

excellent prompt for a class's closing discussion: Will decolonisation, de-canonisation and better inclusion help disassemble the concept and practice of such judgements, or are they inevitable?

The book contains errors. Some are typos, enervating to instructors and possibly confusing to students, such as the misspelling of John Adams' *Harmonielehre* as *Harmonielehrer* and the misuse of a pound sign for a sharp. More serious are the errors on the chart of 12-tone rows on page 61, in which three row forms are mislabelled (upper right – P0 should be R0; lower left – I0 should be I6; lower right – RI-0 should be RI-6). Since this introduces Schoenberg's 12-tone music and the concept of permutations of row forms, it is problematic.

There are a number of examples of post-war philosophical endeavours, particularly in the chapters on modernism and postmodernism. These inclusions are valuable when expanded upon. Many students will benefit from connecting extramusical thinkers to the topics about which they are learning. Occasionally, the references to philosophy and other fields seem like asides that are not developed further; the inclusion of endnotes would have helped to maintain the flow of the text. In some places, listenings in the textbook include title, artist, record label and date of recording; in others, just the first two. Having all of them completely labelled would help instructors and students hunt them down. It would be better still to also have a complete discography of the listening examples at the end of the book.

Published in 2022, there are places where the book has not quite caught up to changes during the pandemic and post-pandemic years; in particular, the increased programming of female and minority composers. Where the book mentions the music of William Grant Still and Florence Price disappearing from the repertoire, the return of their work, particularly Price's, which now is frequently programmed and recorded, would be a useful coda.

I look forward to learning more from students' reactions to the book this coming spring. One caveat: they are getting a new 12-tone row chart.

Christian Carey 10.1017/S0040298223001043

The beginning and end of Arbor Vitae, James Tenney's last work, hold impossibly high pitches, suspended like the threads of fate. Quiet bow noise protects the tender silken frequencies in their aerial mortality, leaving as it arrived, from nothing. The beauty and breadth of experience in Tenney's incredible life and career seem almost perfectly captured in this last string quartet, much as they definitively are in Robert Wannamaker's two-volume book The Music of James Tenney. Published in 2021 by the University of Illinois Press, the first volume outlines Tenney's work with analyses of key pieces from each distinct period, preceded by a narrative about the social, aesthetic and technical context of Tenney's life; the second volume follows the same chronological sections as the first, but contains all of his oeuvre and thorough analyses of the pieces not expanded upon in the first volume. After reading Wannamaker's texts, I am even more ensorcelled by Tenney's music, and I am grateful that I have them on my bookshelf as an authoritative and comprehensive reference, indispensable for any Tenney admirer.

Tenney was meticulous about form: a section of music was made up of segments, which were made up of sequences, which were made up of clangs and elements.¹ The duration and trajectory of each musical parameter such as frequency, note duration, amplitude, noise bandwidth, etc., were meticulously planned at these formal levels. So it is pleasing that a monograph of Tenney's music would be similarly well devised in form. From a concise overview in the introduction of the first volume, the subsequent sections organise Tenney's output into nine time periods of creation along with an interlude about harmonic theory after the Postal Pieces in the late 1960s. Each section begins with a biographical stage-setting that informs the technical and creative pursuits at that time of the composer's life. Subsections elaborate on certain concepts, such as '7.3 Interval Tolerance and "The Language of Ratios"",² or analyse a key work, like ⁶9.3 Bridge (1984).'3 Wannamaker usually ends each section with a personal reflection, which I appreciate not only for sensory elaboration, but also conceptually and ethically. Context and positioning are important establishing acknowledgements, even for technical text. It reminds us that music is never objective, and that this is a strength.

Robert Wannamaker, The Music of James Tenney, Volume 1: Contexts and Paradigms, Volume 2: A Handbook to the Pieces. University of Illinois Press, £64.85.

¹ Robert Wannamaker, The Music of James Tenney: Volume 1: Contexts and Paradigms (Champaign, IL: University of Illinois Press, 2021), p. 44.

² Ibid., p. 144.

³ Ibid., p. 199.

Although Tenney did propose music as 'an objective thing out there',⁴ I take this statement as one mainly to describe his process as research. In a note among the archives for *Fabric for Che* (1967), Tenney writes 'Music is a physical process (acoustics). And it involves psychological processes (imagination, perception). But it is also, and most importantly, a social process.'⁵

In addition to his critical insights, Wannamaker provides the reader with uncommon archival detail that should prove interesting even to readers well versed in Tenney's body of public work. Wannamaker is a professor of music theory, composition, history and literature at the California Institute of the Arts (CalArts),⁶ where James Tenney spent the period 1970 to 1975 and his last years (2000–2006) teaching. For this reason, do not skip the end notes, which contain some precious details, like the discovery of a previously unknown work by John Cage from 1978, titled *All Sides of the Small Stone for Erik Satie (and Secretly Given to Jim Tenney as a Koan).*⁷

The author's mathematics background is useful as well; the graphics in *The Music of James Tenney* are standout. The spectrograms – which recall musical x-rays especially for Tenney's computer music, despite Tenney himself never making use of them – are enlightening and, to Wannamaker's credit, almost never superfluous.⁸ The fireworks display of the *Noise Study* (1961) spectrogram is especially worth examining,⁹ and the spectrogram for the tam-tam roll in *Having Never Written a Note for Percussion* (1971), though obvious in its snowy spectral bloom, is revelatory in understanding Tenney's continual trajectory towards spectrality.¹⁰ The figures on form are more eye-opening in some cases than others, but they are always fun and informative. Perhaps not every sound collage piece charted over time by source sample would be interesting, as Wannamaker created for *Viet Flakes* (1966),¹¹ but it certainly does not detract from the analysis. But the main reason for owning these books is for the scrupulous graphics and tables describing tuning and harmonic systems. I intend to study these maps for years to come.

A final note for potential readers – there is no CD, but I had no trouble finding the works on YouTube, which Wannamaker noted.¹² And because Tenney's music is so epigrammatic, merging an acute sense for geometry and inevitability, sometimes a description of the compositional idea and perhaps a graphic or two already get at the beauty of the music as that is an integral part of it: the design, the organisation, the research. Wannamaker has done a tremendous job putting all the elements together for us to get inside the sound and process as time pulls us forward in Tenney's life. The Music of James Tenney stays true to Tenney and his ideas - transparent and thorough - and will help generations of composers continue to learn from him as a beloved teacher and trailblazing composer.

> Julie Zhu 10.1017/S0040298223001031

⁴ Ibid., p. 11.

- ⁵ Ibid., p. 101.
 ⁶ Robert Wannamaker, Toronto Audio Engineering Website, www.torontoaes.org/robert-wannamaker/ (accessed 11 December 2023).
- ⁷ Wannamaker, The Music of James Tenney: Volume 1, p. 144.

- ⁹ Ibid., p. 72.
- ¹⁰ Ibid., p. 133.

- ¹¹ Robert Wannamaker, The Music of James Tenney: Volume 2: A Handbook to the Pieces (Champaign, IL: University of Illinois Press, 2021), p. 58.
- ¹² Wannamaker, The Music of James Tenney: Volume 1, p. xiii.

⁸ Ibid., p. 269.