## dissertations

Robert Barclay Brown—The Early Atonal Music of Anton Webern: Sound Material and Structure

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Viewed in light of the year of its completion, 1965, *The Early Atonal Music* of Anton Webern takes a large, honest step in the right direction. It is well organized, clearly written, and arrives at conclusions which have generally been corroborated by later research. The work is divided into four chapters. In the first, entitled "Problems of Analysis in Atonal Music," Dr. Brown places his ideas in their historical context and gives a discerning account of the various approaches to atonal music which preceded his own. The third chapter, "Other Structural Techniques," discusses the given repertory (namely, Webern's Opp. 3–16) in terms of conventional compositional devices, such as ostinato, imitation, and canon. The fourth, "Webern and His Contemporaries," introduces contemporaneous examples from Schoenberg, Skriabin, and Strauss.

It is, however, the second chapter, "Webern's Sound Material and Its Role in Musical Structure," which forms the central portion of the author's thesis. The essential analytical tool involved here is the representation of unordered pitch-sets through their constituent intervals. Any set of distinct pitches can be arranged in ascending order within the same octave, and the intervals between consecutive notes (measured in semitones) can then be placed in an array. Thus the set C, C#, D, D#, E, G, G# translates into the intervallic pattern [111131]; in addition to the numbers shown in the array there is the "hidden interval" of four semitones between  $G^{\ddagger}$  and C. By taking the first note of the set and placing it at the end the intervallic pattern, one produces 111314. This process, repeatable four more times, yields, respectively, 1131411, 131411, 314111, and 141113. Any one of these six patterns can be used to represent the given set. For identification purposes, however, Dr. Brown chooses the one which lies within the smallest interval and (if this requirement is not satisfied uniquely) has the larger intervals on the left. In the present case, then, the initial version is selected. If one wishes to denote a particular transposition of a given set, the appropriate letter name should be placed to the left of the array. For example, C#

1111131 represents the set C#, D, D#, E, F, G#, A.

Using this notation, the author goes on to list the intervallic patterns which occur most frequently in the works under discussion. This is certainly an impressive undertaking, without the aid of a computer. Among other things,

he cites the continuing prevalence of 31 and 13.<sup>1</sup> The second of these sets is merely the inversion of the first, and they share the same interval content; yet Dr. Brown does not regard them as equivalent. Making use of this property for all sets and their inversions would have reduced the total number of possible unordered pitch-sets from 350 to 200.<sup>2</sup> Surely this would be an advantage for the analyst; thus it seems odd that Dr. Brown has evidently not thought to do so.

Also puzzling is the matter of nomenclature. At the close of Chapter 1, Dr. Brown apologizes for having to introduce "a certain amount of new or specialized terminology to facilitate discussion" (p. 42). However, the reason for some of this new terminology is unclear. For example, he uses the term "pitch-type" to apply to the name of a note without reference to register, because he rejects Milton Babbitt's term "pitch-class" "lest the reader mistakenly infer some connection between the present study and Babbitt's work in twelve-tone theory" (p. 5, fn. 15). However, Babbitt's term was already well known and need not have been—and, indeed, has not been—confined to twelve-tone music alone.

The bibliography is reasonably complete, except for two important omissions. The first is Allen Forte's article "A Theory of Set-Complexes for Music,"<sup>3</sup> which relates directly to the subject of the present dissertation. The second is Donald Martino's "The Source Set and Its Aggregate Formations,"<sup>4</sup> in which unordered sets of three, four, and six notes are catalogued with respect to interval content.

It must be emphasized, however, that my criticisms, for the most part, are not to be leveled against Dr. Brown alone. It is a sad fact of life that every 20th-century dissertation is somehow required to define its terms anew, and as a result there is much needless duplication and confusion. To appreciate this fact one need only imagine the tedium of an analogous situation, in which every 18th- or 19th-century topic would be prefaced by a definition of the tonal system! Given the idiosyncrasies of the field, *The Early Atonal Music of Anton Webern* is no mean achievement.

## NOTES

<sup>1</sup> These formations, translatable, respectively, into a minor third plus a minor second and vice versa, constitute a signally important element, not only in the present repertory, but in Webern's twelve-tone works as well (for example, Op. 24).

<sup>2</sup> Some sets are their own inversions, and therefore the number is cut not quite in half.

<sup>3</sup> Journal of Music Theory (1964) 8:136-83. Since this article appeared very shortly before Dr. Brown's dissertation was submitted, it would be unrealistic to expect it to feature in the body of the work. However, at least a bibliographical citation and a footnote would have been welcome.

4 Journal of Music Theory (1961) 5:224-73.