Tactus, Mensuration, and Rhythm in Renaissance Music. Ruth I. DeFord. Cambridge: Cambridge University Press, 2015. xii + 504 pp. \$130.

Ruth DeFord's comprehensive study of musical time answers a critical scholarly and theoretical need in Renaissance music. Musical notation accurately represented pitch hundreds of years before the need arose to align those pitches in time. The capacity to indicate temporal relationships, first established in the late twelfth century, quickly multiplied rhythmic possibilities, leading to previously unimagined complexities in musical composition over the next 400 years.

The terms in the title represent three essential components of music's relationship to time. *Tactus* measures the conceptual unit of time in composition and the audible passing of time in performance, often marked by a tactile physical motion of the hand, foot, or finger. DeFord devotes five chapters to the relationship of *tactus* to rhythm and theory. Mensural (measured) notation encompasses a complex, fluid, constantly evolving system for interpreting written symbols and the proportional relationships among note values. Our modern system descends from mensural notation, but we no longer fully understand the complex possibilities that composers of the period exploited; temporal practices had simplified even before the end of the Renaissance. Chapter 2 offers a lucid overview of mensural notation. Rhythm "includes all aspects of the perceptible organization of time," including "note durations, melody, harmony, counterpoint, texture, and text setting" (3). The book introduces, defines, theorizes,

explains, complicates, exemplifies, and finally, in a brief conclusion, summarizes the myriad implications of the three terms.

We often depend on contemporaneous writings of music theorists for information on the long musical Renaissance, ca. 1420–1600, but as DeFord notes, "Rhythmic styles and notational practices in real music are much more diverse than those described by theorists" (1). Moreover, theorists often disagreed, depending on their time, place, and purpose, and sometimes they simply did not accurately comprehend the notations and traditions they attempted to explain. Musicians and theorists may have been unable to understand or implement the notation and principles used just a generation or two earlier. In an anecdote from the 1530s, three of the era's notable musicians could not agree on the meaning of a mensuration sign in a Mass by Josquin, who had died only about a decade earlier (200). Theorists in different cultures served different audiences — professional, pedagogical, or intellectual. In some cases, their musings had no actual application to music; Heinrich Glarean complained, "Art should be transmitted as art. Moreover, the matter itself now shows that the observance of so many proportions is superfluous . . . since there is more labor in learning them than sweetness or grace in singing them" (178).

Throughout the first half of the book, DeFord weaves the disparate theories into a narrative that illuminates all aspects of her subject, setting forth the principles that undergird her discussion of varied musical styles in the second half. When theory fails to address an issue adequately (for example, dissonance treatment within the ternary *tactus*), she deduces principles based on the practices of composers — in this case, Du Fay. The theorists often reveal their own awareness of sung music: Adriano Banchieri admonished, "The prudent singer should be careful to sing these syncopations in such a way that one hears the tugging expressed gracefully and boldly until [the voices] unite" (98). DeFord considers the possible implications of analytical decisions — for instance, whether syncopation or hemiola is at work: "Although the choice might go either way, the difference is significant from a theoretical point of view, because the conceptual basis of the mensural structure depends on which notes are counted together. The decision will have an impact on the performance of the passage as well. . . . The prominence of the note in performance should reflect the way the performers understand the mensural structure of the passage" (100–01).

In the book's second part, "Practice," the theories come alive in a panoply of masterworks from the period: Du Fay's songs; *L'homme armé* masses of Ockeghem, Busnoys, and Josquin; motets by Josquin; Isaac's *Choralis Constantinus*; Palestrina's masses; and Rore's madrigals. Each chapter completes a substantial study in its own right, demonstrating how composers treated time in a particular genre and how scholars have responded to these works. Viewing each of these repertories through a temporal lens reveals new perspectives and understanding, even of well-known works. The chosen repertories, vetted as authentic for each composer, exemplify the variety of mensural practices, musical styles and genres, time periods, scholarship, and historiography for the period.

In these chapters, DeFord's methodology identifies the frequency of mensuration signs used, range of note values, the compositional *tactus*, note values at cadences, length of dissonances, shifts in mensuration, levels of temporal organization, and specific issues pertaining to each repertory. Each chapter considers an ample number of works, providing a meaningful context for understanding individual works as well as a significant sample of practices. The chapter on Josquin's five- and six-voice motets, for example, examines the composer's use of mensuration as a structural device and the rhetorical and affective results. DeFord's clear, thorough analyses invite close reading and will no doubt send readers to the collected works for sustained study of these sixteen virtuosic motets. This applied study vividly demonstrates that "the complex, reciprocal relations between musical time and external time cannot be reduced to categorical formulas" (213), but must be experienced in music.

Tactus, Mensuration, and Rhythm in Renaissance Music offers scholars of Renaissance music an enriching compendium of theoretical concepts and compositional practices that provides models for analysis and interpretation, insight into key repertories, and, most important, an understanding of the manifold implications of music's temporal organization. Rich in musical examples, summarizing lists, and explanatory figures, the book demonstrates that musical analysis "in light of [mensural] theory reveals a boundless wealth of rhythmic ideas that equal those of any other period in complexity and expressive power" (4) and also implicates sonority, structure, text setting, and meaning. DeFord understands the music of the period as both musician and scholar; her extraordinary breadth and depth of clarity and insight not only explain, but also will inspire new ways of studying and understanding the great treasury of Renaissance music. She deftly brings together the abstract and the concrete, laying out terminology, concepts, and application in clear and engaging language that will change the way Renaissance musicologists think and work.

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