

engaging in the kind of imaginative (though often quirky) discourse one has come to expect from New Haven—in essence, because it is not trendy. I find it saddening to think that a book so lucid and erudite should come under fire for failing to be something that the author patently never intended to write. One might as well criticize it because the lines do not scan. The “old” historicism still has much to teach us—as Palisca’s book proves most eloquently.

—Erik S. Ryding

Elliott Antokoletz. *The Music of Béla Bartók: A Study of Tonality and Progression in Twentieth-Century Music*. Berkeley and Los Angeles: University of California Press, 1984.

Of the major composers active in the early twentieth century, Béla Bartók has been most exclusively the object of study by music theorists; nearly all of the important studies that have been made of his music have been analytical. In this body of literature, two principal strands of thought are conspicuous. The first of these centers around the work of the Hungarian scholar Ernő Lendvai. Lendvai’s attempts to analyze Bartók’s music by relating all its features to various proportions, in particular to the ratio of the “golden section,” have been tremendously influential in the past decade or so.¹ The second principal strand of analytical thought in Bartók studies focuses upon the symmetrical pitch collections and chordal constructions that permeate Bartók’s music. The functional role that such formations play in the music of Bartók, Stravinsky, and the composers of the Second Viennese School has been demonstrated by numerous scholars, such as Babbitt, Jarman, Perle, van den Toorn, and Taruskin.²

Elliott Antokoletz’s study of Bartók’s music clearly falls into the second of these two analytical groups. According to the author’s preface, the field of Bartók analysis is in need of basic integrative concepts as a framework for the “diverse and often contradictory interpretations” that have heretofore prevailed (p. xi). The study is based upon the premise that there does exist in Bartók’s music an “all-encompassing system of pitch relations,” and that this system can be located in the principle of “*equal subdivision* of the octave into the total complex of interval cycles.” Furthermore, says Antokoletz, “the fundamental concept underlying this equal-division system is that of *symmetry*” (p. xii).

In his preface, Antokoletz reveals his background, and the reader is immediately able to determine his basic assumptions and approaches in the study. In his adoption of the term (and concept) of the interval cycle, he follows the theoretical work of George Perle. Other aspects that may be traced to Perle include the above-mentioned focus upon symmetrical constructions and, in the final chapter of the book, an argument in favor of Perle's terminology for cyclic collections.³ Since Perle's work is of consistently high quality—particularly impressive in its combination of analytical rigor and historical sensitivity—I turned to the work of his former student with high hopes indeed. I was not disappointed.

The Music of Béla Bartók begins with a discussion of important features of Bartók's musical language in their historical context. The features in question are those that contribute towards equalization of the notes of the chromatic scale and those that encourage the formation of symmetrical pitch collections. According to Antokoletz, Bartók was significantly influenced by the progressive music of his day (the music of Debussy, Strauss, various nineteenth-century Russians, and the composers of the Second Viennese School) and by the Eastern European folk music that he transcribed and edited. Antokoletz does not merely repeat these seeming truisms; he traces the various techniques of symmetrical construction from their earlier uses in the late nineteenth century down to Bartók. He shows not only *where* the composer found them but *how* he came upon them. Antokoletz concludes that Bartók "can be considered a focal point for all these musical sources [the symmetrical techniques discussed in this chapter] since in the course of his compositional evolution he comprehensively absorbed and integrated all these formations" (p. 25).⁴

The second chapter deals with Bartók's harmonization of Eastern European folk songs. Supporting his analyses with quotations from Bartók's own discussions of the proper way to harmonize folk tunes, Antokoletz demonstrates Bartók's method of deriving the material of the accompaniment from the songs themselves. The central portion of the chapter examines Bartók's *Eight Hungarian Folk Songs* for solo voice and piano. The accompaniment in seven of these songs is based upon the principle of symmetrical expansion around a central mode, usually pentatonic, which in each case is the source mode of the tune. In the anomalous song no. 7 the accompaniment is based upon "a contrapuntal and an harmonic elaboration of a single modal interval (tritone) rather than as a balanced polymodal expansion around the basic mode or its pentatonic substructure" (p. 50). The principle of derivation from the mode, however, still applies.

In chapter 3, "Symmetrical Transformations of the Folk Modes," we learn how the reordering of the pitches of a given mode might produce a symmetrical collection. According to Antokoletz, Bartók's frequent concentration

upon melodic intervals of the fourth or fifth allows him to treat diatonic modes as if they were portions of the interval cycle of fifths.⁵ The tritone that appears in any diatonic collection can be made to act as "the boundary of a symmetrical formation" (p. 54). The transformation of symmetrical structures is tellingly revealed by an examination of the sketches for Bartók's Fourth String Quartet. Selected passages from the preliminary sketches of both first and second movements show diatonic scalar passages that are re-ordered to produce symmetrical constructions in the final version (p. 63).

The discussion of symmetrical reordering in chapter 3 leads into the topic of chapter 4, the general principles of symmetrical pitch relations in Bartók's music. As his example, Antokoletz again takes the Fourth String Quartet, since the quartets as a whole are representative of Bartók's style, and since the Fourth in particular "can be seen as the epitome of Bartók's compositional experimentation" (p. 67).⁶ The discussion of symmetrical formations in the Fourth String Quartet devotes the most consideration to the role played by three intervallic cells, which are labeled X, Y, and Z.⁷ Cell X consists of a four-note segment of the chromatic scale; cell Y, a four-note segment of the whole-tone scale; and cell Z, a pair of interlocking tritones a semitone apart, which can also be expressed as two perfect fourths a semitone apart or as two pairs of semitones a tritone apart. After giving an exhaustive analysis of the construction of each cell and its potentials, Antokoletz proceeds to relate the cells to sets of inversionally complementary semitonal cycles (that is, pairs of ascending and descending scales that interact at varying points). He does so in order to demonstrate the significance of the tritone in the entire complex of interval relations and to illustrate the role of the tritones of cell Z in the formation of octatonic scales.

In chapter 5, Antokoletz focusses upon Bartók's uses of the three intervallic cells X, Y, and Z in his compositions. Cells X and Y play major roles in the Fourth String Quartet and in *Music for Strings, Percussion, and Celesta*. Cell Z is even more versatile, playing important structural roles in Bagatelles no. 7 and 12, in many of the *Eight Improvisations for Piano*, and in the First and Second String Quartets, besides the two pieces mentioned above. An especially trenchant statement appears in Antokoletz's discussion of the intervallic cells used in Bagatelle no. 7:

While these cell expansions and transformations are basic to organic growth and structural coherence of the piece, a sense of tonality is produced by chordal structures other than those based on the cells. . . . [W]hile these local traditional tonal assertions have little to do with the unfolding of the cells, they tend to establish a tonal framework for melodic and harmonic relations solely based upon interval content.

(pp. 82–83)

Though his principal focus throughout the book is upon symmetrical constructions, Antokoletz does not try to make them explain every feature of Bartók's music. The flexibility the author shows here, his implied willingness to use a rather eclectic analytical approach in getting at the substance of the music, is a response to the heterogeneity of Bartók's music. I might add that this kind of heterogeneity is also found in the music of most other early-twentieth-century composers, and that Antokoletz's eclectic approach is surely preferable to any rigid insistence upon a priori unity.

Chapter 6, "Tonal Centricity Based on Axes of Symmetry," is the heart of Antokoletz's work. According to the author, there are two ways that Bartók establishes tonal centers in his music: by using the traditional pitch-class hierarchy of a given mode, or by using a symmetrical pitch collection whose axis of symmetry is to be understood as a tonal center. Both methods can be used within the same piece, and Bartók uses special relationships and transformations to integrate them within individual works. The primary purpose of the chapter is to explicate these relationships as they occur in the string quartets and in *Music for Strings, Percussion, and Celesta*. For example, in the First String Quartet the prevailing tonal center of A is established in two ways. First, F and C#, which are equidistant from A, are established as secondary tonal centers by both traditional and innovative means. Second, certain foreground events indicate the centricity of A more directly, that is, by the frequent use of symmetrical collections organized around A.

In the seventh chapter the author examines the procedures used to link diatonic, octatonic, and whole-tone scales in Bartók's music. These procedures include the addition of single notes to existing scales to produce new scales, the use of symmetrical constructions of perfect-fourth chords—or combinations of a perfect fourth and a tritone—to mediate between two or more kinds of scales, and the extension of a section of one scalar collection to form another. Closely connected with the use of chords composed of a perfect fourth and a tritone is intervallic cell Z, mentioned above.

Examples of the integration of the various scale patterns include a discussion of several pieces from the *Mikrokosmos* that contain octatonic constructions created by polymodal coordination (juxtaposition of two or more modes so that the total pitch content of the lines creates an octatonic scale). The pitch material of no. 109 ("From the Island of Bali") is partitioned into two Z cells to "establish the priority of the octatonic scale" (p. 252). The *Concerto for Orchestra* displays elision of scalar formations to form hybrid collections, the extension of motives to imply scales, and polymodal coordination in moving between types of scales.

In the penultimate chapter of *The Music of Béla Bartók*, Antokoletz discusses the role of the three principal intervallic cells in the formation of the interval cycles in Bartók's works. The most important functions are again

filled by cell Z. Cell Z can act as a base around which notes are symmetrical-ly added, as in *Bagatelle no. 10*. The cell may be filled in with whole tones to produce variants of cell Y or to generate the two whole-tone scales, as in the *Fourth String Quartet*. In the *Concerto for Orchestra*, cell Z is stated in *stretto* (near the beginning of the third movement), unfolding all six of the tritone interval cycles. These techniques play important structural roles, such as linking motives and foreshadowing thematic connections between the various interval cycles.

In the short concluding chapter, Antokoletz returns to where he started by discussing Bartók's music in the context of its time. The common assumptions "several post-tonal composers" seem to have made about the "equal-division system" are rooted in various strands of musical development: the late-Romantic German tradition, and the nonfunctional pentatonic and diatonic modality of folk music. Bartók's importance in this conflation of traditions is based upon his attempt to use folk traditions in constructing a new musical language. Not that he was the only composer to do so, of course. As Antokoletz examines *The Rite of Spring*, he finds in the opening folk melody the seeds of Stravinsky's abstraction of interval cycles later in the work (p. 314).⁸ These and other interval cycle abstractions that Antokoletz finds in Stravinsky's pieces, plus the increasing use of symmetrical constructions in much of the Western music of the early twentieth century, lead Antokoletz to argue in favor of a consistent terminology to be used when discussing these constructions in post-tonal music: namely, the terminology developed in Perle's work on Alban Berg. Antokoletz's justification for extending Perle's terminology is that this extension "permits us to point in a simple, uniform, and objective manner to the properties and relationships of pitch collections of the equal-division system" (p. 328). He delays the use of this terminology until the end of the study so that his analytical concepts and terms might more accurately reflect the evolution of Bartók's musical language.

This is exactly the problem. Antokoletz's eclectic analytical methods are so successful that his belated plea in favor of a unified system loses most of its force. If in Bartók's own mind, and in the social evaluation of his contemporaries, this consistency was not necessary, why introduce it now? Surely it is more productive for us as listeners and students of Bartók's music to adapt our thinking to include the music's apparent heterogeneity than to insist on shoehorning it into a more "objective" conceptual system.

This question pops up occasionally in the course of the book. For instance, in chapter 6, during his discussion of *Bagatelle no. 2*, Antokoletz discounts Bartók's own statement that the piece is in D^b : Bartók's opinion can only be due to the "local occurrence of pitch-class D^b and its dominant (A^b) in the final chord" (p. 142). Antokoletz would rather rely on the symmetrical pitch relations centered around A in the piece, but surely accounting for Bartók's

explanation more fully would have led to further insights into how Bartók establishes tonal centers in his music. It would seem better in this case to direct the analysis from the piece than from the apparent analytical system.

These are cavils, however; Antokoletz's study is an impressive achievement. It is very readable, informative, and relatively free from any dogmatic insistence upon a single analytical method for all of Bartók's music. For this, as well as for its extension of some of the most sensitive analytical approaches in current use, the book is well worth reading.

—*Mitchell Morris*

NOTES

¹ Ernő Lendvai, *Béla Bartók: An Analysis of His Music* (London, 1971). This is based upon his earlier work *Bartók stílusa [Bartók's Style]* (Budapest, 1955). For a clear and intelligent discussion of Lendvai's work the reader is referred to Roy Howat's article "Bartók, Lendvai, and the Principles of Proportional Analysis," *Music Analysis* 2 (1983), 69–95.

² Stravinsky's use of symmetrical collections have received the most attention in the past several years. See, for instance, Pieter C. van den Toorn, *The Music of Igor Stravinsky* (New Haven: Yale University Press, 1983), which focusses on the role of octatonic collections in Stravinsky's works.

³ This terminology is presented in George Perle, *Twelve-Tone Tonality* (Berkeley and Los Angeles: University of California Press, 1981), 171–72.

⁴ The historical development of symmetrical collections and their uses is treated at greater length in Richard Taruskin, "Chernomor to Kashchei: Harmonic Sorcery; or, Stravinsky's Angle," *Journal of the American Musicological Society* 38 (1985), 72–142.

⁵ For a more detailed discussion of the interval cycles, see George Perle, "Berg's Master Array of the Interval Cycles," *Musical Quarterly* 63 (1977), 1–30.

⁶ Incidentally, Antokoletz's doctoral dissertation was *Principles of Pitch Organization in Bartók's Fourth String Quartet* (City University of New York, 1975).

⁷ These symmetrical constructions are so labeled in George Perle, "Symmetrical Formations in the String Quartets of Béla Bartók," *Music Review* 16 (1953), 300–312, and in Leo Treitler, "Harmonic Procedure in the *Fourth Quartet* of Béla Bartók," *Journal of Music Theory* 3 (1959), 292–98.

⁸ A more recent study of Antokoletz's expands this idea. See "Interval Cycles in Stravinsky's Early Ballets," *Journal of the American Musicological Society* 39 (1986), 578–614.

Walter Frisch. *Brahms and the Principle of Developing Variation*. Berkeley: University of California Press, 1984.

Walter Frisch, in *Brahms and the Principle of Developing Variation*, traces the techniques that Brahms used to mold sonata forms out of melodic material, this as opposed to forcing melodic ideas into a prescribed sonata formula.