

William Rothstein. *Phrase-Rhythm in Tonal Music*. NY: Schirmer, 1990.

Reviewed by Greg Wilson

As anyone who is familiar with the pre-release publicity for William Rothstein's *Phrase Rhythm in Tonal Music* would know, it is intended to be an extension of Schenkerian theory to the large-scale rhythmic processes of Classic and Romantic music. Readers might be surprised, however, to find not only extensions of ideas nascent in Schenker's own writings and expansions of ideas from recent Schenkerian theorists such as Carl Schachter, but also references to eighteenth-century theorists including Joseph Riepel, Johann Kirnberger, and Heinrich Koch. These eighteenth-century theorists, especially Koch, first noticed the standard of duple phrase construction and described deviations and exceptions to that standard. Nineteenth-century theorists such as Anton Reicha, Gottfried Weber, and Hugo Riemann are also cited in the text, but Rothstein views their fidelity to the principles of duple phrase construction and symmetry, which forces them to presume that all non-duple phrases are deviations from duple models, as an excess that has been corrected in the twentieth century by Schenker and his followers.

Rothstein's understanding of phrase rhythm has also been influenced by *A Generative Theory of Tonal Music* by Fred Lerdahl and Ray Jackendoff, whose definitions of meter and hypermeter Rothstein generally follows. Rothstein's term "phrase structure" roughly corresponds to certain levels of Lerdahl and Jackendoff's grouping hierarchy. Readers who are familiar with grouping and meter as presented in *A Generative Theory of Tonal Music* may find Chapter 1 of Rothstein's book somewhat confusing. In order to introduce the concepts of grouping and meter to readers who may be unfamiliar with recent presentations of this material, Rothstein begins with a purposefully naive discussion of Johann Strauss Jr.'s "Blue Danube" Waltz, where Rothstein himself seems to confuse grouping and meter. The definitions become clearer by the end of the chapter.

The beginning of Chapter 2 further clarifies Rothstein's concept of phrase, which is not exactly equal to what musicians often call a phrase, nor is it perfectly coextensive with Lerdahl and Jackendoff's grouping.

Rothstein's phrase must involve tonal motion, thus many of the relatively small groups in generative theory and some of what musicians commonly call phrases are excluded. This concentration on tonal motion is where Rothstein's Schenkerian background is most felt, and it reveals Rothstein's methodological differences with Lerdahl and Jackendoff. A generative analysis begins with a grouping analysis of a piece's melody at the surface level. Surface groups are then combined into larger groups by use of a mix of local and overall considerations (grouping preference rules). Subsequent hypermetrical analyses and prolongational reductions are based upon the original grouping analysis. Although prolongational reductions, which are similar in nature to Rothstein's tonal motions, may influence the grouping analysis, generative theory is weighted somewhat more towards bottom-up, local-level considerations. Rothstein, on the other hand, begins from the tonal plan and, thus, his analyses favor large-scale considerations over aspects of local detail and the harmonic motion of a piece over its melody.

Rothstein's methodology has both advantages and disadvantages. A good example is his discussion of phrase expansion by parenthetical insertion. This analytical idea, which Rothstein has developed from ideas presented in Koch's writings, would never be allowed in generative theory, since it violates Lerdahl and Jackendoff's grouping well-formedness rule 1: "only contiguous sequences can constitute a group."¹ Rothstein's analysis of Haydn's Quartet in C Major, Op. 74, no. 1, Menuetto, mm. 49-60, (Figure 1) *does* seem to reveal something about listeners' intuitive analyses of the passage in spite of its disregard for Lerdahl and Jackendoff's rules. Rothstein's analysis reveals that a normal ("basic") eight-bar phrase has been interrupted by three measures of markedly different material inserted between what would have been the seventh and eighth bars of the "basic" phrase, leaving a dangling cadential I_4^6-V pattern in the seventh measure. The implications are strong enough here that a listener should anticipate the resolution of the phrase and be able to link the arrival of the resolving chord with the previous material. More difficult to accept, however, are some of Rothstein's longer parentheses

¹Fred Lerdahl and Ray Jackendoff, *A Generative Theory of Tonal Music* (Cambridge, MA: MIT Press, 1983), 37.

and the assertion that meter is similarly interrupted and resumed after parenthetical insertions. As Rothstein writes, “We figuratively—or even literally—hold our breath until the [metrical] pattern is resumed, measuring the deviation from ‘strict time’ according to the length of the delay to the expected downbeat.” (42)

Rothstein’s analysis in Figure 1 implies that hypermeter is interrupted for three measures and then resumes where it left off. Perhaps this is not implausible in this case, since the hemiola effect of the parenthetical material represents such a metrical break with the previous material. Rothstein’s position differs from that of Lerdahl and Jackendoff, who assert that meter is a relatively local phenomenon.² If this is the case, then it is difficult to believe that listeners could suspend meter for parentheses that may be twenty or more measures long. Passages this long tend to set up a hypermeter of their own. It seems questionable whether a listener is able to keep two hypermetrical patterns (one in suspension and the other ongoing) in mind at once. More likely a listener can hear departures from and returns to regular hypermeter but must rely on local meter when the hypermeter becomes overly ambiguous. Rothstein discusses these issues, admitting that it is not clear to what extent a listener will retain an “underlying” hypermeter in the face of a contradictory surface. (97) It is clear from his analyses that Rothstein’s opinion on the issue is that listeners can retain underlying hypermeter through some rather extensive interruptions or even keep several layers clearly defined in the case of nested internal extensions. Rothstein mentions that “psychological and epistemological questions” of this type must be investigated, (99) but he quickly dismisses the field of music perception as to its ability to offer any illumination on the subject, stating “experimental psychology of the sort commonly practiced in the field of music perception will probably not give us many answers worth having.” (100)

Rothstein’s distrust of perceptual studies also manifests itself in his justification for favoring duple meter. As if to avoid taking responsibility for his assertion that duple meter is somehow natural to human beings on physiological and psychological grounds, Rothstein puts his opinions in the

²Lerdahl and Jackendoff, 99.

mouths of his sources. The authorities for this position are Schenker, who cites the beat of the human heart; Schachter, citing bilateral symmetry of the body; and Riemann who notices the influence of folk dances on western music. A review of the bibliography reveals no sources from psychology, perception, or cognitive science. In Rothstein's defense, treatments of meter from these perspectives have greatly increased since *A Generative Theory of Tonal Music* has become widely known, and thus, after 1986 when Rothstein's text had essentially taken its final form.

Further, there is sufficient evidence of rhythmically complex folk traditions, even within Europe itself, to make one uneasy about Rothstein's assertions about duple construction. Is it possible that duple construction has become a culturally conditioned response in the West and not necessarily "natural" in the psychological sense? John Rockwell has pointed out that Western tonal music is relatively simplistic when compared to the rhythms of Africa and India. He sees this as the result of the influence of ensemble playing which needed a simple metrical pattern so that groups of players might coordinate the attacks of vertical sonorities.³ The question of the naturalness and preeminence of duple organization is one that a carefully executed perceptual study might help clarify. Rothstein is partially correct in criticizing the music perception field when he states "the subtlest aspects of rhythmic/metric structure will not be accurately perceived by groups of college freshman music students—who are often tested because they are readily available—or by the musically illiterate." (100) Proponents of perceptual music studies have not always carefully recognized the differences between studies aimed at determining human proclivities and those intended to study capabilities. The type of study that Rothstein describes should be limited to the study of proclivities; that is, does the average-person-on-the-street tend to perceive things in a certain way. This type of study will reveal the cultural conditioning of a group of subjects. Capability studies, on the other hand, must include large amounts of training time (this is why these types of experiments are seldom done) to see if it is possible for listeners to hear music in the ways that Rothstein suggests or if it is equally possible for trained listeners to become adept at other types of organization. What

³John Rockwell, *All American Music* (New York: Knopf, 1983), 51.

seems odd about Rothstein's objections is that even a proclivity study should reveal something about his analyses, probably confirming many of them, since popular music and mass media continue to familiarize listeners with duple organization in music, deviations from which most listeners should be able to recognize.

The combination of Rothstein's unquestioned preference for duple organization and the emphasis he places on metrical interruptions sometimes causes him to create unnecessarily complex analyses. In the analysis of Mozart's Quartet in D Major, K. 575, third movement, Trio, (Figure 2) Rothstein correctly describes the upbeat nature of the unison measures 1-2, and 7-8, but sees them as an interruption of duple hypermeter. They could more simply be explained as upbeats in triple hypermeter as is shown in Figure 3 with the dot notation used by Lerdahl and Jackendoff.

Some of Rothstein's analytical ideas come close to suggesting a way of dealing with grouping and meter that David Lewin also suggested in his article, "Music Theory, Phenomenology, and Modes of Perception."⁴ Rothstein indicates his preference for Schenker's term "metrical reinterpretation" over Lerdahl and Jackendoff's "metrical deletion" on the grounds that it is a better description of the way that the phenomenon is perceived. Unfortunately, Rothstein does not follow this line of thought much further; he does not provide his readers with analyses that reveal how the context of a musical event can be reinterpreted during the process of listening. Like Lerdahl and Jackendoff, Rothstein provides rather flat analyses that assume a synchronic view of time and a listener's "final understanding" of pieces of music.

The analytical "windows"⁵ concept that Lewin suggested would, of course, mandate an extremely complex and intricate method of presentation, relying heavily on graphic notation. This would go beyond the bounds of Rothstein's attempt to discuss his topic in a manner that would communicate to as large an audience of musicians and

⁴David Lewin, "Music Theory, Phenomenology and Modes of Perception," *Music Perception* 3 (1986): 327-92.

⁵Lewin, 373 footnote.

musicologists as possible. In fact, Rothstein tends to avoid graphic analyses in favor of written description. An examination of the graphic notation that he does incorporate into the book reveals several inconsistencies. For example, in the first half of the book, phrases are sometimes indicated in the examples with solid slurs, subphrases with dotted slurs, and motives with squared solid brackets; at other times, if slurs are already present in the score, then dotted brackets become subphrases and solid brackets become phrases; or dotted slurs may be subphrases and solid brackets phrases, but solid brackets used by themselves sometimes denote subphrases. Nearly every example has its own interpretation for brackets and slurs, and, to add to the confusion, slurs take on a totally different meaning when they appear in the traditional type of Schenkerian diagram. Phrase indications of any kind all but disappear from the second, analytical, half of the book, being replaced by rather wordy prose descriptions instead. All this from someone who had high praise for Schenker because he recognized that "one graphic representation is often worth many paragraphs (and sometimes many pages)." (6) Similarly Rothstein's graphic representations of hypermeter are also inconsistent, although they do appear throughout both sections of the book. Numbers indicating hypermeter are generally placed haphazardly anywhere over a measure, but should be assumed to correspond with the downbeat of measures in most sections of the book. Nevertheless, in the chapter on Mendelssohn, exact placement of the number above the measure suddenly becomes meaningful as Rothstein intends to imply that hypermetric beats actually occur on other beats than the notated downbeat.

These difficulties aside, readers are likely to find Rothstein's book informative, representing a good summary of the techniques of phrase rhythm in tonal music. The analyses in the second half of the book follow the development of four composers and through them some of the developments in the techniques of phrase rhythm from the beginning of Classical era to the end of the Romantic period. Each composer is shown to develop methods for solving the "rhythm problem" which Rothstein defines as the staleness and boredom of unrelieved symmetrical organization. Joseph Haydn developed a host of techniques to solve the rhythm problem as a response to the development of new formal plans in

the Classic period (mainly sonata form). Mendelssohn continues the Classic tradition (those techniques developed by Haydn) but adds a few twists of his own. Chopin and Wagner, however, are somehow separated from classical rhythmic solutions, and, therefore, must independently develop their own unique solutions both of which manifest themselves in some type of “endless melody.” Many readers will enjoy this type of historically-motivated theoretical discussion.

Those readers who may have disliked the systematic formalism of *A Generative Theory of Tonal Music*, which resulted from its genesis as a interdisciplinary study, will likely find the first half of this book to be a kind of “user-friendly” version of some of the same ideas, with its terminology geared specifically to musicians. One can only wish that the consistency of graphic notation and the careful and concise discourse which characterized Lerdahl and Jackendoff’s contribution could have found its way into this book as well.

Figure 1. Rothstein’s analysis of Haydn: Quartet in C major, Op. 74, No. 1, Menuetto, mm. 49-60. (Rothstein, p. 89)

The image displays a musical score for the Menuetto from Haydn's Quartet in C major, Op. 74, No. 1, measures 49-60. The score is written for four staves: Violin I, Violin II, Viola, and Cello/Double Bass. The music is in 3/4 time and C major. The first system (measures 49-50) is marked 'f' (forte). The second system (measures 51-60) includes dynamic markings 'fz' (forzando) and 'Fine'. The score is annotated with numbers 1 through 8, indicating specific musical features or phrases. The first system shows measures 49-50, and the second system shows measures 51-60.

