

The Musical Language of Bartók: Historical Backgrounds

Folk- and Art-Music Sources

Bartók's musical language may be approached from either of two points of view—one in which the concepts and terminology are derived from folk-music sources, and the other in which the concepts and analytical tools are derived from certain currents in contemporary art music. This study is intended to demonstrate that the assumptions underlying *both* approaches are essential in understanding the evolution of Bartók's musical language and that fundamental relationships exist between the diatonic folk modes and various abstract pitch formations commonly found in contemporary compositions.

Bartók's early masterpieces, which were written shortly after his first investigations, with Kodály, of Hungarian folk music, bear the first important evidence of his ability to synthesize folk and art music. Among these early works, the *Fourteen Bagatelles for Piano*, Op. 6 (1908) had juxtaposed, transformed, and to some extent synthesized many of the elements that were to be basic to his musical language throughout his compositional evolution. The fusion of all these elements in his mature works was to result in a highly complex and systematic network of divergent chords and scales. Bartók's comments regarding the *means* by which he derived his harmonies from modal folk melodies suggest a link between the folk-music sources and certain procedures associated with serial composition.¹ (The term *series*

¹ *Béla Bartók Essays*, ed. Benjamin Suchoff (New York: St. Martin's Press, 1976), p. 335. The original publication is in "The Folk Songs of Hungary," *Pro Musica* (1928): 28–35.

2 The Musical Language of Bartók

denotes a succession of elements, such as the Schoenbergian twelve-tone set, that have a fixed order. Although Bartók's music is based on unordered non-twelve-tone sets, that is, those that have fixed intervallic content but not ordering, the means by which he establishes connections between the melodic and harmonic levels are closely related to those found in serial compositions.)² Bartók described his transformation of folk elements into unordered abstract pitch sets as follows:

Through inversion, and by placing these [modal] chords in juxtaposition one above the other, many different chords are obtained and with them the freest melodic and harmonic treatment of the twelve tones of our present day harmonic system. . . . Of course, many other (foreign) composers, who do not lean upon folk music, have met with similar results at about the same time—only in an intuitive or speculative way, which, evidently, is a procedure equally justifiable. The difference is that we created through Nature.³

Bartók was evidently aware that, with the dissolution of traditional tonal functions in the early part of the present century, composers of divergent stylistic backgrounds and influences were evolving a new concept of the relations contained in the chromatic continuum. The trend toward equalization of the twelve tones led to a tonally acentric system that underwent developments primarily in the works of the Viennese composers Schoenberg, Berg, and Webern, and also to a body of musical compositions that were deeply rooted in a sense of tonal centricity. These compositions, which have some connection with certain works of the Viennese composers, are significantly represented by the works of Bartók and other non-Germanic composers.

Orientation toward French, Russian, and Folk-Music Sources: Nonfunctional Bases in Pentatonic, Modal, and Whole-Tone Constructions

While the atonal and twelve-tone works of the Viennese composers and certain works of Bartók have a common origin in the extended chromatic tonal relations of late Romantic music, Bartók's music also has origins in sources that are largely removed from the Germanic tradition of the atonalists. Reaction against the ultra-chromaticism of the Wagner-Strauss period led Bartók in two new directions. With an increased demand for a national Hungarian art, Bartók turned to the exploration of authentic folk music from Eastern Europe. At the same time, as Hungarian cultural life, after a long tradition of Germanic influences, was becoming reoriented toward that of France, Bartók found a new source for his musical language in the works of Debussy.⁴

² George Perle, *Serial Composition and Atonality* (5th ed., rev., Berkeley and Los Angeles: University of California Press, 1981), p. 40.

³ *Bartók Essays*, p. 338. The original publication appears in n. 1, above.

⁴ Béla Bartók, "Témoignage [sur Ravel]," *Revue Musicale* 19/2 (December, 1938): 436.

Bartók's appointment in 1907 as a teacher of piano at the Academy of Music in Budapest was important for his development in both areas, permitting him both to settle in Hungary and continue his investigations of folk music, and at the instigation of Kodály, who was appointed as composition teacher there at the same time, to study the music of Debussy thoroughly. According to evidence obtained from invoices and the contents of Bartók's library now in the Bartók Archivum in Budapest,⁵ Bartók purchased in Budapest copies of several works by Debussy, including the *String Quartet* (in October, 1907) and, between 1907 and 1911, a number of the piano works such as *Pour le piano*, *L'isle joyeuse*, *Images I and II*, and *Préludes I*. Bartók's own *Quatre nénies*, Op. 9a⁶ (written in Budapest in 1910) reveal significant connections with the Debussy works, not only in the use of a French title but also in the prominent use of pentatonic formations, as in the *Andante* movement.⁷ More extensive similarities between the musical languages of these two composers may be seen in the use of modal and whole-tone formations, for example, in Bartók's *First String Quartet* (1908/9) and his opera, *Duke Bluebeard's Castle* (1911), the pentatonic opening of which is strikingly similar to that of the *Andante* from the *Quatre nénies*.

Bartók was surprised to find in Debussy's work "pentatonic phrases" similar to those in Hungarian peasant music. He attributed this to influences of folk music from Eastern Europe, particularly Russia, and felt that similar Russian folk influences could be traced in the works of Stravinsky.⁸ Bartók's suggestion that the development of his own works sprang from sources similar to those of Debussy and Stravinsky (although they developed largely independently of one another) brings to our attention a larger historical framework within which his personal musical language emerged. Mussorgsky is a major forerunner of this tendency toward assimilation of folk music, and there is evidence that Debussy acquired certain features of folk music primarily from Mussorgsky. Similarly, in works by Stravinsky such as *Le sacre du printemps*, we find an extension of those Russian folk elements that had already appeared in the works of the Russian nationalists.⁹ Thus, in the music of the Russian nationalists, French impressionists, and Hungarian composers (Kodály as well as Bartók), there is a common

5 Anthony Cross, "Debussy and Bartók," *Musical Times* 108 (1967): 126.

6 This is incorrectly designated as Op. 8b in the edition; see Halsey Stevens, *The Life and Music of Béla Bartók* (New York: Oxford University Press, 1954, rev. 1964), p. 327.

7 I am indebted to Benjamin Suchoff, Head of the New York Bartók Archive, for bringing to my attention the unusual employment by Bartók of a French title and also for pointing out to me certain Debussyian characteristics of this work.

8 *Bartók Essays*, p. 410. Bartók's "Selbstbiographie" originally appeared in several versions in: *Musikblätter des Anbruch* (Vienna) 3/5 (March, 1921): 87–90; *Magyar Írás* (Budapest) 1/2 (May, 1921): 33–36; *Az Est Hármaskönyve* (*Az Est Lapkiadó RT Kiadása*, Budapest, 1923), cols. 77–84; *Sovremennyya Muzyka* (Moscow) 2/7 (1925): 1–6; and *Színházi Élet* (Budapest) 17/51 (December, 1927): 49–51.

9 *Ibid.*, p. 325. The original publication is "The Relation of Folk Song to the Development of the Art Music of Our Time," *The Sackbut* 2/1 (June, 1921): 5–11. This essay was also published in *Muzyka* (Warsaw) 2/6 (June, 1925): 230–33, and 4/6 (June, 1927): 256–59.

4 The Musical Language of Bartók

bond in the inclination toward the pentatonic and modal constructions of folk music, such constructions forming a nonfunctional basis on which a new kind of tonality (or sense of pitch-class priority) is established. The basic principles underlying these historical developments were stated by Bartók:

The early researches . . . into the youngest of the sciences, namely musical folklore, drew the attention of certain musicians to the genuine peasant music, and with astonishment they found that they had come upon a natural treasure-store of surpassing abundance.

This exploration . . . seems to have been the inevitable result of a reaction against the ultra-chromaticism of the Wagner-Strauss period. The genuine folk music of Eastern Europe is almost completely diatonic and in some parts, such as Hungary, even pentatonic. Curiously enough, at the same time an apparently opposite tendency became apparent, a tendency towards the emancipation of the twelve sounds comprised within our octave from any system of tonality. (This has nothing to do with the ultra-chromaticism referred to, for there chromatic notes are only chromatic in so far as they are based upon the underlying diatonic scale.) The diatonic element in Eastern European folk music does not in any way conflict with the tendency to equalize the value of semitones. This tendency can be realized in melody as well as harmony; whether the foundation of the folk melodies is diatonic or even pentatonic, there is still plenty of room in the harmonization for equalizing the value of the semitones.¹⁰

Use of Symmetrical Pitch Collections by Russian, French, and Hungarian Composers

Concomitant with the tendency to equalize the twelve tones, in the latter part of the nineteenth century symmetrical pitch collections¹¹ began to appear as textural devices or local structural elements. While symmetrical formations contributed to the dissolution of traditional tonal functions, they also contributed to the establishment of a new means of progression. Furthermore, the specific means by which Bartók employed symmetries on all levels of his music led to a new sense of pitch-class priority. The growth toward this new system of establishing tonal priority was already apparent in the Russian nationalists' and, subsequently, French and Hungarian composers' operations on symmetrical pitch constructions.

Russian Nationalists: Symmetrical Properties of the Dominant-Ninth Chord

Works of the Russian nationalist and impressionist composers contain prominent examples of pitch symmetry.¹² The excerpt in Example 1a, the

¹⁰ Ibid., pp. 323–24. See *ibid.* for original publication.

¹¹ See Preface, n. 3, above, for a definition of *symmetry*.

¹² The symmetrical relations in Exx. 1–5, by Mussorgsky and Debussy, have been dis-

opening of the Clock Scene at the end of Act II of Mussorgsky's *Boris Godunov* (1871),¹³ is entirely based on symmetrical pitch constructions and progressions. The accompaniment alternates two transpositions of a dominant-ninth chord [B-D#-()-A-C# and E#-A-()-D#-Fx]¹⁴ a tritone apart. While the dominant-ninth chord is a traditional tertian construction, it is its symmetrical intervallic properties that are exploited in this passage. The primary connection between these two symmetrical dominant-ninth transpositions is their common tritone, D#-A, which is held as an ostinato in the bass and reiterated in the voice. This tritone (D#-A), which serves as a common pivot in the progression, also symmetrically encompasses the implied axes (F# and C, respectively) of the two chords (Ex. 1b). While these axes are only implied, each dominant-ninth symmetrically progresses to the axis of the other transposition, that is, C#-B of the first [B-D#-(F#)-A-C#] moves to axis C-C of the second [()-A-C-D#-()], while Fx-E# of the second [E#-A-(C)-D#-Fx] moves to axis F#-F# of the first [()-D#-F#-A-()]. Thus, the invariant segment (axial tritone D#-A) functions as a common pivot in the progression between the two transpositions of the "set." This procedure, employed by Rimsky-Korsakov as early as 1867, foreshadowed the concept of invariant set-segments in serial compositions and also served as a new means of establishing pitch-class priority (i.e., based on an axis of symmetry).

1 Mussorgsky, *Boris Godunov*, Act II, Clock Scene (p. 155)

(a)

(b)

1st domin. 9th 2nd dom. 9th

cussed by George Perle in "Symmetrical Formations in the String Quartets of Béla Bartók," *Musical Review* 16 (November, 1955): 301.

¹³ The piano-vocal score published by J. and W. Chester, London, which reproduces the copy Mussorgsky possessed on the day of the first complete stage performance, January 24, 1874, is used here.

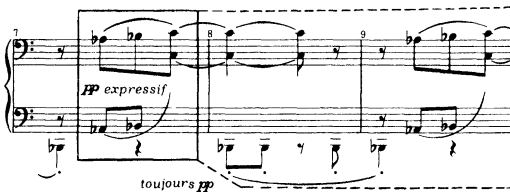
¹⁴ Where a note is missing from a given pitch formation, parentheses () will be used.

17–21) by an ascent back to the initial octave position of G#, after which the axis D-D is for the first time expressly stated as a primary foreground event. At mm. 31ff. the D-D axis appears as the octave boundary of the sixteenth-note figure, both primary axial pitch classes, D and A^b (m. 41), prominently ending the first large whole-tone section. The six-measure middle section shifts to a new symmetrical formation, the pentatonic scale E^b-G^b-A^b-B^b-D^b (Ex. 5), which retains the original axis of symmetry, G[#]-G[#], of theme 1. The modified recapitulation (mm. 48ff.), which brings back the two whole-tone themes in reversed order to produce an overall symmetrical three-part form, correspondingly progresses in reversed order from the secondary axis of symmetry (B^b-B^b) through a passing-axis, C-C, to the primary one, D-D (or G[#]-G[#]), at m. 58. (The passing-axis, C-C, originally connected the basic ones in the first section, at mm. 11–12, lower staff.) After some alternation between the primary and secondary axes (D-D and B^b-B^b), the final cadence

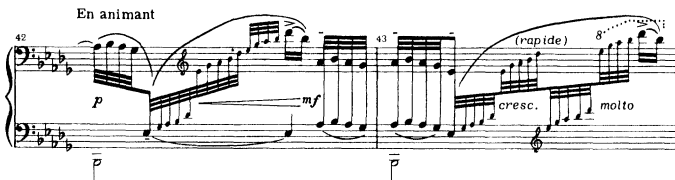
3 Debussy, *Voiles*, mm. 1–5, main theme



4 Debussy, *Voiles*, mm. 7ff., second theme



5 Debussy, *Voiles*, mm. 42ff.



8 The Musical Language of Bartók

on C-E establishes the priority of the primary axis. Thus, the work is exclusively based on two unordered non-twelve-tone sets (the whole-tone and pentatonic scales), linked by a common axis of symmetry. Axes of symmetry were already exploited by Bartók two years earlier (1908) in the second of the *Fourteen Bagatelles for Piano*, Op. 6 (see Ex. 163, 164, 165, below).

In the early years of the present century, the most important foreign composers associated with the international cultural scene in Paris were Russians. The interaction of non-Western folk elements (significantly stemming from the music of the Russian nationalists) with the new harmonic vocabulary of Debussy laid the groundwork for a tonal-modal musical language that was to have a profound influence on the works of Stravinsky as well as Bartók. Stravinsky's first important works were created under the influence of Rimsky-Korsakov, with whom he studied (mostly orchestration) privately in St. Petersburg from 1903 to 1906.¹⁵ Although Stravinsky lived in French Switzerland for a large part of the time between 1910 and 1920, he was in close proximity to the artistic developments of Paris during those years, and it was during that time that his friendship with Debussy had its origin.¹⁶ The styles of the two composers differ—the colorful, exotic sonorities of Debussy's scores are absorbed and transformed in the violent rhythmic-accentual idiom of Stravinsky's *Le sacre du printemps* (1912)—but Debussy's transformations of traditional modal and pentatonic structures into symmetrical formations within his static isolated sound patterns can be traced in Stravinsky's mosaic forms throughout his career. In *Le sacre*, which was written in association with Diaghilev's Ballets Russes, symmetrical pitch formations are frequent in the melodic and harmonic fabric of the local forms. A special use of symmetry appears in the "Mystic Circles of the Young Girls," in which the primary (tonic) chord in B major-minor and the main pentatonically derived melody in viola I (based on B-C♯-E-F♯) have a common axis of symmetry (D-D♯). This four-note symmetry (B-C♯-E-F♯) also forms the exclusive pitch content of the ostinato pattern in the celli and bassi (Ex. 6). At m. 6, one of the axial tones (D) is added to the four-note symmetry in the horn line, and at m. 7, the other axial tone (D♯) is explicitly added to the four-note symmetry in the main thematic line of viola I. The basic chords within the larger harmonic progression of the six violas support the linear four-note symmetry. Under each occurrence of the dominant degree (F♯) in the val melody, the upper three violas play a B-minor triad against which the lower three violas play three variant B triads: B-D♯-F♯; B♯-D-F♯; and B♯-D♯-F♯. The first vertical combination—(1) B-D♯-F♯/B-D-F♯—forms a major-minor symmetry (B-D-D♯-F♯) with the

¹⁵ Igor Stravinsky and Robert Craft, *Conversations with Igor Stravinsky* (Berkeley and Los Angeles: University of California Press, 1980), p. 39.

¹⁶ See letters from Debussy, *ibid.*, pp. 48–56.

6 Stravinsky, *Le sacre du printemps*, "Mystic Circles of the Young Girls,"
first eight measures

Andante con moto. $\text{♩} = 60$

Clar. basso

1. 2. Cor.

3. 4.

Tr. 1. 2. 3. (Do)

6. V-le Solo

2. Celli Soli

gli altri Celli

2 Bassi Soli

gli altri Bassi

molto cant. ma non *f*

molto cant. ma non *f*

molto cant. ma non *f*

molto cant. ma non *f*

molto cant. ma non *f*

molto cant. ma non *f*

tenuto sempre *ff*

div. pizz.

(sul La) arco tenuto sempre *p*

(sul Mi) tenuto sempre

2. con sord. con sord. *fff*

con sord. *fff*

D

D#

etc.

same axis (D-D#) as the modal tune (B-C#-E-F#). The priority of this vertical harmonic combination is established by the rhythmic structure of the passage;¹⁷ both occurrences of (1) (Ex. 7) support principal melodic statements of F#, the first before the E-neighbor tone (m. 1), the other after the E-neighbor tone (m. 3), while the two occurrences of each of the other two variants—(2) B#-D-F#/B-D-F#, and (3) B#-D#-F#/B-D-F#—support one prin-

17 This metric and rhythmic analysis is given by Boulez, "Stravinsky Remains," *Notes of an Apprenticeship*, pp. 75–79 in trans. Herbert Weinstock (New York: Alfred A. Knopf, 1968).

10 The Musical Language of Bartók

7 Stravinsky, *Le sacre du printemps*, "Mystic Circle of the Adolescents"

cipal melodic statement of F# and one appoggiatura F# statement. Furthermore, the relative positions of these three bitonal combinations (123132) form a symmetrical scheme in which (1) is primary. With the exception of the present example, the concept of an axis of symmetry does not appear to be significant in *Le sacre*; that is, although interval cycles and other symmetrical formations are prominent throughout the work, strict inversionally complementary relations that define a single axis are not.¹⁸

Russian Nationalists, Scriabin, and Kodály: Symmetrical Partitions of the Octatonic Scale

As early as 1867, an eight-note symmetrical scale based on alternating whole and half-steps—this is known as an *octatonic* scale¹⁹—was employed by Rimsky-Korsakov in his symphonic poem *Sadko*, Op. 5. The descending form of the scale at the beginning of the *Allegro* 3/4 depicts Sadko's fall into the sea and his being dragged to the depths by the Sea King. This use of the scale is reminiscent of Glinka's use of a descending whole-tone scale at the moment when Ludmilla is spirited away by Chernomor in Act I of *Ruslan and Ludmilla*.²⁰ The octatonic scale, which plays an important role in many of Rimsky-Korsakov's compositions, is also extensively employed by Stravinsky, Scriabin, Kodály, Bartók, and others. Scriabin's *Prelude for Piano*, Op. 74, No. 3 (1914) is exclusively based on a single octatonic set (A#-B#-C#-D#-E-F#-G-A), in which one chromatic passing-tone (e.g., G# in m. 1)

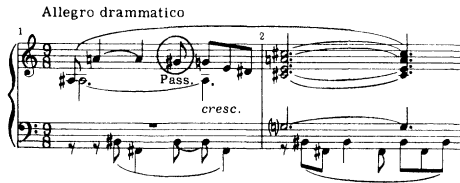
¹⁸ George Perle, "Berg's Master Array of the Interval Cycles," *Musical Quarterly* 63/1 (January, 1977): 13.

¹⁹ See Chapter IV, n. 14, below.

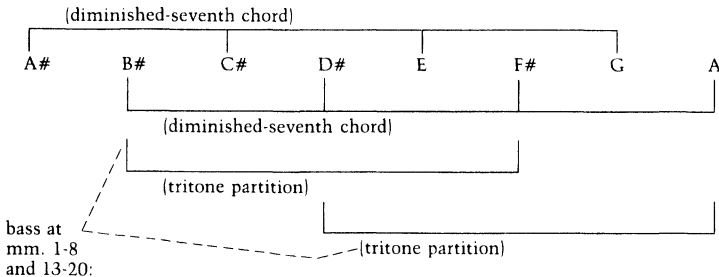
²⁰ Nicolai Rimsky-Korsakov, *My Musical Life*, ed. Carl Van Vechten, trans. Judah A. Joffe (New York: Alfred A. Knopf, 1923), p. 72.

occurs in each of the two-measure thematic statements (Ex. 8). In the opening section (mm. 1–8), the accompaniment is linearly partitioned into two equivalent symmetrical subcollections: the alto and tenor lines each unfold one of the two diminished-seventh chords (A#-C#-E-G) of the octatonic set, while the bass unfolds the other (B#-D#-F#-A). The latter further appears partitioned into its two tritones (B#-F# and D#-A). Example 9 illustrates the symmetrical partitioning of the octatonic scale into these equivalent subcollections. Since the tritone complement of each note is present in the octatonic set (producing four tritones altogether) and in each of the symmetrical subcollections, the exact return of the first two sections (mm. 1–8 and 9–12) at the tritone transposition (mm. 13–20 and 21–24) permits total invariance both of the set and of each of its segments. (This is due to the principle of *tritone equivalence*, that is, the tritone remains invariant at its own transposition or in its complementary inversion.) Thus, the concept of invariance among transpositions of the set (or its segments), in terms of both intervallic and pitch content, establishes a new means of thematic association and progression within this limited symmetrical context. In the basic nondodecaphonic set (seven-note segment of the octatonic scale) of Scriabin's *Seventh Sonata* (1911/12), invariant set-segments function in a more

8 Scriabin, *Prelude for Piano*, Op. 74, No. 3, mm. 1–2



9 Scriabin, *Prelude*, Op. 74, No. 3, symmetrical partitioning of the octatonic set into equivalent subcollections



12 The Musical Language of Bartók

complex manner, as pivotal elements among the various transpositions of the set.²¹

Another possibility of symmetrically partitioning the octatonic scale occurs in Movement II of Kodály's *Sonata for Violoncello and Piano*, Op. 4 (1910).²² At mm. 52ff., the octatonic scale, D^b-E^b-E-G^b-G-A-B^b-C, is a focal point for the development and interaction of two equivalent symmetrical partitions, D^b-G-G^b-C and B^b-E-E^b-A, each of which is based on two tritones a perfect fourth (or minor second) apart. The two tritones (D^b-G and G^b-C) of the former partition first appear together (m. 24) as unobtrusive boundaries of two gapped whole-tone chords [D^b-E^b-(-)-G and G^b-A^b-(-)-C] (Ex. 10). At the cadence (mm. 31-33, piano part), a partial statement of this

10 Kodály, *Sonata for Violoncello and Piano*, Op. 4, movement II, mm. 18-36

18 19 20 21 22 23

Poco più mosso (♩ = 152-160)

Poco più mosso (♩ = 152-160)

diatonic (G^b-A^b-B^b-C-D^b-E^b-F)

24 25 26 27 28 29

W.T. W.T.

30 31 32 33 34 35 36

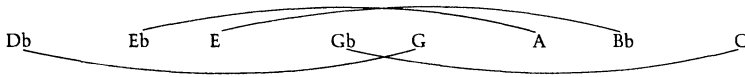
dim. dim. ff pizz.

octatonic (D^b-E^b-E-G^b-(-)-A-B^b-C)

²¹ See Perle, *Serial Composition*, pp. 41-42. According to Perle, Scriabin had systematically exploited unordered non-twelve-tone sets as a means of compensating for the loss of traditional tonal functions.

²² See Linda Brewer, "Progressions among Non-Twelve-Tone Sets in Kodály's *Sonata for Violoncello and Piano*, Op. 4" (D.M.A. treatise, University of Texas at Austin, 1978).

11 Kodály, *Sonata for Violoncello and Piano*, Op. 4, movement II,
symmetrical partitioning of octatonic scale



octatonic subcollection (D^b-G^b-(-)-C) now emerges as a more prominent foreground event against a partial statement (cello part) of the second octatonic subcollection [B^b-E^b-(-)-(-)]. The latter appears complete at mm. 35–36, where its two tritones are linearly interlocked (B^b-E^b-E-A), while a tritone (F[#]-C) from the initial partition is vertically stated against the latter partition, giving us six notes of the larger octatonic set [(^b)-E^b-E-F[#]-(-)-A-B^b-C]. The symmetrical relations between these equivalent double-tritone partitions of the octatonic set are shown in Example 11. Furthermore, tritone G^b-C from the initial partition serves as a common link between this octatonic set and the diatonic theme at mm. 18–23, first eighth-note (see Ex. 10). The single tritone contained in this diatonic collection is G^b-C, which expressly appears also as the boundary of the accompanying gapped whole-tone chord, G^b-(-)-B^b-C. [An inversion, G^b-A^b-(-)-C, of the latter chord appears at m. 24 of the next thematic statement, in juxtaposition with its inversion, D^b-E^b-(-)-G, the two tritone boundaries together implying the presence of the initial octatonic partition, D^b-G-G^b-C.] Thus, as early as 1910 we find in Kodály's music complex procedures based on invariant segments common to octatonic, diatonic, and partial whole-tone sets. Similar relations among these set forms had appeared two years earlier in some of Bartók's *Bagatelles* for piano (see Chapter VII).

*Late Nineteenth- and Early Twentieth-Century
Germanic Influences: Symmetrical Organization
of Chromatically Related Keys*

Despite the reaction against the prevailing Germanic influences in Budapest at the turn of the century and the search for new sources of artistic inspiration, many of Bartók's compositions continued to manifest certain characteristics prevalent in the Germanic musical tradition. Fundamental features of this tradition were to be absorbed into his compositions and synthesized along with those of the peasant melodies and French-Russian musical sources. The Brahmsian style of Bartók's music from the early years in Pozsony (1890s) was transformed during his student days at the Academy of Music in Budapest (1899–1903) by his intensive studies of the chromatic scores of Wagner (particularly the *Ring* cycle, *Tristan und Isolde*, and *Die Meistersinger*). However, according to Bartók, it was a performance of Rich-

14 The Musical Language of Bartók

ard Strauss's symphonic poem, *Also sprach Zarathustra*, by the Philharmonic Orchestra on February 2, 1902, that led him out of a period of stagnation: the Strauss work contained "the seeds of a new life."²³

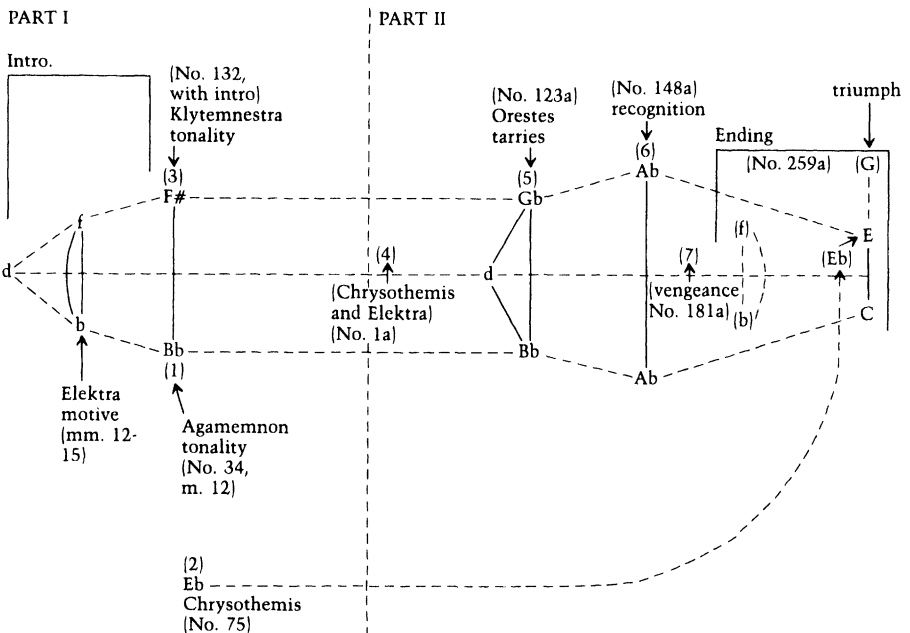
Bartók's study of the Straussian idiom led him to create a new type of chromatic melody, exemplified in movement I of his *First String Quartet* (1908–1909). While this melodic line evokes the romantic restlessness expressed in the musical thread of Wagner's *Tristan*, Bartók's freer tonality (largely achieved by sudden major-minor mixtures) and an almost continuously dissonant texture (based on pervasive use of appoggiaturas and sevenths) may be primarily associated with the more daring harmonic fabric of such works as Richard Strauss's *Elektra* (1906–1908).²⁴ While the Bartók quartet and Strauss opera are still based on the assumptions of triadic harmony, the constantly shifting tonalities in both works frequently result in polytonal relations.

These similarities are even more striking when we consider that the chromatically related tonalities in both works are set within a large-scale symmetrical scheme, each key being locally established as a point of departure or convergence for the tonally ambiguous contrapuntal lines. This symmetrical tonal scheme in Bartók's *First String Quartet*, in which the basic tonality of A is axial in the background-level unfolding of three prominent tonal areas, F, A, and C#, is discussed in depth in Chapter VI, below. In *Elektra*, the basic tonality of D serves as the axis of the series of tonalities associated with the seven main character presentations of the opera (Ex. 12). In the Introduction, the opening statement of the Agamemnon motive establishes the priority of D minor. At the point at which Elektra "darts back, like an animal to its lair" (mm. 12–15), her motive alternates two first-inversion triads (B-minor and F-minor) a tritone apart (Ex. 13). This local harmonic progression based on B and F offers the first suggestion of a symmetrical root relation to the axial D tonality (B-D-F). In Elektra's first monologue (section 1, at No. 36, mm. 6ff.), B \flat is established as the tonality associated with Agamemnon, while F# is established (in section 3, No. 130, mm. 3ff.) as the tonality associated with Klytemnestra. The tonalities (B \flat and F#) of the two parents are symmetrically polarized on either side of the B-F motive of the child (Elektra) and, ultimately, the D axis. At the first words of Orestes (in section 5, No. 123a), "Here must I tarry," these two tonalities (B \flat and, in enharmonic spelling, G \flat) are locally juxtaposed with D as the roots of three solemn chords (Ex. 14). In the recognition scene (section 6, No. 148a, mm. 9ff.), the only tender music of Elektra in the entire opera is exclusively

23 *Béla Bartók Essays*, ed. Benjamin Suchoff (New York: St. Martin's Press, 1976), p. 409. The citation of original publication appears in n. 8 of this chapter.

24 This should not be construed to mean that the quartet is influenced by Strauss's opera but, rather, that they demonstrate parallel developments. While the general impact of Strauss's idiom on Bartók was decisive, Bartók expressed a specific dislike for *Elektra* in an essay written in 1910; see *ibid.*, p. 446. The original publication is "Strauss: Elektra," *A Zene* (Budapest) 2/4 (April, 1910): 57–58.

12 Symmetrical scheme of tonalities in Richard Strauss, *Elektra*



13 Strauss, *Elektra*, Introduction, mm. 12-15



14 Strauss, *Elektra*, No. 123a

123a

Orestes

Metr. $\text{♩} = 60$
Langsam und feierlich (noch etwas langsamer als vorher)
Lento con solennità

Ich muß hier war-ten.
Here must I tar-ry.

ff

expressed in A^b major. The latter is the tritone of the original D tonality and, with D, represents the dual axis of the symmetrical scheme (see Ex. 12). The opera ends in C major, which is associated with Elektra's triumph. We may consider the sudden and prominent appearance, in the last four measures, of the major-third degree (E) of the C-major tonic triad as part of an implied frame (C-E) for the D axis. Although the concept of symmetry has little meaning on the local harmonic levels of the opera, it appears to be the primary organizing factor in the large-scale scheme of chromatic key relations.

The Schoenberg School:

*Symmetrical Formations as the Basis of Progression
in Free-Atonal Compositions*

Strauss's *Elektra* and Bartók's *First String Quartet*, which epitomize late Romantic music on the threshold of a new chromatic idiom, are still set within the limits of tonality. While the expressionistic quality and certain nontonal aspects of *Elektra* pre-date the free-atonal idiom of Schoenberg's *Erwartung* (1909) and Berg's *Wozzeck* (1914–1922), Strauss never crossed that threshold, and after *Elektra*, in *Der Rosenkavalier* and *Ariadne auf Naxos* (1911–1912), he reverted to classical techniques and forms. Bartók's works of this period, however, were only the beginning of his new chromaticism, which may in special ways be more closely associated with certain works of the Viennese composers Schoenberg, Berg, and Webern than is commonly acknowledged. Bartók's works are stylistically removed from those of the Schoenberg school,²⁵ but his exploitation of pitch sets forms a direct link with them.

Although Bartók first became acquainted with Schoenberg's music only in 1912,²⁶ his *Eighth Bagatelle for Piano*, Op. 6, written in 1908, reveals important similarities both in style and method to the first of Schoenberg's *Three Piano Pieces*, Op. 11, which it preceded by about a year. Both the *Eighth Bagatelle* and Schoenberg's Opus 11, No. 1, employ "pitch cells,"²⁷ which replace the traditional triad as the basic harmonic premise. In both works a nonsymmetrical three-note cell is ultimately transformed, by means of intervallic expansion and literal inversion, into a four-note symmetry. A comparison of Example 15 with Example 85 illustrates that the latter for-

25 Bartók fuses the dense chromatic counterpoint and dissonant atonality of Schoenberg with the modal material of peasant tunes and the transparent textures of Debussy; Schoenberg's own music is tonally and rhythmically free from the influences of the latter sources.

26 *Bartók Essays*, p. 467. The original publication is "Arnold Schönbergs Musik in Ungarn," *Musikblätter des Anbruch* (Vienna) 2/20 (December, 1920): 647–48.

27 A cell is defined by Perle (in *Serial Composition*, p. 9) as a group of pitches that "may operate as a kind of microcosmic set of fixed intervallic content, statable either as a chord or as a melodic figure or as a combination of both." Its components, however, are not fixed with regard to order in Bartók's works or the early free-atonal works of Schoenberg.