Issues from *The Music of Alban Berg*

The harmonic and melodic content of twentieth-century music has been described using a wide variety of terms such as "atonal", "pan-tonal", "non-tonal", "post-tonal", "twelve-tone", etc. In each of these terms (aside from the last), the concept of tonality is explicitly used as a reference point against which the sonic quality of twentieth-century music is measured. Implicit in these terms is also the notion that one cannot discuss the music of the past one hundred years without saying what it is not, i.e. that it is not purely tonal. If the music is not tonal, however, then what it is? Herein lies the crux of not only a taxonomic problem, but also an analytic problem as well.

Trying to pin down some sort of unified, all-encompassing theory of analysis for the entire musical output of twentieth-century composers proves difficult if not impossible. According to Headlam in his book *The Music of Alban Berg*, "Many musicians have attempted to find an explanatory theory for atonal music comparable to that for tonality, in which every note has its functional place within a hierarchical network of pitch and intervallic relationships" (53). Other musicians, though, allot "each piece its [own] unique space and relationships between events," (53) thus granting each composer the potential to develop new systems of musical organization divorced from anything that has ever happened before. Of course, like any two opposing philosophies, the actual real-world manifestation often lies somewhere in the middle, a balanced view also held by Headlam.

In addition to this compromise between the individuality versus the similarity of twentieth-century works, one also has to consider the compromise in this music between tonality and atonality itself. The shift from the former method of musical organization to the latter, beginning somewhere in the mid- to late-nineteenth century, certainly appears more as a gradual process than as an abrupt schism. Even in the music of Berg, for example, a composer solidly within the "atonal" canon, tonal moments (or at least the illusion of tonal moments) "open a window onto a familiar world" (61). More fundamentally, Berg's use in works such as *Wozzeck* of variation forms, passacaglias, and fugal sections, all forms invented for containing tonal motions, leads one to believe that the divide between tonality and atonality is not always clear or possible. Headlam would like us to see Berg, in fact, as having "achieved a synthesis in his treatment of all musical elements" (11).
Part of this ambiguity between or potential synthesis of tonality and atonality relates to what George Perle has termed interval cycles. It is by having an "underlying cyclic basis" that "Berg's music transcends surface distinctions of 'tonal', 'atonal', and 'twelve-tone' periods..." (11). Since, for example, the diminished-seventh chord (a 3-cycle), augmented triad (a 4-cycle), and circle of fifths (a 5-cycle) all divide the chromatic scale into equal parts and all have tonal implications, these cycles provide compositional tools that make any sort of tonal/atonal categorization tricky. Thus, "Berg's musical materials are not dependent on tonal interpretations for their coherence, but they nonetheless retain tonal implications within a broader cyclic context" (55).

Perle's concept of interval cycles centers on the idea of symmetry, at least for the 2-, 3-, and 4-cycles. Headlam remarks that "tonality itself is based on the asymmetrical divisions of musical space, most notably the division of the octave into a perfect fourth and perfect" (15). This notion of atonality being based on symmetry as opposed to the asymmetrical basis of tonality is a common one in the literature of music theory (in the writing of Laitz, Straus, etc.). What I find frustrating with the depiction of this symmetrical/asymmetrical dichotomy is that it always seems, at least in my mind, to be acting as some sort of subtle validation of atonal methods. Assuredly, adherents to atonal musical practices have suffered an (inordinately) excessive amount of criticism from those in the more traditional tonal camp regarding musical taste and perhaps feel the need for justification wherever it may be found. But more importantly, it seems to me that the asymmetry of tonality in actuality does not contrast the symmetry of atonality, but is merely symmetry of a different kind.

Although I realize I am beating a dead horse, I would like to point out that tonality is based on linear symmetries within the octave. On a linear scale, the frequency of a pure fifth is exactly halfway between the frequencies of an octave, with the major third being exactly halfway between this fifth and the lower note of the octave. Building such thirds on the fifths above and below the lower octave creates all the notes of a major scale. The chromatic scale, a compromise for tonality, instead divides the octave logarithmically into twelve equal parts. Thus, to speak generally, atonality is based on logarithmic symmetry whereas tonality is based on linear symmetry. It is a testament to the complexity of music that our ears hear both on the logarithmic as well as the linear scales. But it is merely the type of symmetry emphasized that determines tonality versus atonality, not symmetry or lack thereof. Perhaps the pejorative term "atonality"
can be discarded in favor of "logarithmically symmetrical tonality," and we can begin referring to tonal works as having "linearly symmetrical tonality."

Moving on from my mini-diatribe, let us return to the topic of cycles in twentieth-century music. One important aspect of Perle's cyclic view of music is that it does not have to "account for every note" (58). Much like passing or neighbor tones act in a tonal context, "non-chord tones" exist within analyses based on the theory of cycles. This allowance of non-chord tones is a crucial distinction between the methods of Perle and Forte, since in Forte's theory, "all notes on the surface are members of pitch-class sets" (60). This fundamental difference in outlook harkens back to issues I raised in my second paragraph concerning differences in analytical approaches. Furthermore, if one is to adopt a "middle-ground" between the two theories, the issue is raised as to just how to exactly to balance the approaches of Perle and Forte. Does one use whichever one is convenient for the analysis of a particular piece? Or does one develop some sort of mélange in technique applied consistently across all pieces? The issue of analytical approach becomes more complicated when more theories of analysis are introduced. Headlam also discusses the theories of David Lewin, whose "approach has many similarities to Perle's" (59) but does not require symmetry, instead searching for symmetries of different kinds through the focus on "spans between musical objects.... rather than on the objects themselves" (58).

Ultimately, Headlam uses cycles as his main approach to the analysis of Berg's music, admitting, "no single analytical method can reveal all the intricacies of a composer's music" (66). With the hint of tonal implications inherent to cyclic collections, however, Headlam raises the issue of whether the existence of a cycle through a section of music acts as a "prolongation" of that cycle or as merely a persistence (63). In other words, can a cycle function as a stable force (or goal) in atonal music, much like the tonic functions in tonal music? Headlam denies this possibility, stating that "cyclic collections are quickly superseded.... and require constant reiteration for their continuing referential status," (63) although this view does not take into account the possibility that the composer, correctly or not, has assumed that a cycle would serve in some sort of capacity as a tonic. Thus the music theorist is engaged in the eternal pull between attempting to answer how something has been composed as opposed to describing what it is that has been composed.

WORKS CITED