notes to create one perceptible monophonic line.[11] So, multiple instruments can project one single voice, and the author also mentions that one instrument (part) "may in some instances create an illusion of more than one voice" through the kind of registral shifts we conventional refer to as compound melody. Another special case of monophony is illustrated by a passage from a Carter Etude for woodwind quartet which consists of only one pitch, played repeatedly by all four instruments in the same register, but at different attack points and in different durations and dynamics. This passage is appropriately described as monophonic in the usual sense, but "polytimbral" and "polyrhythmic". These sorts of crossover cases are

[11] The qualification that the activity must be shifted between different instruments seems unnecessary, except that it makes the unstated definition of voice connected to different instrumental timbres tidier. But surely such an alternating texture could also occur between, for example, the two hands in a piece for solo piano.

essential to a theory of texture, and our vocabulary must be capable of capturing the relevant distinctions.

In the section on homophony, Delone begins by distinguishing the two common ways in which this word is used: main voice plus accompaniment versus chordal homophony, where all the parts have the same rhythm. Delone claims this is an unfortunate situation, since only the latter case is fully homophonic, while the former has two contrarhythmic textural strands. Unfortunately, referring to a full texture of main voice plus homophonic accompaniment as homophony seems conventional enough that it must be accepted. The term itself is also slightly misleading, as a main criterion separating homophony and polyphony is the rhythmic dimension in which the voices are more interdependent; they are *homorhythmic*. Delone partially defends this emphasis on rhythm in our textural thinking on the basis that it is often more objective than our tonally biased assessment of the pitch domain. But though his textural analysis may not be strongly based on pitch, he points out that it is not timbrally neutral. Rather, contrapuntal voices blend better when played by some instrumental combinations than others. Partially because of this, he is led to speak of textural "stratification", the breaking down of the total musical space into smaller groups containing multiple parts. Stratification is "predicated on contrasts of timbre and multitimbral combinations, registration, levels of intensity and textural density" (96). But the terminology at this point is imprecise, oscillating between referring to strata, strands, and even "lines" (in quotes) to refer to groupings picked out by these criteria that are not octave doublings. This textural middleground, though definitely a useful and important concept, seems to be an area of even greater theoretical uncertainty.

Another book with a very wide scope is *Sonic Design* by Robert Cogan and Pozzi Escot, and of particular relevance is their section on "Musical Space" (1976, 15–85). Though the term texture is not directly used, the authors' interest in linear processes (as evidenced by their line drawings of voices on a grid of pitch versus time) leads them to formulate more specific definitions for its component parts, something that the previous works largely took for granted. In a note designed to justify the use of the term voice for instrumental music and explain its history, they provide working definitions for the distinction between voice and line. A voice, in their view, is any individual "strand" of music (more than one of which might be played by the same instrument), and a line is a specific subcategory, "a voice (or part of a voice) organized as *stepwise* motion" (82–3, n 19). A line is a certain kind of *structure* in which each note functions to move to the next (not necessarily temporally contiguous) note by step. Thus they can speak of the overall linear trajectory (upward or downward) of a voice containing elaborations of that general motion.

This raises a significant point about the way we use "line" in casual musical discourse. In this textural discussion, we may frequently wish to use "line" to refer to continuous pitches played by one instrument, in a similar way to what we probably mean by "voice". But theorists also like to speak of various kinds of background structures, such as an Urlinie, which we also think of as lines. While Cogan and Escot's use may be overly specific, it does address this problem not broached in the previous works. It also allows them to come up with other terminology, such as the description of a voice as *multilinear*, which is their solution to the recurring subject of compound melody, and *density,* the measure of the number of lines being projected by a voice. They also use

several terms for higher-level groupings of elements in the textural hierarchy, such as *field* (a specific registral area) and *stream*, which is also a registral distinction but seems to be more tied to specific voices rather than the abstract frequency band picked out by the previous term. Thus, a field is an area of activity, and a stream is activity within a field. However, as in the previous text, these middleground terms are not as well defined as those for their foreground components.

By far the most thorough and precise theoretical account of texture is Wallace Berry's.[12] Berry's central project in *Structural Functions in Music* involves the contention that there are dissonances and resolutions in all the parameters of music and that these form structures of alternating progression, recession, and stasis. Texture is one of these primary structural parameters, or *elements*, and "might be said to consist in events by which the interrelations of lines of other cofunctioning components are conditioned, but the textural element is also regarded as including such factors as *density* and *space*" (23). So while texture does include registration and other aspects of vertical arrangement, the emphasis is again on the degree of interdependence among components. Berry also provides more formal definitions of these basic textural relationships, of which I will compile a few.

In the most generic terms, a single real textural factor may contain multiple components. Specific examples include "lines", which are "any textural component in which horizontal relation and configuration can plausibly be traced as a logical continuity - an identifiable stratum in the texture at some given level", and "voice", defined as "a line having distinct relative independence; it may thus be a complex of doubled lines, but

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[12] Berry 1976, "Introduction" 1–26 and "Texture" 184–300.

is not itself capable of doubling" (192–3, n 7). This is yet a different use of these terms, and something of a reversal of the prevailing trend. Here, line is closer to actual separate instruments and parts than voice, which is a higher-level term for the combination of related lines. And it should be noted that doubling for Berry does not just mean octave doubling, but includes much looser roughly homodirectional or homointervallic pairings. This last sentence brings up examples of the large class of compound terms Berry uses to describe the specific relationships between components.

Besides the conventional monophonic, polyphonic, and so forth, he applies the prefixes homo-, hetero-, and contra- to other contexts to create an almost overabundance of possible ways for things to be related, some of which have already cropped up by necessity in the previous authors' and my discussion of them. Though the numerous combinations of words and prefixes is slightly overwhelming, it does allow for very specific description and communication, in principle one of the main goals of any theory. To summarize, the prefixes apply to "identity, mild and *very local* diversification ... and more pronounced contrast, respectively" and the three dimensions to which they are most usually attached are rhythm, direction, and linear intevallic content, creating nine terms (homorhythmic, homodirectional, homointervallic, and so on) only some of which have conventional usage. And although it is not always necessary to refer to more than one such parameter at a time, Berry on occasion finds use for hyphenated combinations of these terms to craft very specific descriptions of a whole textural relationship. For example, *doubling* is defined as referring to lines homorhythmically-homodirectionally-homointervallically associated, while a strict *mirror* assocation is homorhythmic-homointervallic-contradirectional. Finally, Berry is adamant that any application of these

descriptions must refer to a specific, relevant level of structure as the analysis of textural conditions may change depending on the length of the time-span under consideration, as local motions are subsumed within global trends.[13]

Berry uses terms constructed in the system to define the traditional categories of mono-, homo-, hetero-, and polyphony. Most simply, "*heterophonic* is understood to denote a relation that is homodirectional (parallel in contour) but heterointervallic ... having minor diversification in interval content." The other definitions are slightly less satisfying however. The simple description of monophony as "single-voice (monolinear)" is complicated by Berry's unusual definitions of line and voice, while the definition of homophony is problematic through no fault of his own, as Berry must simply accept the disparity, already encountered in Delone, between the literal, logical meaning of the word and its conventional use. Polyphonic is usefully understood as usually taken to have qualitative implications and thus actually occupying a range on a continuum of complexity, whose "highest manifestation" would be ultimately mulitvoiced, contrarhythmic-contraintervallic-contradirectional.

In addition to his many terminological contributions, Berry also develops a method of visually displaying textural data that allows for a depiction of its hierarchical levels and changes through time. He charts the combinations of lines into real voices to track increases and decreases in textural intensity. Also of interest is the quantitative relationship between them represented by *density*, which has two aspects, number and compression. *Density-number* is simply the number of sounding components while

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[13] This system is laid out on pages 191–95, "Types of musical texture: problems of classification and terminology."

density-compression is "the ratio of the number of sounding components to a given total space" (209). Thus the latter is a kind of saturation, inversely proportional to texture space; if density-number stays constant and total space decreases, then density-compression increases. Interestingly, this is typically the case in cadences, despite the presumed relaxation in other element-structures. This and other structural features come out in Berry's graphic representations. Despite the persistent lack of clear terminology for higher-level textural structures, some words do frequently come up informally, particularly *strata*, and the combinations are always visually displayed.

Terminology and Graphic Representation

I will now attempt to create a glossary of relevant textural terms. My goal is to maximize the potential for making the kinds of distinctions theorists want to make, while minimizing the conflict with the way some words are already used casually in the discourse. First, I believe Berry has already provided us with a large and serviceable collection of terms for the interrelations between individual factors, including the conventional textural types as used by Dunsby and Meyer: monophony, homophony, heterophony, and polyphony. He assigns reasonably clear meanings to the set of prefixes, which can then be applied to musical terms from all domains. Thus, my concern is with the usually inexact vocabulary for those constituent elements themselves at the various levels of texture. Somewhat following Berry, my preferred general term for any such elements in a neutral context is *component.*

Part

A *part* consists of the pitch-events played by a single instrument or orchestral section. Part is not merely a lower level term, but a slightly different class of term altogether than voice or line. While voices and lines are sets of notes, parts are the different musical agents that produce those notes; parts are actors and voices are the immediate products of their actions. Consequently, evaluation of parts is particularly susceptible to stylistic expectation. The category is not in an exact relationship to either voices or instruments (or instrumentalists). Obviously some parts may project multiple voices, notably piano (and pieces for piano four hands may even be an instance of multiple parts played on a single instrument). On the other hand, and more relevant in the present study, orchestral

string sections are a clear case of multiple instruments thought of as a single part. For example, a viola section is one part sounded by many instruments, which may play one or more voices (if the part is written divisi). In the case of violin sections however, convention dictates we should expect first and second violins to be distinct parts.

The treatment of symphonic wind sections is more variable, and it is highly contingent on stylistic norms whether multiple like instruments are likely to be heard as separate parts, primarily dependent on the proportionate time they spend in doublings. In the example of the chamber symphony, due to the obvious intertextual independence, I have elected to consider the doubled wind parts as always separate voices (which may occasionally play a single line), while defaulting to counting the string parts as a single voice except in those places where they are specifically written divisi.

Voice and Line

A *voice* is a sequence of contiguous non-overlapping pitch-events played by a single *part*. A *line* is a series of consecutive non-overlapping pitch-classes, connected at some level of structure.

Contrary to Berry and Cai, the consensus is that voice*,* rather than line*,* is the more surface term, closer to identifying with specific instruments, though polyphonic instruments such as a piano may perform more than one voice (notice the above definition does not say the voice must be the <u>only</u> series played by that instrument). And we can speak naturally of the simple case of octave doubling as two *voices* playing one *line*. My definition of line however will be substantially broader. This is inspired by Cogan and Escot and the desire to accommodate all the ways in which we use the term.

The most important difference in the definitions for voice and line is the use of contiguous versus merely consecutive. Contiguous events are adjacent in time (as voices must be projected by a part), while consecutive events need only follow one another, though not necessarily directly, and be related in some identifiable way. Obviously such a definition of line is incomplete without some extensive accompanying theory of linear structure, Schenkerian or otherwise, to clarify and restrict what kinds of consecutions (particularly non-contiguous ones) are identifiable as potential structures. But it is meant to allow both the simple case of pitch-class identity at the foreground level (doubling), and both more abstract cases of non-contiguous but registrally similar notes within a multilinear voice (compound melody) and background structures unfolding over longer time-spans (such as an Urlinie).

I wish also to introduce two terms for higher levels of texture. I considered stream or strata for these roles, but Cai's point about our use of the weaving metaphor for texture led me to prefer metaphorical consistency, and thus the more appropriate words strand and layer.[14]

Strand

A *strand* is composed of voices that are totally, or nearly, homorhythmic and homointervallic within a time-span. A strand can be *simple* (only one voice) or *compound*. There are four degrees of complexity possible within a compound strand, in ascending order from the closest relations: unison doubling, octave doubling, doublings

[14] For greater consistency with the fabric metaphor, *thread* could be substituted for *component* as a basic term, though I suspect we tend to think of threads in the context of atomic elements, less capable of natural transference to higher levels.

at other levels of transposition (3rds, 6ths, etc.), and freer pairings. These gradations are not equally spaced, and there is a disparity between unison and octave doublings, which preserve the identity of a line, and other transformations that do not. Also there is another level of distinction made between *doubling* in general (where the interval-class succession is the same, i.e. the line is transposed to a different pitch level) and pairings where the intervallic relationship is not exact. The qualification (nearly homo-rhythmic or intervallic) in the definition is vital to these pairings, as we can easily recognize components as related even when the surface details are quite different, such as a heterophonic doubling in which one line is an ornamented version of the other.

Layer

A *layer* is a collection of strands related by timbre, register, or type of activity. Thus we may speak of the woodwind layer versus the string layer, or the layer of all the bass voices. Cogan and Escot's more abstract registral areas (field and stream) would allow the grouping together of voices from different strands if they are stated in the same register. I find this counterintuitive and prefer to keep this a strictly higher-order category, grouping components with similar function that are also in similar textural locations.

We may speak of *density* (number and compression, using Berry's terms) not just of the texture as a whole, but within any one of these levels as well. This allows us to compare the weighting of a line based on the number of voices doubling it or the thickness of a voice based on its degree of multilinearity, as well the obvious higher-level cases.

Berry produces charts of textural progressions in short musical passages by listing the number of lines and "real voices" within each measure. These are displayed in columns with individual entries for each voice and the numerical digit indicating the total number of lines included in that voice. The short chart shown in Example 2 paints a clear picture of a passage that exhibits a gradual increase in parts, all initially playing independently. Once all have entered, the quantitative density remains constant, but their independence begins to decrease as they enter into doublings, first in pairs then, finally, with all four parts playing in agreement.

The beauty of these small charts is that they allow for the presentation of a great deal of textural information in a more visually meaningful way than the presentation in a score. Also, Berry uses them to draw out fundamental formal observations, such as a basic arch shape of a phrase like the example above, without any recourse to harmony, melodic trajectories, or other pitch-based analytical techniques. It is this ability that is suggestive of the technique's potential usefulness for music of the period in question.

Because of my very different definitions of the basic textural elements, as well as my wish to include additional information through the more abstract hierarchical levels, my own charts differ from Berry's. Like Berry, columns represent segments of uniform texture, but within these vertical slices components are counted differently. For comparison, see Example 3, my chart of the opening four measures of the second movement of Schoenberg's symphony. The upper half of the chart tabulates the number of components at each textural level within each time-span. The four categories of voice, line, strand, and layer are arranged in ascending order of increasing abstraction, with greater detail at the bottom closer to the musical surface as represented by the chart

proper. This is a strict hierarchy, such that at each higher level the number of components is less than or equal to the previous. The total number of parts presents a smaller number of distinct lines, which combine into strands, which are grouped according to layer.

All of these distinctions are represented in detail in the lower portion of the chart. Any given numeral in this diagram represents a single line, while the numerical value equals the number of voices playing that line (given possible octave doubling). Following Berry, parenthetical numbers are occasionally used to indicate a line that is only present for a portion of the relevant time-span, either dropping out prematurely or only entering part way through. The individual numbers may be added to another within the same strand, which corresponds to a complete entry within the table. Simple strands are those with only a single digit (some number of voices all playing the same line), while compound strands are identifiable as a string of numbers showing the voices playing two or more independent but related lines. Finally, horizontal lines in the table represent the divisions between layers. This produces the greatest increase in visual complexity from Berry's model. An attempt is made to produce a vertical arrangement of strands that allows for neat horizontal slicing between layers, while implying continuity of activity when (and only when) it is appropriate to do so. This is not always easy to accomplish, particularly as layers are introduced or disappear within the span covered by a graph. In such cases I have been forced to resort to my own best judgment and musical intuition.

For this reason, I have elected to accompany the charts as needed with short score reductions designed to show the same textural groupings. Each staff grouping

corresponds to one layer of the texture. Every line is notated once, and compound strands containing more than one line are beamed together. Finally, the number of voices playing a line is represented by annotations denoting the appropriate instrumentation, which should also help to orient the reader in relation to the full score. Still, no one graph ever represents a complete analysis, and hopefully any ambiguities are clarified by the accompanying prose descriptions.

Part One - Exposition?: 1906–08

Armed with a more thorough textural vocabulary, we return to the analysis of the opening measures of Schoenberg's second movement. As shown in Example 1, the movement begins with three voices: two playing the repeated tonic bass note and another alternating between the third and fifth. These two lines are each simple strands and belong to a single "bass" layer because of their shared low register, stable tonic-defining function, and on-beat rhythmic pulse. This hierarchical embedding is the information represented numerically in the accompanying table, Example 3.

The first cello introduces a new layer in m. 167. Although similar to the bass layer in its consistent metrical pulse, this new line is strongly differentiated from the tonal stability of the first layer by the dissonance created by the subordinate positioning of the tonic triad pitches. The third measure continues the textural "crescendo" with the introduction of the third layer. Again there are aspects of continuity as the register and coordinated attacks of B and D clearly relate the bassoon motive to the ongoing cello layer, but the greater rhythmic vitality commands the attention to this motive as foreground figure. This is confirmed in m. 169 when the flutes answer this figure, bringing it up to an appropriate treble register. This is also our first example of a compound strand; while the two flute lines are not identical, they are clearly grouped together by virtue of being homorhythmic and nearly homophonic (except the short fourth note). The table shows the clear, unidirectional increase in all four values over this introductory gesture, as well as the greater increase in interlinear complexity at the end represented by the relatively higher increase in lines and voices in the final measure.

Reexamining this phrase has provided us with a simple example on which to demonstrate the analytical procedure. At this point we are prepared to plunge forward with the discussion of the remainder of the movement. For reference and by way of orientation, I provide Example 4. This chart shows what I take to be the form of Part One (up to m. 251), subdivided into sections, sentences, and phrases.[15] The issue of why mm. 166–251 are taken to be a high-level formal unit, and how many other parts may follow, will be discussed at the beginning of the next chapter.

The second phrase, mm. 170–74, is represented in Example 5. Here the texture settles into a conventionally homophonic one with the entrance of the thematic statement. In other words, it is composed of only two layers: a layer consisting solely of the clarinet Hauptstimme (one line doubled at the octave), and another taking in all of the accompanimental activity. The heterogeneity of the many accompaniment strands is overruled by the joint supporting function in contrast to the foreground figure, and our stylistic predisposition for homophonic texture within presentational statements. Within the accompaniment there are four strands, grouped by homorhythmic attacks.

This homophonic texture is disrupted somewhat in m. 171 by the insertion of a statement of the introductory motive. This statement in the violas echoes the flutes and first bassoon from the previous phrase; it is so clearly separate from the new texture and

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[15] I have not attempted to define a systematic hierarchy of terms for formal units, as I have for texture, because such a system is a substantial and disputed topic in its own right. For one such attempt, with particular relevance to Schoenberg's music, see Moortele 2009, particularly pages 11–15.

In the absence of a clear theoretical agreement on this subject (particularly in non-tonal music), I have arbitrarily decided to use the Schoenbergian terms sentence and phrase for low-level formal units and will do so consistently, though their usage may not coincide with their conventional implications.

theme that I consider it a distinct layer, one that creates a momentary disturbance of the homophonic presentation of the main theme. Yet it is worth noting that this motivic material is carried over in the other strings as well; the cello neighbor-note motive of the first phrase is here divvied up between the cellos and violins. Interestingly, the primary pitches here are B and D, thus finally giving the motive in a simple tonic form, a small glimmer of stability during this disorienting phrase.

While one could easily argue for regarding the strings as their own unified layer in m. 171 based on this motivic association, I regard only the viola as truly separate because I place greater stress on the continuity and stepwise motion in the cellos with what as come before and in the violins with what follows. And the homophonic texture in m. 172 is even more clear than 170. After the oboe and horn drop out the only remaining woodwind is the bassoon, which begins to exactly double the contrabass line. I group the heterointervallically related cello part with this bass line, while leaving the three upper string parts as a single polyphonic strand. This is partially because these strands are clarified in m. 173, where the cello does in fact begin to double the bass and the violin and viola also move into a homointervallic relationship with each other (doubling at the sixth).

Measure 174 functions as a reinitiation closely parallel to the first four-measure unit (see Example 6). As the overlap from the previous phrase concludes, the viola begins to play the reiterated G bass note and the bassoon takes up the arpeggiation first heard in the cello in m. 166. In m. 175 the low strings play a variant of the original first cello neighbor motive, the flutes in m. 176 combine elements of this motive with their own gesture from m. 169, and finally in m. 177 the *forte* horn entrance gives the motive

exactly as it first appeared. At the same time the first clarinets have taken over the B-D from the bassoon, in harmony with G to the lower D as in the second flute in m. 169, and then both lines are passed to the violins. The violas and cellos behave as the bass did in the parallel measures, arpeggiating down the tonic triad to the arrival on the low G on the next downbeat. This divvying up of the accompaniment patterns is a form of intensification; the same motivic material is presented the second time around but with an increased rate of registral change.

So there are some good reasons to expect that m. 178 will be parallel to m. 170. And, in fact the theme does enter in the bass register in m. 178 with the same descending sixteenth notes, but the overlap of the woodwinds obscures this and creates a dramatic increase in textural tension as they just now reach the motive from m. 169, one measure later than expected. The parallelism is not exact, and the number of distinct lines in the woodwind layer is much greater. There are six voices in four lines in m. 178, then five lines in m. 179. But this count neglects the partial doublings, which clearly divide the activity into three pairs of voices. Example 7 sorts out the varying degrees of complexity between the pairings within this strand, showing the pairings on separate staffs and beaming together only the doubled pitches. Oboe 1 and clarinet 2 play in octaves throughout both measures, while flute 1 and oboe 2 do so until the final two notes. Flute 2 and clarinet 1 are engaged in the most complex pairing; like the previous pair, the doubling breaks at the penultimate note (though all four of these lines are agreed about the final interval being a descending semitone), but there is also a brief moment of contradirectionality in m. 178.

The other accompaniment material is drawn from fragments of the theme, such as the parallel violin lines in m. 178 that mimic the descending entrance of the Hauptstimme, and the woodwind line of m. 181, which is a further variation on the motivic sequence heard in the previous two measures. The pitch content of the theme itself is varied, beginning with a transposition up a fourth starting on the fifth note. A more marked departure happens in m. 181 when the statement does not progress toward a cadence; instead, a new rising Hauptstimme begins in the strings. The orchestra splits into three groups that are all headed toward members of the G major triad but arrive at different times: the bass on the fourth eighth of m. 182, winds on the fifth eighth, and strings on the next downbeat. By the time the lines converge in m. 184, an E-flat/D# has been introduced and it is now on an augmented triad.

Example 8 summarizes the textural changes within this sentence. The vertical lines divide the four phrases. The first of these reproduces exactly the data of Example 5, showing the steady textural crescendo. In the second phrase the homophonic texture is indicated by the division into two layers (plus the insertion in m. 171): a single simple strand, and a denser accompaniment. The third phrase is parallel to the first in its initial return to simple strands, as well the gradual increase in components at all four levels. The jagged line between the final phrases is meant to show the motivic overlap in the upper layer. Finally, the texture of the last phrase again exhibits one layer that consists primarily of a single doubled line, and the remainder is characterized by a consistently high number of voices, engaged in complex polyphonic relationships. Thus the chart confirms visually both the chosen phrase boundaries, which are marked by significant textural changes, as well as the similarities between the two pairs of phrases. Texture is

in agreement with motivic content in structuring this passage as a compound sentence. From now on, charts such as this one will be used to give an overview of the textural process in each of the remaining divisions of Part One.

As is so often the case in Schoenberg, an *a tempo* following a *ritardando* marks the beginning of a new phrase in m. 184, at which point the orchestra splinters once again. This moment is significant as it is the first mid-measure thematic initiation, an offset that will become nearly ubiquitous going forward. Like m. 170 the texture here is somewhat homophonic (accompaniment supporting the oboe Hauptstimme), a texture appropriate to thematic presentations. See Example 9 for the chart of the sentence's texture.

The placement of chordal attacks on beats 1 and 2 help to reassert the sense of the 6/8 meter after the hemiola at the end of the previous phrase. The melody is a consequent statement, beginning with the same B-A#-G#-F# descent as the antecedent but in a more relaxed rhythm and continuing down chromatically. In m. 188 the Hauptstimme passes to the trumpets and first violins. The tonality clears up for a moment to create a $F\#^7$ on the downbeat of m. 189 leading to the reentrance of the original theme on B in the bass. But in m. 190 the sixteenth notes continue upward and lead to a chromatic line that rises up to D and then falls over the next three measures at a decreasing pace. There is another statement of the theme's head-motive in m. 193, but it stops as the bass reaches the verge of closure at A-flat, and first the winds answered by the strings play the up to now missing closing gesture from m. 173. There is a cadence on G in m. 197, but rather than a dominant the penultimate sonority is one of Schoenberg's so-called "fourths chords" (C, F, B-flat, E-flat, A-flat) created by approaching each tonic-triad pitch by step.

This section is rounded off with a codetta that returns to many of the motives of the introduction, in unusual metrical positions because of the half-measure offset at the beginning. I am inclined to consider this a four-measure unit, in keeping with its parallelism to mm. 166 and 174, followed by a two-measure link into the next section. Thus the theme group proper ends with a tonic, on the downbeat of m. 201, rather than the "dominant" at the end of m. 202. But this is not a clear-cut division. For one thing, the six-note motive of mm. 201 and 202 has already appeared in the previous measures and is obviously main theme material, being initially the first six pitch-classes of the antecedent itself. Also, the break between mm. 202 and 203 is strongly articulated by a rest and change in texture followed by the entrance of the next section's own theme. As is often the case in interesting music, there are conflicting elements (parallelism and tonal closure in favor of m. 201, and textural change, articulation by rest, and motivic change in favor of m. 203) that blur the boundaries between formal sections and make selecting a specific location for the division a false question.

The theme of Section II (see Example 10) clearly begins in m. 203, with a four-measure phrase, broken into 2+2. The theme is presented first in the winds, then answered up a second by the trumpet. In the next phrase the harmonic region moves from C# minor to A-flat with E-flat in the bass in m. 212. In the second half the bass drops down to A-flat and then passes back up chromatically to E-flat. This is another ingenious section where the goal of modulation is relatively clear but the independent lines never all reach it at the same time to produce a tonic triad. That goal is E-flat major, on which the next theme enters in the horns in parallel thirds. But that moment, the pickup to m. 219, is harmonized as C minor. And the other voices do not finish until the

downbeat, at which point it is a half-diminished chord on B. E-flat has been established without either ending one section or beginning the other on that triad. This is reminiscent of the opening of the first movement, where the tonality is inferred early on even though the first tonic chord does not occur until the cadence in m. 11.[16] And of course that tonic is also E-flat, creating a significant connection between the two movements. An even more obvious connection is presented when the cello and bass enter with the pitch-classes of the motive that opened the piece B-flat–E-flat–F-flat.

Section III is composed of three roughly six-measure sentences. Within these units, the texture chart (Example 11) reveals a further division into a fairly consistent column width of about two measures, and there is a 1-to-1 relationship between these segments of uniform texture and the phrase divisions. This is a significant decrease in "textural rhythm" in comparison with the frequent changes every measure or faster within Section I. This characteristic is an essential part of the more stable affective quality of this section.[17]

The first sentence of the new theme consists of two strands: the new theme played in parallel thirds by the horns, and the bass line in the low strings that begins with the opening pitch-classes of the first movement. They are joined at the close by the bassoons, which are connected rhythmically and registrally to the bass layer. The

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[16] Schoenberg seems to have been proud of this delayed tonal confirmation, as evidenced by his noting it directly on one sketch; "Der erste Es moll akkord ist im 11. Takt." (*Sämtliche Werke* B11/II, 92)

[17] The use of the term "textural rhythm" in this way may be unfamiliar, but it is a major thesis of Berry (1976) that there is a rhythm to all the elements of music, of which only harmonic rhythm is conventionally discussed. See specifically 313–16 on "The rhythms of element-successions", and 201–04 on "Textural rhythm" in particular.

tonality of this unit is in keeping with the transition into it. After the allusion to the first movement theme, the bass begins a chromatic descent from A-flat, and this is harmonized in the horns by appoggiaturas into, followed by leaps between, pitches of this triad. The bass descent arrives on E-flat on the downbeat of m. 224, but the linear closure in the horns projects a C minor harmony in 6/3 position. Compare this to the bass motion *up* from A-flat to E-flat in mm. 213–14, and the ongoing sense of an E-flat tonality without a specific moment of agreement about projecting that triad.

The following six measures are grouped into two-measure phrases by sudden changes in texture. The first of these (middle of m. 224 to the downbeat of m. 226) projects an F minor triad, arrived at on the final downbeat (in 6-4 position). This is easier to determine by examining the five lines of the segment independently: the Hauptstimme (a variation of the consequent from the first theme, m. 184) is narrowly centered on A-flat, the bass line begins on C then leaps to E-flat and steps back, while the two clarinet lines approach the pitches F and C by step (also the first bassoon, which partially doubles the second clarinet). Each is tonally clear on its own over the span, but the coordination to create dissonant simultaneities obscures this simple background. Similar behavior is exhibited in the succeeding phrases, which arrive on D-flat with the resolution of the appoggiatura on the third eighth of m. 228 and again in m. 230, and continuing into the next phrase with the A-flat in m. 232. This succession of harmonies (A-flat, C minor, F minor, D-flat, A-flat) reveals a collection of closely related chords sharing many common pitch-classes, and thus the abstract possibility for parsimonious voice leading. But this can only be understood by careful separation and observation of the many complex interlinear relations between parts.

This textural analysis also allows greater comment on the formal characteristics of the sentence. Between the first and second phrases there is an obvious increase in the number of parts, with the introduction of the violin strand and the doubling of the Hauptstimme by the flute. But there is also a significant increase in the independence of the inner parts. The first bassoon has a new independent line, while the second breaks off from doubling the bass line to move in thirds with the second clarinet. This intensification cooperates with the rise in dynamic. The third phrase is less strongly separated from its predecessor, lacking a dynamic change or a reinitiation of the theme, and might thus be seen as a subordinate appendix or even folded into the second phrase. But it does provide an important function of relaxation (before the dramatic buildup in the final sentence), as the clarinet and bassoon layer finally coalesces into only two lines played by two parts each, giving an arch shape to the middle of this section.

The closing sentence of Section III surprisingly sees the reuse of the head motive of the first section. In the first two measures the woodwinds play this short gesture twice over the marked Hauptstimme, which is a slower paced stepwise ascent in the strings. As already mentioned, this motion arrives on A-flat in m. 232 (again with an appoggiatura into the third) over E-flat in the bass, a sonority heard in m. 212 within the transition to this key area. A root position E-flat is actually heard as the last eighth of this measure as pickup into the final subphrase. The woodwinds now recall a motive heard briefly in m. 206 (violin 1) while the parallel motion in the trumpets and horns returns us to a texture similar to that which prominently opened this theme. At the downbeat of m. 234 the whole ensemble actually lands on an E-flat chord, but it is an augmented triad and the

final phrase presents near universal rising motion up to the strong close on another A-flat over E-flat sonority.

There is a sort of melodic overlap into the next section, with the A-flat fourth moving to G in the first violin and cello. Though I have presented the 6/4 chord over E-flat as something of a contextual consonance for this piece and defining for the key area of this section, the lone G's sounding forte-piano before the quiet entrance of the other lines does have the sound of a resolution. But here the resolution occurs with the start of the next time-span.

The theme of Section IV is new but is reminiscent of previous material, particularly the end of the opening theme. Measure 238 is comparable to m. 173, with a long tied note leading to descending sixteenth-notes. The original however was a descending arpeggio while m. 238 is scalar, but descending step-motion is motivic as well, tracing back to the head motive just heard again in mm. 230–32. The accompaniment here is the accented rhythmic gesture that first closed the transition section in mm. 215–18. It provides homophonic accompaniment to this rising and falling sixteenth-note line, and in retrospect we can think of that first instance as incomplete in its lack of melody. In the terms used by Meyer and Levy, it was a ground with no figure. These two components serve the same function of acceleration before closure, and in the future they will appear together several times.

Example 12 gives the overview of Section IV. This closing section is characterized by irregular phrase lengths. There is a modest division after three and a half measures (the length of the parallel segment) when the Hauptstimme shifts to the flute, and an intensification as it is doubled by the clarinet and piccolo leading to a more

drastic break after the downbeat of 244. This arrival is on an unusual chord perhaps interpretable as polytonal; the first melody note E-flat goes with G and B-flat in the lowest strand, while the second F# completes the other strand of B and D. This stands out as unusual precisely because, despite the tonal complexity of the piece, most arrivals do tend to be on triadic sonorities.

Measure 244 brings a dramatic fragmentation of the thematic material. The texture is reduced to three components: a single woodwind line (in two parts) that continues the sequential repetition of a short segment of the descending sixteenth-notes, the lone first violin, which presents the rising eighth accompaniment, and octave echoes in the bass (see the short score reduction in Example 13). At the pickup to m. 247 there is an increase in activity as the clarinet and bassoons resume the continuous sixteenth-notes at an accelerated pace (alternately rising and falling every two eighths) and the accompaniment is also transformed to a steady eighth-note pulse. But there is also a compensatory decrease in complexity to only two strands, each consisting of a single doubled line. There is a textural overlap around m. 249; after a rest the violins are joined by the viola for a pickup to the final gesture, while the rest of the texture does not change until the downbeat. By m. 250 the full ensemble is playing, but the relative decrease in interlinear independence is maintained. There are only four layers, separated by timbre: the woodwinds and the upper strings (both of which continue to have only a single line each), a new bass line, and a slightly more complex brass layer. They all cadence on an A-flat chord at m. 251, this time a dominant seventh but still with E-flat in the bass. The process enacted in this sentence, one of fragmentation followed by a crescendo and the

full ensemble employed in basically a four-voice texture, is central to creating the feeling of a definitive cadence without a preceding tonal harmonic progression.

Part Two - "Elaboration": 1939

I have taken m. 251 to be the end of the first major division of the movement. There are however other points of articulation. Measure 251 actually reinitiates a statement of the closing theme parallel to m. 237. It is not until m. 260 that different thematic material is presented, specifically the head motive of the first theme. This is followed in m. 263 by a drastic change in texture, dropping down temporarily to a single cello note, played *piano*.

According to Dale, a "coda group" extends from mm. 237–63, at which point the development section begins. However, the material presented in m. 251ff. turns out not to be a restatement, but a development of the closing idea. The character of this continuation is quite different from the thematic statement of m. 237, or even the cadential liquidation of the second sentence at m. 244. Though there is an addition to the texture of a new string layer, the parallelism is nearly exact through the first phrase. But then the thematic parallel breaks in m. 255, where the pace of melodic rising and falling is expected to increase, and instead the Hauptstimme is propelled up two octaves into a voice exchange in m. 256. These new additions contain subtle allusions to the opening. The viola line from m. 253 (partially doubled by violin 1) is identical to the first violin in m. 172, while the trajectory of the bassoon and cello in m. 256 duplicates the bass line in that same measure, stopping short on E-flat. The exactness of the pitch correspondence in these spots might be coincidental, but there is no doubt that their presence here shifts the accompaniment away from a space appropriate to Section IV (or Section II.c) and towards the region of the first theme. Measures 257-59 quicken the pacing of motivic

entries with three abortive reentries of the closing theme. The last finally alters the pitch level (down a third) and leads to the B major triad on the downbeat of m. 260.

That harmonic shift sets up the entrance of the head motive, which begins on B. This theme too is fragmented, continuing for only a measure and half before a second shorter statement in m. 262. And the timbral contrast between the two statements is the strongest possible; the theme is sounded first by all the woodwinds in unison and octaves, then answered by the entire string section in the same bare doubling. This answer is cut off by the largest contrast in instrumentation possible, with the drop from the tutti D major chord on the downbeat of m. 263 down to a single D pitch in the cello. After three measures of near silence the head motive reappears in the cello and bass. Again the motive lasts merely one measure before next initiated by the flute, presenting another maximal contrast, this time of register. And again there are almost three measures of near silence (pianissimo mostly inner-voice chords) before the next statement, this time introducing a new quasi-inversion form of the motive played by a solo violin. By m. 272 any possibility of a normal thematic presentation of the Section I theme has certainly dissolved. The solo texture suggested by the violin is adopted for the next several motivic statements, and at the same time the motive itself has been reduced solely to its opening tetrachord.

Certainly m. 263 has some aspects of a beginning, and this is not incompatible with m. 251 being an ending, in which case the intervening span forms some type of transition. However, within this span we observe considerable fluctuations of texture, so it is hard to make the case for privileging the change in m. 263 over other fluctuations in the same ongoing process of development. The first obvious point of articulation that

precedes this process is m. 251, which initiated a restatement that dissolved before reaching an ending. Perhaps Dale does not consider m. 251 as a possible point of beginning because of the continuation of preceding thematic material at that point. But it is not so unusual for a sonata development, for example, to begin first by continuing with the closing theme that was just heard and not introduce the development theme, whatever it may be, until the development process is already underway.

In fact, there are other good reasons for thinking of m. 251 as a more significant point of division. When Schoenberg broke off composition for the first time,[18] it was precisely in m. 251; thus it is a likely inference that he thought of this point as the end of something, regardless of how long it takes the next thing to truly begin. And it also seems possible that the many decades before resuming work are a factor in the character of this subsequent thematic transition. Schoenberg admitted to having great difficulty picking up where he left off:

> For the past months I have been working on the Second Chamber Symphony. I spend most of my time trying to figure out: 'What did the author mean here?' After all, in the meantime my style has become much more profound and I have much difficulty in making the ideas which I wrote down years ago without too much thought (rightly trusting to my feeling for design) conform to my present demand for a high degree of 'visible' logic. This is now one of my greatest difficulties, for it also affects the material of the piece. However, this material is very good; expressive, rich and interesting. But it is meant to be carried out in the manner which I was capable of at the time of the Second Quartet. (undated letter to Stiedry, cited in Rufer 1963, 64)

[18] Sketch 1269

In light of these troubles, it is perhaps not surprising that Schoenberg elected to begin his continuation with an extension of the closing theme material already in play, before returning gradually to the earlier theme.[19]

The different characters of presentation in Parts One and Two correspond to what Schoenberg referred to as *stable* (feste) versus *loose* (lockere or aufgelöste) formations.

> A statement is stably formed when its smaller components do not have the tendency to move away from a perceptible center ... but instead arrange themselves around it (concentric tendency). 'Motivically speaking' one can say: the smaller components ... are for one thing not extensively developed, for another not developed in such a way as to become anything basically different, since the intention is to show different aspects of the grundgestalten. (Schoenberg 1995, 176–77.

Loose structure, on the other hand, is characterized by

> direct and immediate repetition of segments, juxtaposition of contrasting segments, often with an overlap; little or no recurrence of earlier features within the section. (Schoenberg 1967, 204).[20]

Obviously, loose formations are often typical of developmental functions. But is the second part of this movement a development? Answering that question inevitably requires dealing with the larger question: is this movement a sonata?

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[19] Given these difficulties it is remarkable that Schoenberg seems never to have considered abandoning or substantially reworking any of the measures immediately preceding the temporal break. Instead he seems to have absolute respect for "the author" and determination to keep whatever he had already written. Indeed, at the point of this compositional caesura in the first movement, Schoenberg had written on the sketch "there follows ms. 146–165", and the final form of the continuation lasts exactly that many measures. It borders on inconceivable that Schoenberg could have known precisely how long an acceptable continuation would have been, and yet had no idea what its content would be. See sketch 1257 (*Sämtliche Werke* B11/II, 92).

[20] See also Schoenberg 1995, 179 and 382.

It remains to be determined what the internal structure of this second formal division might be and thus what, if any, form we might attribute to the movement as a whole. Regarding formal delineation in atonal music, Wallace Berry states "literatures that resist tonality rely upon many of the compensations for its loss or attenuation which we have observed in styles of the late nineteenth century: insistent motive development and reprise, concision and brevity of expression, and association with literary text" (Berry 1986, 421). With no dramatic program, we must rely on Schoenberg's motivic development.

I pause now to introduce a new type of graph in order to investigate the organization of motivic material. Example 14 is a graphical representation of the time-spans of Part One, identified by the motivic material in use (with motives along the vertical axis and time on the horizontal). The correspondence between these letters and the motive families is spelled out in Example 15, a short catalogue of the primary motives of the four sections of the first part, in the form of their original presentation. Note that the graph of Part One is not meant to line up exactly with the phrase structure discussed earlier; Example 14 and Example 4 represent fundamentally different information (motivic groups versus thematic units) and thus exhibit some discrepancies, particularly in the subdivision of Section I.[21] It is for this reason that my nomenclature changes, from numbers to letters, in order to avoid confusion. Still, there is strong parallel between, for example, motive groups A, B, and C and the introductory gesture and antecedent and consequent sentences of Section I.

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[21] I have not found it necessary here to search for motivic subdivisions of Sections III and IV at the same level of detail as Sections I and II, for reasons which shall become clear below.

Example 16 illustrates the organization of Part Two in an analogous way. This accounts for all of the measures up to 439, the beginning of the Coda to be discussed later.[22] As can be seen, Part Two does not introduce substantially new material but instead presents a reordering and variation of the motives of Part One. In fact it is my contention that the motive groups do actually occur in nearly their original order, though not all the themes receive presentational treatment. In this reading, the first section is greatly expanded and includes many insertions of Section II material, either as full-fledged intrusions or used as accompaniment for the primary themes.

B material (from the antecedent theme of Section I) is the main source of motivic development until m. 308, though the variations are increasingly more distant after m. 293. After the liquidation observed above in mm. 263–76, a more emphatic statement returns in the woodwinds (again taking off from E-flat) at the pickup to m. 278, followed by the inverted variant in a rising sequence. This crescendo is followed by another dramatic decrease in texture, which is this time significantly followed by the neighbor-note motives (A) from the introductory phrase. Though it lasts only two measures rather than four, this gesture clearly punctuates the ongoing B material in a way analogous to the rebeginning in mm. 174–77. Thus the succeeding measures are significantly marked as being parallel to the second half of that compound sentence.

The first significant change in motivic region comes in m. 309, interestingly punctuated by the referential harmony of an A-flat triad over an E-flat bass note. The

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[22] Of course, as always this boundary is somewhat arbitrary and debatable. The parallelism ends at m. 431, Dale takes m. 433 (the entrance of a first movement theme), and the notated key change is in m. 440. The use of measure 439 in the above motivic context is motivated merely by the continued use of the head motive, which ends at this point.

first motive presented is E (from the second phrase of Section II), but in the next measure this is seen to be accompanimental counterpoint for the primary figure, C. The horn gives the consequent theme exactly for four measures, down a fifth from its original presentation. In Part One that had been virtually the entire time allotted to this theme; though a heterorhythmic line had continued for three more measures, it was already partially eclipsed by the return of the main theme in the bass. But the second time around Schoenberg elects to give a more substantial treatment to this underdeveloped idea, and what had been seven measures becomes twenty. The four-measure phrase is immediately repeated by the first violins, which also then begin to follow out the continuation. In m. 321 the first trumpet begins a variation, and after that the textural rhythm increases building up to the next section.

However, while the C theme is finally getting its own chance for developing variation, at the same time something surprising and heralding more far-reaching implications creeps into the background texture: three quotations from the *first* movement. These motives are drawn from each of the three themes of that movement's A section (mm. 1-10, 11-22, and 23-31). The first begins in m. 314 with the cellos and basses quoting the third theme first heard in m. 23 (see Example 17). The transposition is exact to the downbeat of m. 316, and the next two notes continue the intervallic parallel in rhythmic augmentation. During this elongation, the theme is answered in inversion by the clarinets and bassoons.

The second quotation is the most varied of the three. It is played by the second violins in mm. 316–19, joined by the violas for the latter two measures (see Example 18).

Dale equates the violin 2 part here to the violin 1 Haupstimme from mm. 11–19.[23] This parallel is convincing for the first two measures, as these lines are nearly homorhythmic and heterointervallic. However, it fails to account at all for mm. 318–19, precisely as this strand is reinforced by increase from one voice to four. I suggest a possibly stronger parallel to mm. 20–23, which is the end of the phrase Dale cites and the transition into the next (the bass motive just quoted). The transition began with two measures parallel to mm. 11 and 12 (and thus mm. 316 and 317), but then introduced two more voices in the third and fourth measures. In addition m. 23 began the next phrase throughout which the violas maintain a consistent accompaniment pattern that is a better fit for the rhythm of m. 319. While the first two measures of this statement are less intervallicaly similar to mm. 316–17, the parallel to the second pair is clear, even to the inclusion of contraintervallic lines. Thus the quotation fuses these two statements from the beginning and end of the phrase.

Finally, in m. 318 the four-note motive that opened the piece is introduced. It is first heard down a step, then repeated in m. 320 by all of the woodwinds in unison at its original level of transposition. Thus, in these eight measures we hear all three themes from the initial A section of the first movement, in reverse order. In Schoenberg, it is doubtful that such a quotation would ever be inserted randomly, and we should expect this material to have further repercussions later in the piece.

In the next phrase the succession of events is in fact temporarily derailed. Motive E, which had been used as accompaniment to C, leads naturally into motive F, disrupting

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[23] Dale 2000, 117. The relevant examples are 6.8.1 and 8.1.3, on pages 118 and 153 respectively. These are however unannotated quotations from the score, so no specific claims are made about the details of the transformation.

the continuity of the first section. There is a decrease in density associated with this motive and its cadential function, here instantiated by the texture of two imitative, internally homorhythmic, layers. This interruption ends abruptly in m. 338, heralding a passage solely dominated by first-movement material. We again hear the bass motive from mm. 314 and 23. But most of this ten-measure passage is derived from a different theme, this time from the first movement's B section (specifically its second theme, mm. 62-72). This motive persists until m. 349, becoming reduced to merely a three-note descending gesture in the final measures.

Measure 349 reintroduces the descending tetrachord associated with group B, though the following passage contains no actual thematic statements longer than a half measure. The predominant elements of this passage are these short fragments of B, accompanied by eighth-note pulses associated with F. The developmental quality is further aided by the eventual introduction of material from A, E, and the first movement B section. But the general parallel for this passage, mm. 349–72, is clearly to the final two phrases of Section I, where the B motive returned after the consequent theme but now in a closing function. Here this same function is accomplished by motivic fragmentation and the coupling with F, which more naturally expresses the needed intensification. The expansion of C in this part allows for the perception of the latent ternary aspect of the first section; the B-C-B structure creates a large-scale sentence form, corresponding to the functions of presentation (with repetition), continuation, and closure.

There is another brief interruption in m. 372. Like m. 331, this is another premature jump ahead towards closing material, this time with the entrance of H (the

Section IV theme). This motivic material overlaps into the next phrase, which begins in m. 377 with the D theme. This moment stands out, as it is the only theme from the first two sections not yet heard (in addition to being the next expected in the order of original presentation). It signals a move towards stronger parallelism with Part One and a corresponding decrease in development expansion. The three motivic groups of Section II (D, E, and F) are run through in order and in roughly the same amount of time taken in Part I, with a slight shortening of the second phrase whose material had just been used extensively to counterpoint the B and C themes.

Finally, at the pickup to m. 391 the trumpets in parallel thirds signal the arrival of the Section III theme. This section is treated to a much more straightforward recapitulation than Section I. The melodies of the first two sentences are obviously parallel until the second half of m. 402 (parallel to 229). Here there is an extension and an increase in rhythm. The parallel point had lead in Part One to the reentrance of the head motive. As he had done in the C section, Schoenberg avoids the quotation of this theme (B material having already received double the time it had in Part I) and instead repeats the theme of the current section, now in the strings in m. 406.

Section IV begins in m. 416 and is similarly faithful to the original. It lasts the same length as in Part I and divides into two sentences at the same point. However the internal presentation is somewhat different. The rising and falling melody is far less continuous, replaced by overlapping two-measure ideas which restart the descent from a tied note a total of six times. Measure 424 is parallel to 244, where a decrease in textural density coincides with the prominence of the F motive. The parallel breaks after m. 428, where again there is an omission of the tetrachords associated with group B. Instead, in

m. 431 and 432 we are treated to a sixteenth-note motive and wide descending leap both characteristic of the end of the main theme (cf. mm. 181-82). Then the tetrachords do return, continuing through m. 438 and overlapping into the Coda.

Published comments on this piece tend to minimize the cyclical plan of Part Two, in favor of interpreting the movement as a sonata form.[24] In such an analysis it is obvious that my Part One is understood as the Exposition, while the neutrally designated Sections I-IV correspond to primary theme group, transition, secondary theme group, and closing group respectively. I do not dispute the plausibility or appropriateness of these terms for the above sections. They do certainly have the respective characters expected of the components of a sonata exposition, and there is even a general tonal contrast between the first and second theme groups. I have tried to avoid the temptation to use these terms only because I have hoped to avoid giving the expectation of the continuation they usually suggest. The relevant question is whether the first part of a piece can have the form of an Exposition without implying a subsequent Recapitulation.

In Dale's view sonata-form procedures are "explicit" in the movement; "Cast in a relatively conventional sonata form in G major, the movement departs from the norm only in that its recapitulation begins with the transition group rather than with the first subject" (2000, 116–17). See Example 19, which reproduces her form chart, Table 6.3.

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[24] In addition to Dale (discussed below), see also Christian Martin Schmidt (2002) who gives an identical form chart and also describes the movement in sonata terms, but does point out that it is not obvious from the exposition alone that this was the only possible continuation. Even MacDonald's description, though he does not give a specific account, does use the terms "development" and "recapitulation" (2008, 194). Jan Maegaard on the other hand does not hear either of these forms and instead claims that after the opening theme returns several times in a "rondolike manner" the formal design "seems to dwindle", and it is apparently only the Coda that retrospectively keeps the listener from being "let down" (1998, 189).

While there is definitely a change around m. 377 to a closer measure-for-measure parallelism, this fails to account for the thematic ordering of this cycle before that point. And I am somewhat skeptical that a transition section could by its very nature be heard as a likely candidate for a large-scale point of *initiation*. It seems impossible to me to absolutely divide this second motivic cycle at any internal point.

But if it is taken as a whole, it is certainly untenable to describe Part Two simply as a Recapitulation, given the unstable nature of its first half. Can it instead be called a Development? It is worth noting that Schoenberg disliked this customary English translation for Durchführung, strongly preferring the word Elaboration, precisely because he believed modulatory middle sections usually followed the motivic material of the exposition.

> The customary term, 'development', for this section is a misnomer. It suggests germination and growth which rarely occur. The thematic and modulatory 'working out' (*Durchführung*) produce some variation, and place the musical elements in different contexts, but seldom lead to the 'development' of anything new. (Schoenberg 1967, 200 n. 1)

Schoenberg also reminds us to keep an open mind with regard to the possible plans for developments in non-tonal works.

> The more modern music has distanced itself from certain 'old-fashioned' technical tricks ... the more it has also loosened the harmony, so that even the first section is already more eccentric harmonically than was formerly the case with a modulatory section ... so much the more was needed a modern technique that could find new methods for the eccentric plan of a development (as it placed the concentric plan of the statement of gestalten and themes on a new basis). (Schoenberg 1995, 271)

Given this reminder to allow a certain analytical flexibility, is it possible to find an acceptable subcategory of sonata forms to describe this movement? William Caplin's (1998) theory of formal functions offers some hope of describing the differing characters

of the various motivic statements. Indeed, his theoretical approach would be the most suited to explicating the repeated intrusions of closing material prematurely in the cycle as well as the conflict between binary and ternary organization in the primary theme, and the language of my discussion of these issues above is indebted to Caplin's example. In particular, his concept of *fusion* allows for the merger of functions within a formal unit, and seems a promising way to describe the turn toward a character relatively more suited to a recapitulation.

As far as classification, Caplin does offer the term *truncated small ternary* for forms whose second part is most likely to be heard initially as a contrasting middle section, but which lack a return of the first part (thus AB, with A' eliminated) (1998, 206 and 213). However, as the name small ternary implies, he only uses this designation for sections such as interior themes and slow introductions, and never for full movement forms. This movement could perhaps be called a truncated *large* ternary, with a fusion of developmental and recapitulatory functions in the later sections.

The most influential work on sonata form in recent years is undoubtedly James Hepokoski and Warren Darcy's *Elements of Sonata Theory* (2006). And amongst their five types of sonatas[25], there is indeed one formal category that describes exactly the plan of Schoenberg's movement. They concur with Schoenberg that developments frequently use the same motivic material as the exposition and that, in their terminology, it is "a strong first-level default" for developments to be "fully or partially rotational (that is,

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[25] The five types, and their more typical names, are: Type 1, "sonata without development"; Type 2, a "binary variant" which lacks a conventional name; Type 3, the "textbook" sonata; Type 4, "sonata-rondo"; and Type 5, "concerto-sonata." For general discussion see Chapter 16.

guided in large part by the ordered thematic pattern established in the exposition)" (2006, 206 and 19). Thus a sonata without development (their Type 1 sonata) and a sonata with an incomplete or missing recapitulation (as we have in the Schoenberg) are similar in that they are each "dual-rotational" forms. And Expanded Type 1 sonatas are often found, where the second rotation is lengthened by elaboration, typically in the primary theme and transition (P-TR zones) (349). But Hepokoski and Darcy offer another dual-rotational form, Type 2, which is an even closer fit. In Type 2 sonatas, the second rotation starts out off-tonic with expansions in the P-TR zones, but the arrival of the secondary theme (S) brings a tonal resolution and return to more exact recapitulation. They reject the notion of dividing this rotation and claiming the recapitulation begins with S, because S in their view is incapable of beginning a large structural unit. (I would add that TR is even less likely to exhibit this function, as mentioned in my response to Dale's assertion that the recapitulation begins there.) "Type 2 sonatas do not have recapitulations at all, in the strict sense of the term. Instead, their second rotations have developmental spaces (P-TR or, sometimes, their episodic substitutes) grafted onto tonal resolutions (S-C)" (354).

The problem with simply attributing this form to the movement lies in the heavy emphasis on tonality in its definition. Hepokoski and Darcy themselves stress the central importance of this tonal plan, as it is the source of the only difference between their Type 2 sonata and an expanded Type 1. But this raises the very serious issue of if and how sonata form can be a relevant analytical category in the absence of clear tonality. It is also not entirely clear that it is necessary; Berry, in his book on form, describes many of the attributes we have observed as being fairly typical even in a simple binary form.

> The form of the binary's second part is likely to be comparable, and may even be identical, to that of the first. Often it is a phrase group in which there is somewhat freer development of a basic motive. The second part is thus frequently longer than the first (resulting in an asymmetrical binary), and more modulatory within the range of closely related keys. (Berry 1986, 34)

Berry rejects the designation of binary form as AB, since this denotes a substantial change between parts, when "the rule is a second part which is simply a new arrangement of the motives of the first, with the same rhythmic pace and content, even though more fluctuant tonally" (36). Thus one might prefer AA', which adequately describes Schoenberg's composition, without recourse to sonata terminology. Sonata form is such a powerful and elegant category that it is natural for theorists to be tempted to employ it whenever possible, but we should not overstate the case for a complex deformation of such a form when simpler concepts work just as well. And while such a piece is clearly in dialogue with sonata traditions, in the absence of functional tonality such a dialogue can only go so far.

Schoenberg's own definition of binary form is also in agreement with Berry's. He describes the two segments as being built from "closely related but differentiated motive-forms" and, of relevance to this piece, suggests that "the difference between this structure and the small ternary form may consist in the absence of a real motival contrast ... or in the absence of an identifiable repetition" (1967, 168 n. 1). But most importantly, Schoenberg was always skeptical of any idea of form as an abstract concept, divorced from the particularities of a unique work and its experience in time.

> Theorists see in existent forms something given, whereas in reality something so resistant as a given ... which one can grasp complete and in itself, never has been or will be given [in music]. Rather, musical form is something coming-into-being [*Entstehendes*] (to say something come-into-being [*Entstandenes*] may already be incorrect), at every time newly coming into being, and never except in the

finished artwork itself something at hand, that can be transmitted and further utilized. (Schoenberg 1995, 45)

Coda - Emancipation of the Consonance

Even in 1939 Schoenberg was still uncertain about the overall structure of the symphony. He put substantial work into a possible third movement[26], and fleetingly considered that even a fourth or fifth might not be "out of the question". However, the third movement was ultimately rejected, and a description in a letter to Stiedry gives a possible clue as to why Schoenberg might have determined it was superfluous.

> The last movement is an "epilogue", which does bring thematically new material (developed from preceding material) but which, nevertheless, is not unconditionally necessary. The musical and 'psychic' problems are presented exhaustively in the two completed movements; the final movement merely appends, so to speak, certain 'observations'. (Rufer 1963, 65)

Instead of this freestanding "epilogue" a coda was added to the second movement to serve a similar function. This coda includes the return of the first movement themes that earlier crept into the elaboration. Also there is a notated key change to six flats, corresponding to the E-flat minor of the Adagio. In a piece so chromatic that virtually every note carries an accidental anyway, the fact Schoenberg chose to use key signatures at all is more psychological than practical in motivation, and the change serves to draw attention to the reprise. This return to the themes, tempo, and tonality of the opening creates a large-scale ternary design over the whole symphony, mirroring the ternary form of the first movement and possibly standing in for the third part of the second movement in any reading where it is also considered a kind of incomplete ternary.

Some authors have read the return to the material of the slow, minor-key opening as a tragic ending, significant because they are something of a rarity in Schoenberg's oeuvre where endings of, if not affirmation, then at least transcendence are more

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[26] Including a short score draft of 127 measures. *Sämtliche Werke* B11:II, 175–201.

common. In Maegaard's interpretation, after the feeling of "Where does this go?" experienced during the elaboration, "as if hit by a stroke of lightning (reminiscence of the collapse?), the music sinks back into the darkness of the first movement, and there it remains until the end. In retrospect it appears to be a perfectly logical consequence of the foregoing development" (1998, 189). And according to MacDonald:

> It is one of the very few Schoenberg works to have an explicitly tragic ending; but it is tragic with the inspiring effect of a *Lear* or *Hamlet*. Perhaps the long delay in completion of the work was necessary for Schoenberg to tackle with sufficient objectivity the experience so powerfully embodied here. (MacDonald 2008, 195)

One could describe the full drama of the movement by starting with the first compound sentence where the initial promise of a stable, tonal opening was undercut by the disorientation of the clarinets' chromatic theme. In contrast, the second theme called out from horns in parallel consonances, attempting to assert order. But the second theme also contained the seeds of its eventual downfall, introducing the first allusions to the piece's opening and the E-flat/A-flat tonal center which is so easily transformed to the E-flat/A-*natural* tritone relationship operative in the first movement and Coda. The elaboration exaggerated the contrast between first and second themes as the first two sections were prolonged and developed before the return of the following sections in concise and stable form. But by that point it was too late; the first movement themes had been allowed in and could not be denied. The end represents a resignation, a fall to the flat-side and the final merger of the basic ideas of both movements before dissolution.

This picturesque musical interpretation aside, the piece itself indicates a significant "reprise" in the story of Schoenberg's compositional development; whether or not it is a tragic one depends on one's own point of view. Schmidt (1952) has described the harmonic language of this piece as a "regression," a step away from the possibilities

opened up by Op. 9 and developed in the Second String Quartet.[27] In such a unidirectional view of music history the eventual completion of this piece decades later must be considered even more tragic, as it heralded the beginning of a new phase of tonal and quasi-tonal composition for the aging Schoenberg. This period of late tonal works has been referred to as the "emancipation of the consonance," in a play on the more familiar phrase regarding dissonance and the beginning of atonality.[28] Dale argues that the completion of the outstanding chamber symphony was a vital breakthrough in the mental block allowing such compositions to once again be acknowledged as major works; "How else is one to explain the fact that it was not until after the completion of the Chamber Symphony that the *Kol Nidre*, written a year earlier, received the opus number 39?" (Dale 2000, 199)

The emancipation of the dissonance that began in earnest with the First Chamber Symphony proceeded more swiftly than Schoenberg himself was entirely comfortable with, and he always wished he could have spent more time exploring the style of his early works. There is a pleasing symmetry to the fact it should have been the Second Chamber Symphony that eventually granted him that opportunity. But Schoenberg never passed judgments on his works based on which was more or less "revolutionary", in the way his well-meaning supporters like Schmidt sometimes have.

> A longing to return to the older style was always vigorous in me; and from time to time I had to yield to that urge.
> This is how and why I sometimes write tonal music. To me stylistic differences of this nature are not of special importance. I do not know which of my

---

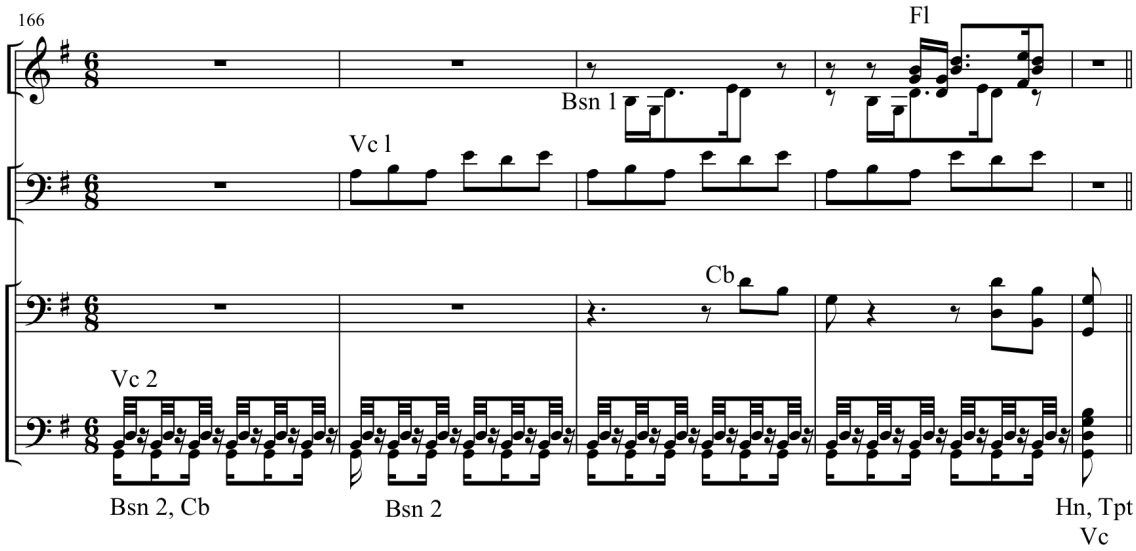
[27] Preface to the Philharmonia edition, no. 461; quoted in Frisch 1993, 251.

[28] Dale takes this phrase from Hans Keller (1981).

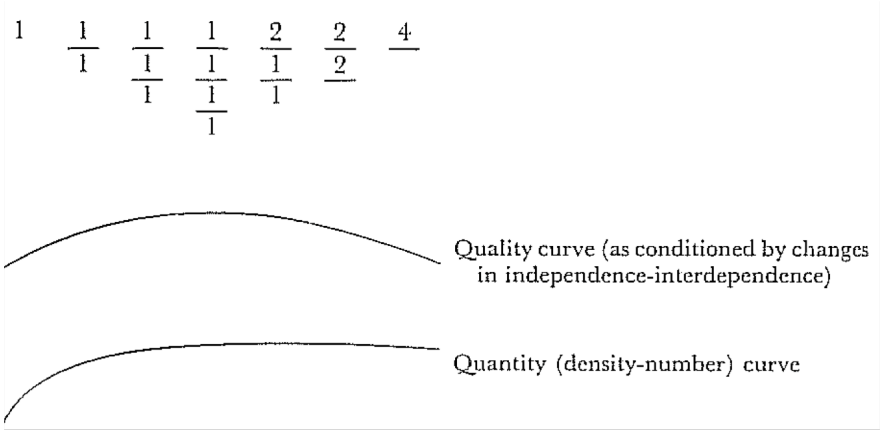
> compositions are better; I like them all, because I liked them when I wrote them. (Schoenberg 1975, 110)

The real point of a phrase like "emancipation of the dissonance" is that the categories consonance and dissonance, if they are functional at all, are not the primary analytical elements within the style. Thus musical form and function is simply articulated by other factors, most notably texture and motivic development. That is why my analysis has focused more on these processes than on our overworked theories of pitch. Schoenberg's real achievement is not in the fall of tonality but in the rise to prominence of these frequently undervalued dimensions. Thus his music is the perfect stimulus to remind us how much our perception of any music always owes to the dramas enacted by these seemingly simple elements.

Example 1. Mm. 166–70



Example 2. Berry's Ex. 2-1b



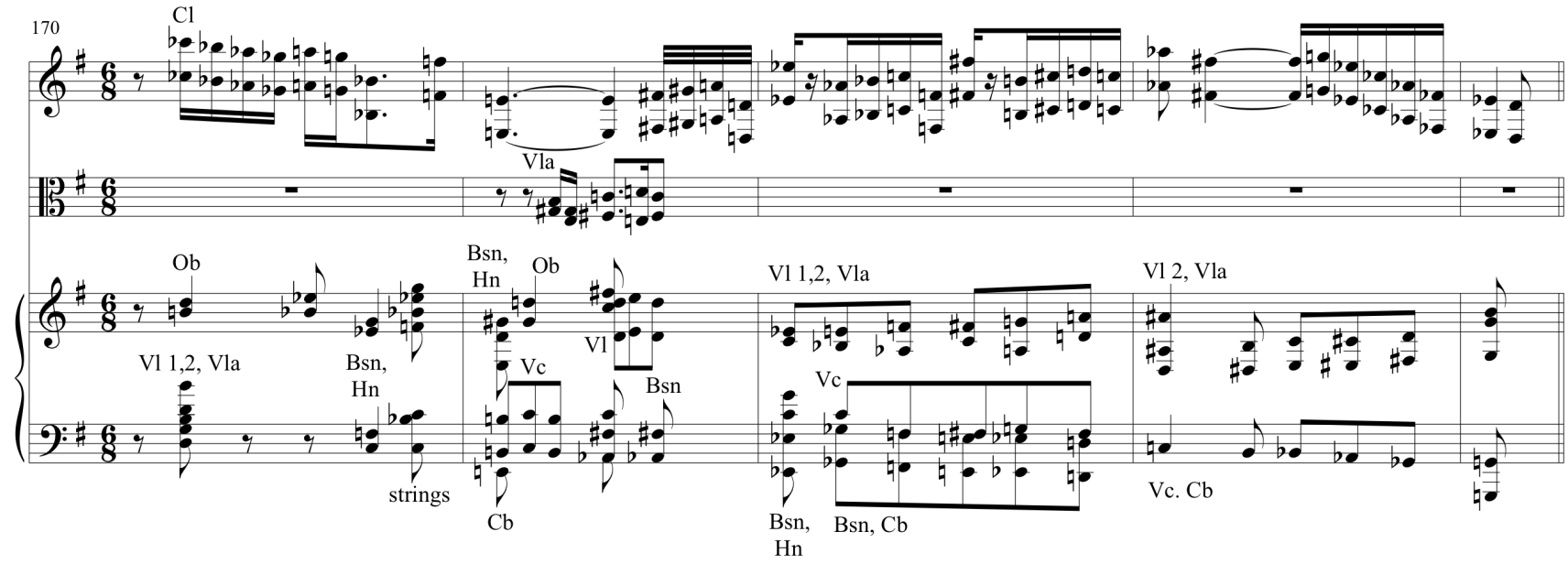
Example 3. Chart of Section I. 1a

	166	167	168	169
layers	1	2	3	3
strands	2	3	5	6
lines	2	3	5	7
voices	3	4	5	8
flutes				1 1
1st bassoon			1	1
1st cello		1	1	1
arpeggiating bass			1	2
2nd cello	1	1	1	1
repeated bass	2	(1) 1	1	1

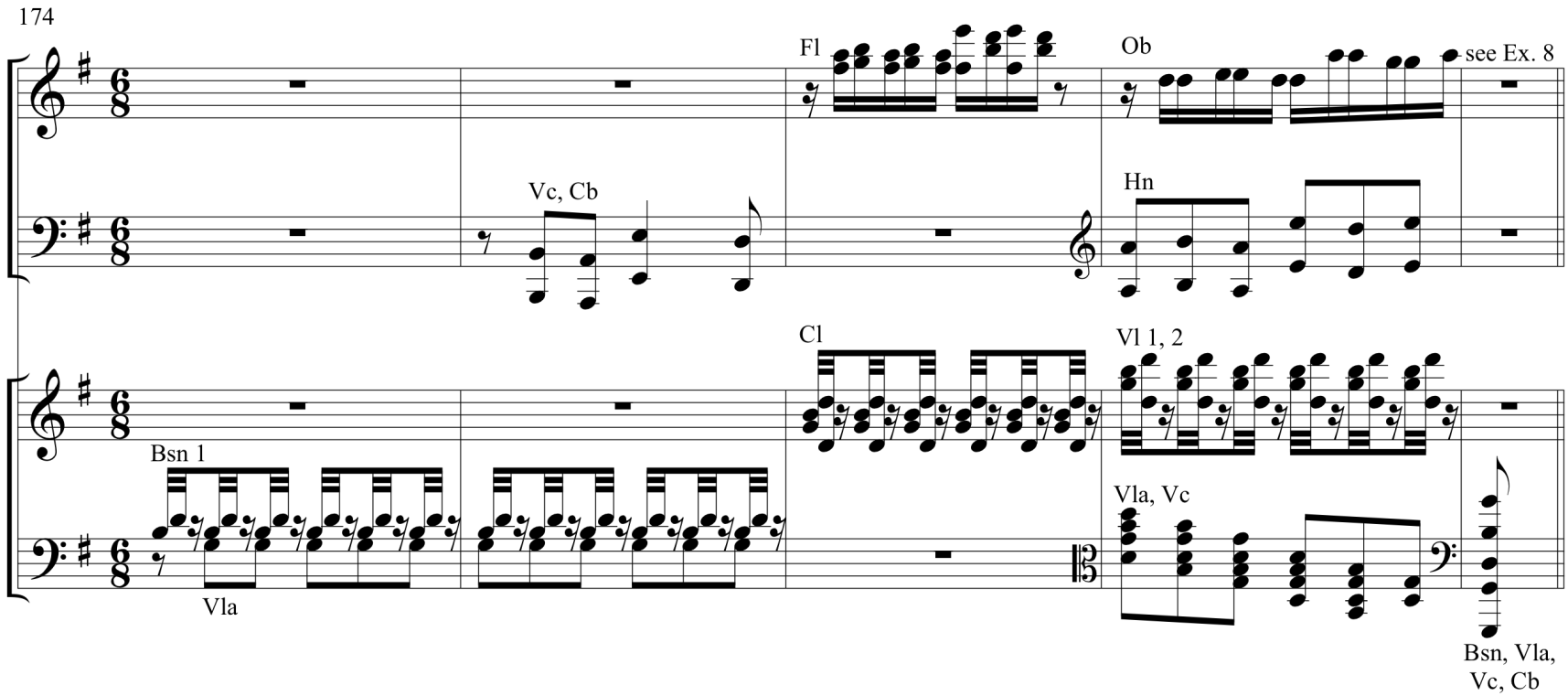
Example 4. Formal Structure of Part One

Section I	Sentence	1	Phrase	a	166-70
m. 166-202				b	170-74
				a'	174-79
				b'	178-84
		2		a	184-89
				b	189-97
				c	197-202
Section II			Phrase	a	203-06
m. 203-19				b	207-15
				c	215-19
Section III	Sentence	1	Phrase	a	219-22
m. 219-37				b	223-24
		2		a	224-26
				b	226-28
				c	228-30
		3		a	230-32
				b	232-37
Section IV	Sentence	1	Phrase	a	237-40
m. 237-51				b	241-44
		2		a	244-46
				b	246-48
				c	248-51

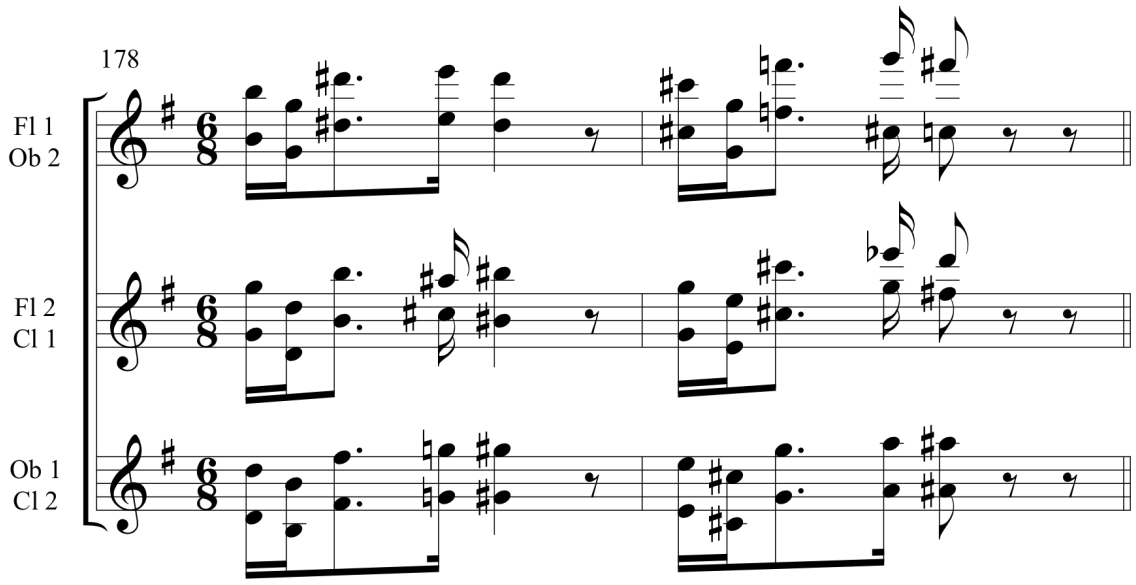
Example 5. Mm. 170–74



Example 6. Mm. 174–78



Example 7. Mm. 178–79, woodwind layer



Example 8. Section I: Sentence 1, mm. 166–84

Phrase	a					b					a'				b'						
mm. #	166	167	168	169	170		171	172	173	174		175	176	177	178	179	180	181	182	183	184
layers	1	2	3	3	2	2	3	2	2	2	1	2	2	2	3	2	2	3	3	3	2
strands	2	3	5	6	2	5	6	3	3	3	2	3	2	4	3	2	3	3	4	5	2
lines	2	3	5	7	5	12	12	6	5	3	2	3	4	8	8	6	9	5	6	10	4
voices	3	4	5	8	7	14	15	9	7	5	2	4	4	10	14	11	15	14	15	15	14
				1 1									1 1	2						1 1 1	
			1	1		2	2	2	2	2		2		2	2 1 2 1	1 1 2 1 1		6	3 3	2 1	
																	3 1 1 1				
		1	1	1			1 1								1 1 1		1 1 1 1	1 1 1	4	2 1 1	5 3 3
			1	2	2 1 1	1 1	1 1						1 1	1 1							
	1	1	1	1		1 1 1 1	1 1 1 1				1	1		1 1 1 1					1 1	4	
	2	(1) 1	1	1	2 1	1 1 1	2	1 1 1	1 1 (1)	1	1	1			5	5	5	5	3	1	3
						2 1	2 1	3 1	2	2											

Example 9. Section I: Sentence 2, mm. 184–202

Phrase	a							b							c									
mm. #	184	185	186		187	188		189–90	191–92	193	194	195	196		197		198		199		200		201	202
layers	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	2	2	3	3	2	3	3
strands	4	6	6	5	4	4	4	6	3	5	4	3	3	4	2	4	4	2	2	3	3	2	3	3
lines	9	10	9	8	9	8	7	7	6	11	5	6	4	6	3	6	4	4	3	5	4	4	6	6
voices	11	12	10	13	13	11	14	15	17	17	13	13	12	15	8	7	5	8	6	7	5	12	11	19
	2	2	2	2	2	2	1	2	7 1 1	3	6	3	6	4	6		1	2	2		2	3	5	9
		1	1				1 1 1	4	1 1	1 1					1 1	1 1			2 2	2 2				
	1 1	1 1	1 1	2 2	2 2 1	2 2 1	4	1 1	6	2 1 1 1 1	2	2 1 1	2 1	3 3		2	2			1	1		1 1 1 1	2 2 2 1
	1 1	1 1	1 1	2 2	2 1 1	1 1	4 2	1		1 1	1 1	4 2		1 1		1 1	1	2 2 2		1 1	1 1	3 3 3	2	3
	2 1 1 1	2 1 1	1 1	1 1	1 1	1 1		2		4	3		3	3		1	1							
		1	1	1				4																

Example 10. Section II: mm. 203–19

Phrase	a		b							c
measure #	203–205	205–206	207–209	210	211	212		213	214–215	215–219
layers	2	2	2	2	2	1	2	3	3	1
strands	3	3	3	4	2	1	3	3	3	3
lines	3	3	6	6	4	3	5	5	5	4
voices	8	6-7	8	6	9	15	9	6	6	10
	4	1-2	1 2	1	4	6 3 6	2 2 1	1	2	2
				1 1	3 1 1		2	2 1	1	2 1
	2	2	1 1	1 1			2	1 1	1 1 1	5
	2	3	2 1	1						

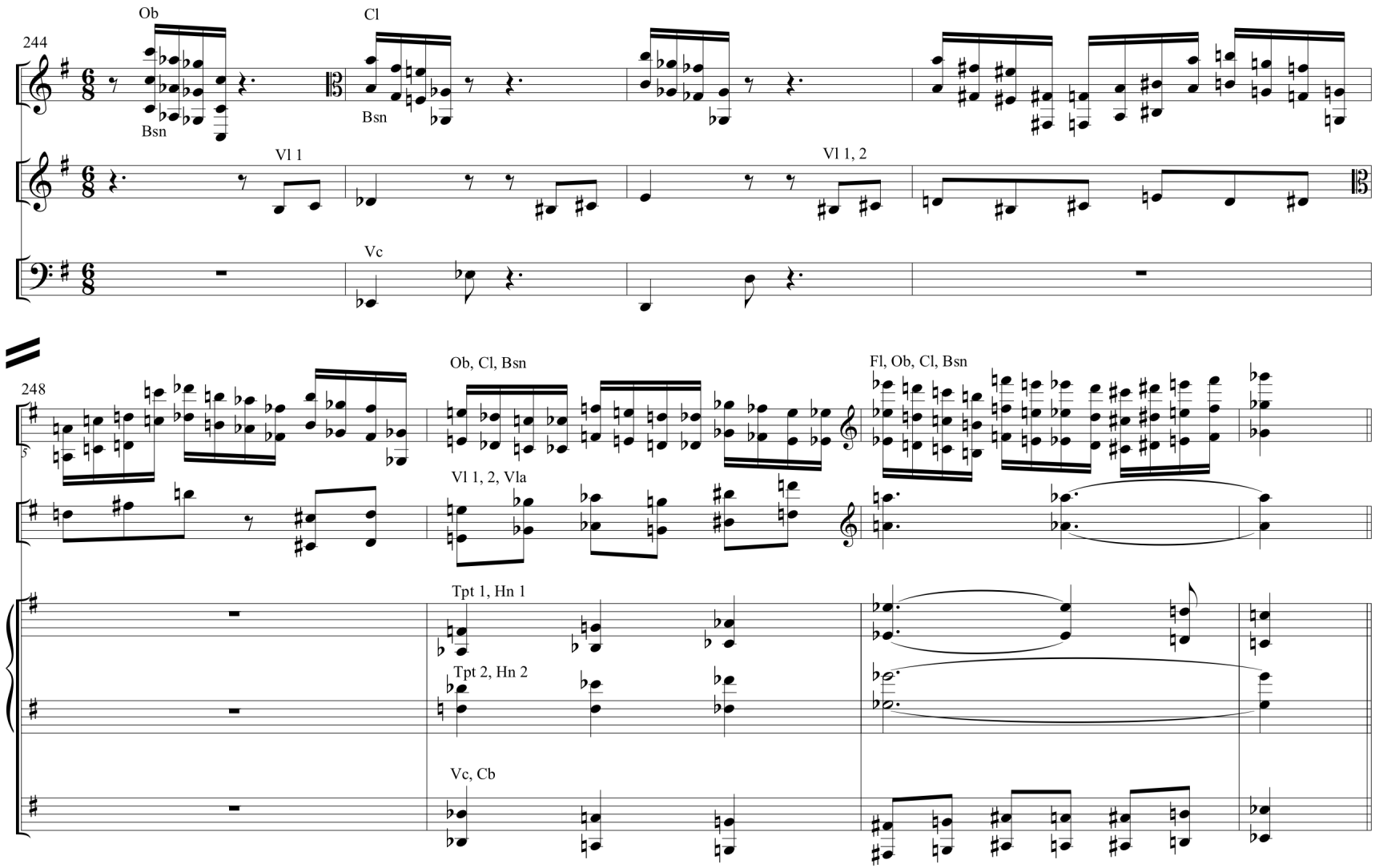
Example 11. Section III: mm. 219–37

Sentence	1		2			3	
Phrase	a	b	a	b	c	a	b
measure #	219–222	223–224	224–226	226–228	228–230	230–232	232–237
layers	2	2	3	4	4	3	4
strands	2	2	4	6	5	4	5
lines	3	5	5	7	6	5	7
voices	4	6	7	10	9	11	19
			1	2	1 (1)	3 1	4 2
				2	2	4	6
				1		1	
			1	1	2		2 1
	1 1	1 1	(1) 1	(1) 1	2		1
	2	2 1 1	3	2	1	2	3

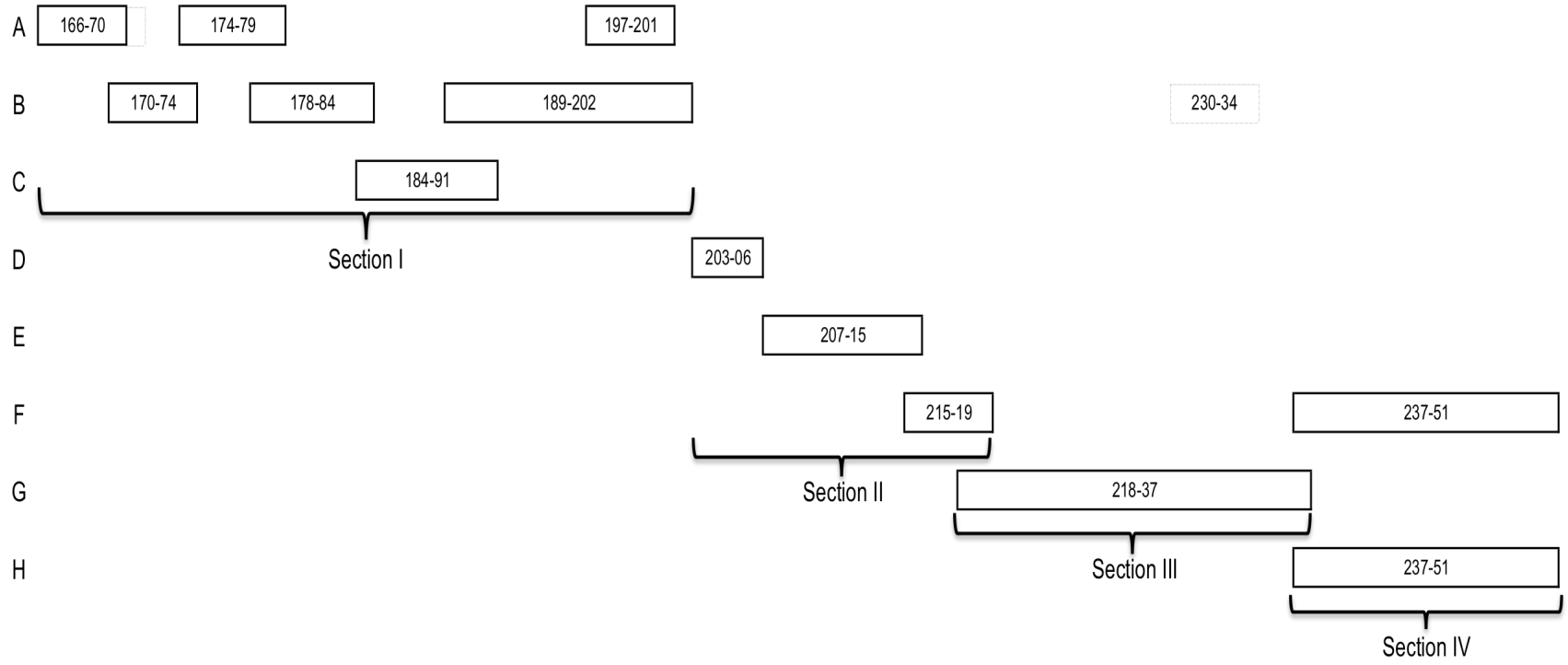
Example 12. Section IV: mm. 237–51

Sentence	1		2			
Phrase	a	b	a	b	c	
measure #	237–240	241–244	244–246	246–248	249	250–251
layers	2	2	3	2	4	4
strands	3	3	3	2	4	4
lines	9	5	3	2	7	5
voices	9	9-10-11	6	6	15	17
	1	1-2-3	4	4	6	8
	1 1 1 1	2 2	1	2	3	3
					1 1 1 1	2 2
	1 1 1 1	2 2	1		2	2

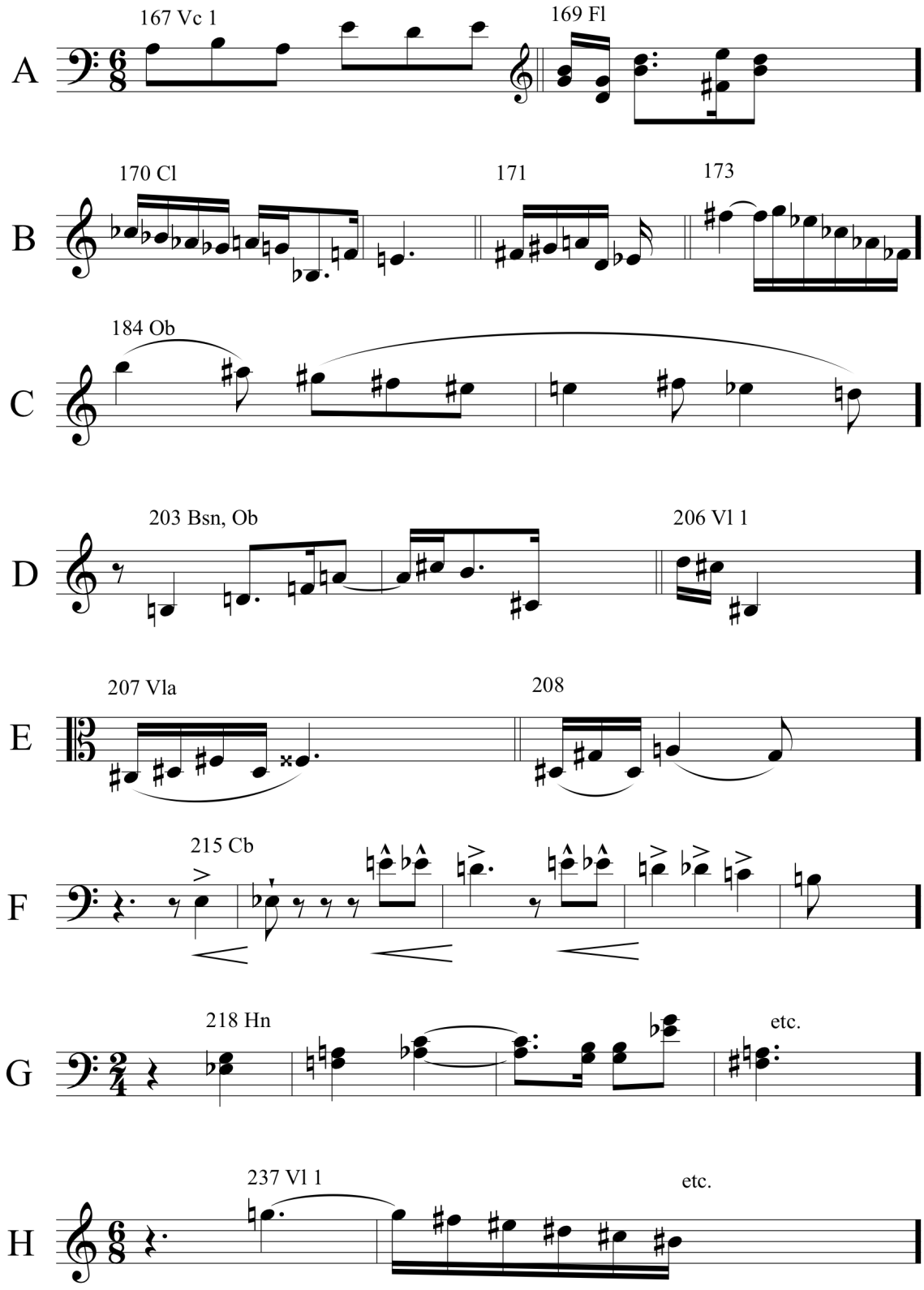
Example 13. Mm. 244–51



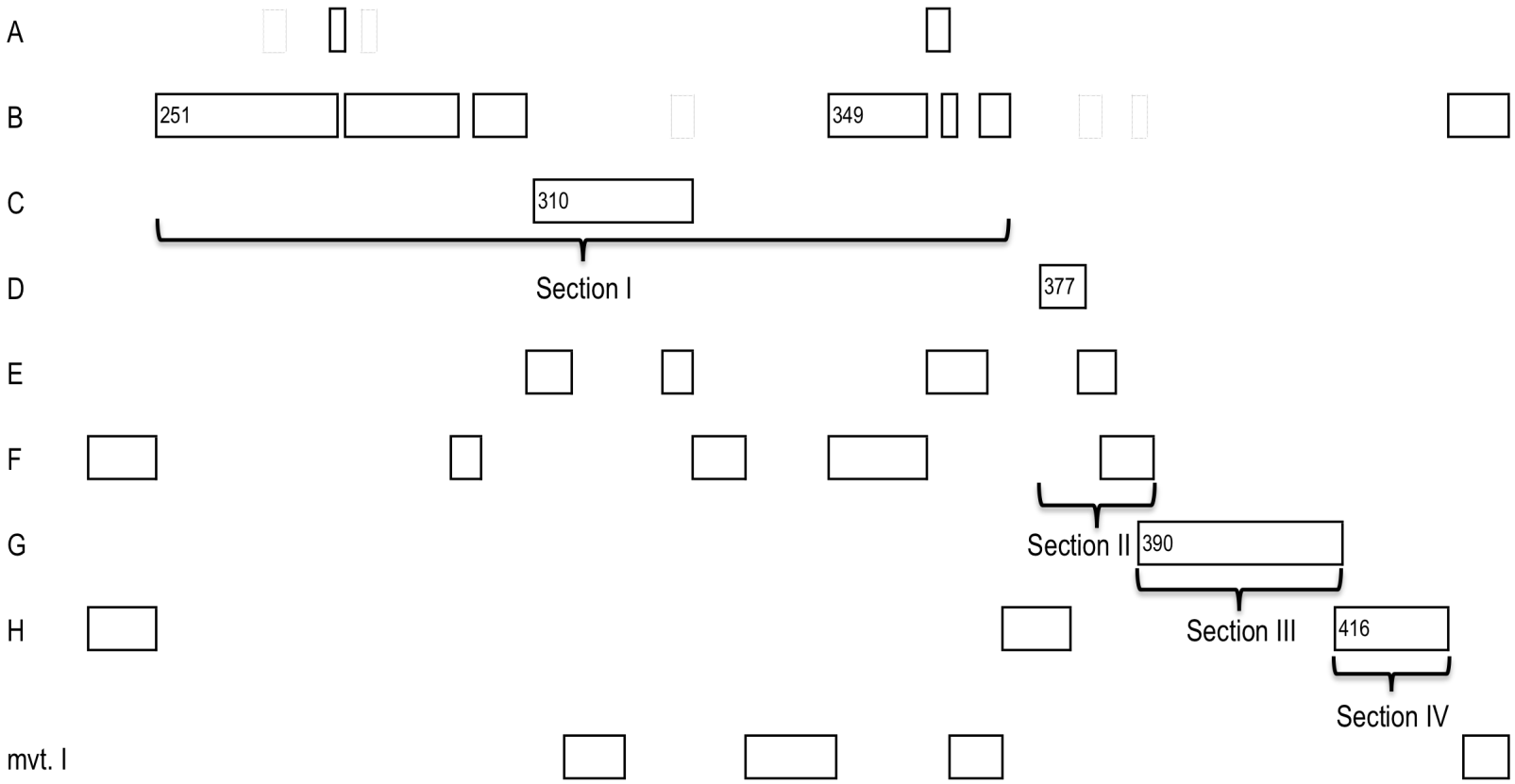
Example 14. Motivic Structure of Part One



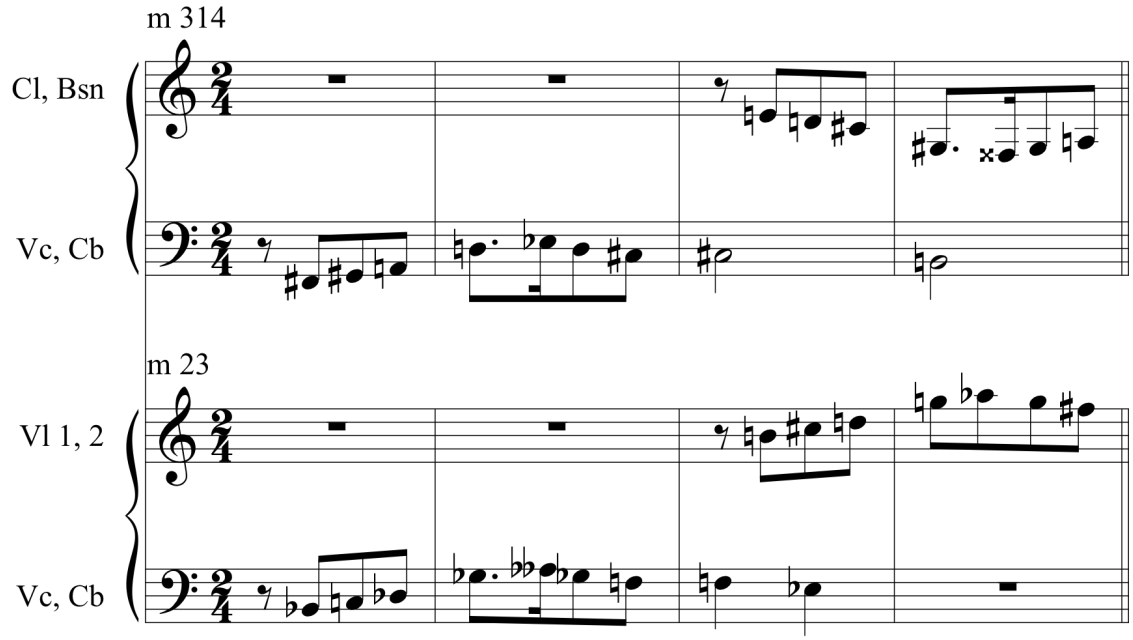
Example 15. Motivic Catalogue



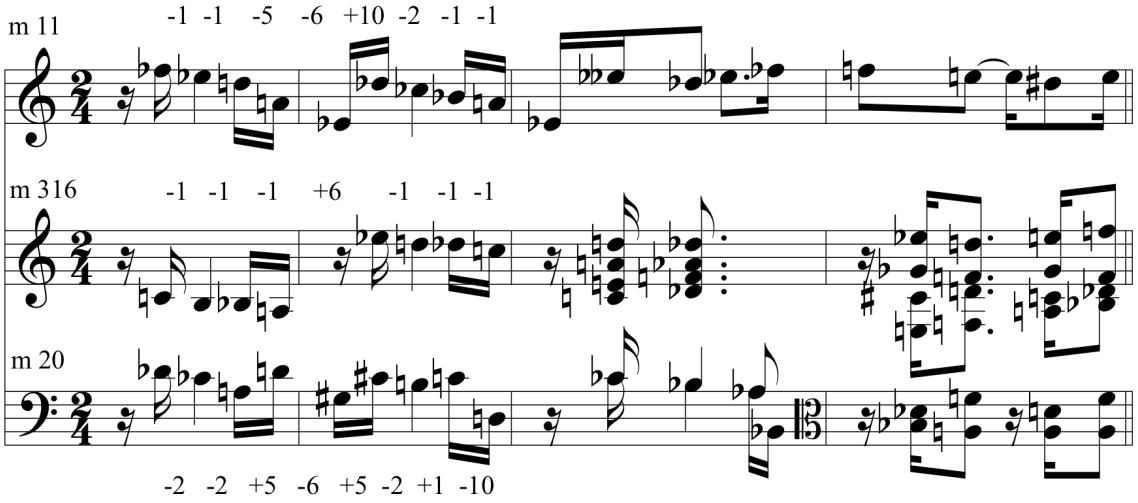
Example 16. Motivic Structure of Part Two



Example 17. Thematic Comparison of m. 314 with m. 23



Example 18. Thematic Comparison of m. 316 with mm. 11 and 20



Example 19. Dale's Table 6.3

Section	Bars
Exposition:	
First Subject	166–202
Transition group	203–19
Second subject	218–37
Coda group	237–63
Development	263–377
Recapitulation	377–430
Transition group	377–90
Second subject	390–416
Coda group	416–30
Coda	433–89

Bibliography

Bach, Carl Philipp Emanuel. 1947. *Essay on the True Art of Playing Keyboard Instruments*. Ed. and trans. William L. Mitchell. New York: W. W. Norton.

Berry, Wallace. 1976. *Structural Functions in Music*. Englewood Cliffs, NJ: Prentice-Hall.

———. 1986. *Form in Music,* 2nd ed. Englewood Cliffs, NJ: Prentice-Hall.

Cai, Camilla. 1997. "Texture and Gender: New Prisms for Understanding Hensel's and Mendelssohn's Piano Pieces." In *Nineteenth-Century Piano Music: Essays in Performance and Analysis*, ed. David Witten, 53–93. New York: Garland Publishing.

Caplin, William E. 1998. *Classical Form: A Theory of Formal Functions for the Instrumental Music of Haydn, Mozart, and Beethoven*. New York: Oxford.

Cogan, Robert and Pozzi Escot. 1976. *Sonic Design: The Nature of Sound and Music*. Englewood Cliffs, NJ: Prentice-Hall.

Dale, Catherine. 2000. *Schoenberg's Chamber Symphonies: the crystallization and rediscovery of a style*. Burlington VT: Ashgate Publishing.

Delone, Richard. 1975. "Timbre and Texture in Twentieth-Century Music." In *Aspects of 20th Century Music*, ed. Gary E. Wittlich, 66–207. Englewood Cliffs, NJ: Prentice-Hall.

Dunsby, Jonathan. 1989. "Considerations of Texture." *Music and Letters* 70:46–57.

Frisch, Walter. 1993. *The Early Works of Arnold Schoenberg, 1893-1908*. Berkeley, CA: University of California Press.

Hepokoski, James and Warren Darcy. 2006. *Elements of Sonata Theory: Norms, Types, and Deformations in the Late-Eighteenth-Century Sonata*. New York: Oxford University Press.

Keller, Hans. 1981. "Schoenberg's Return to Tonality." *Journal of the Arnold Schoenberg Institute* 5:2–21.

Levy, Janet M. 1982. "Texture as a Sign in Classic and Early Romantic Music." *Journal of the American Musicological Society,* 35:482–531.

MacDonald, Malcolm. 2008. *Schoenberg*. New York: Oxford University Press.

Maegaard, Jan. 1998. "Schoenberg's Late Tonal Works." In *The Arnold Schoenberg Companion*, ed. Walter B. Bailer, 177–206. Westport, CT: Greenwood Press.

Meyer, Leonard B. 1956. *Emotion and Meaning in Music*. Chicago: University of Chicago Press.

Moortele, Steven Vande. 2009. *Two-Dimensional Sonata Form: Form and Cycle in Single-Movement instrumental Works by Liszt, Strauss, Schoenberg, and Zemlinsky*. Leuven, Belgium: Leuven University Press.

Rufer, Josef. 1963. *The Works of Arnold Schoenberg: a Catalogue of his Compositions, Writings and Paintings*. Trans. Dika Newlin. New York: The Free Press of Glencoe.

Schmidt, Christian Martin, ed. 1952. *Arnold Schoenberg: II. Kammersymphonie, Op. 38*, Philharmonia score no. 461. London: Universal.

———. 2002. "Zweite Kammersymphonie Op. 38." In *Arnold Schönberg: Interpretationen seiner Werke*, ed. Gerold W. Gruber, 2:40–48. Germany: Laaber.

Schoenberg, Arnold. 1966– . *Sämtliche Werke*. Mainz and Vienna: Schott and Universal.

———. 1967. *Fundamentals of Musical Composition*, ed. Gerald Strang and Leonard Stein. New York: St. Martin's Press.

———. 1975. "On Revient Toujours." In *Style and Idea: Selected Writings of Arnold Schoenberg*, Ed. Leonard Stein, Trans. Leo Black, 108–110. New York: St Martin's Press.

———. 1995. *The Musical Idea and the Logic, Technique, and Art of Its Presentation*. Ed. and Trans. Patricia Carpenter and Severine Neff. New York: Columba University Press.

Weber, Horst, ed. 1995. *Briefwechsel der Wiener Schule*, Band 1. Darmstadt: Wissenschaftliche Buchgesellschaft.

White, John D. 1995. *Theories of Musical Texture in Western History*. New York: Garland Publishing.