

Figures

- 1.1 Schoenberg's row tables for the Suite op. 25 [page 5]
- 4.1 Part of Schoenberg's set tables for the Suite op. 25, with a pitch-class map [60]
- 4.2 Schoenberg, Prelude op. 25, bb. 1–3 [61]
- 4.3 Schoenberg, Prelude op. 25, b. 13 [62]
- 4.4a and b Schoenberg, Prelude op. 25, bb. 17b–21 [64]
- 4.5a and b Schoenberg, Piano Piece op. 33a, bb. 1–9 [66]
- 4.6a and b Schoenberg, Piano Piece op. 33a, bb. 14–22 [69]
- 4.7 Schoenberg, Piano Piece op. 33a, bb. 32b–34 [71]
- 5.1 Berg's illustration of the row set in the *Lyric Suite*, borrowed from F. H. Klein (Berg 2014: 203) [77]
- 5.2 Berg's illustration of the all-notes and all-intervals chord [78]
- 5.3 Berg's illustration of axis of rotation generating the C major and G \flat chords and scales [78]
- 5.4 Pitch reduction of Berg's Violin Concerto, Part II, bb. 125–37; after Österreichische Nationalbibliothek Musiksammlung F21 Berg 27, fols. 20 v–21 r [84]
- 6.1 Webern, string trio fragment, M. 273, bb. 1–5 and 2{a}, accompanied by some analytical annotations, based on a transcription of the manuscripts and sketches as provided in Wörner (2003: 75 and 88); the sources are archived at the Paul Sacher Foundation, Basel [94]
- 6.2a, b, and c Klumpenhouwer network interpretation of Webern's string trio fragment M. 273, bb. 1–2 and 2{a}, as defined by Lewin (1990) and Klumpenhouwer (1991) [95]
- 6.3a, b, c, and d Webern, 'Dein Leib geht jetzt der Erde zu', M. 276: transcription of the sketch of the first melodic idea and twelve-tone row, 'Sketchbook I', p. 11, archived at the Morgan Library & Museum, New York, accompanied by some annotations highlighting the constitution of the interval vector space as illustrated in Table 6.1 [97]

- 6.4 Reconstruction (modified transcription) of Webern's fragment 'Dein Leib geht jetzt der Erde zu', M. 276, 'Sketchbook 1', p. 11, archived at The Morgan Library & Museum, New York [98]
- 6.5 a and b Webern, Symphony, op. 21/ii, final variation (reduction), accompanied by some analytical annotations [101]
- 6.6 Webern, Cantata No. 1, op. 29/iii, bb. 34–43 (reduction) [106]
- 7.1 Trichordal array composed into fifteen subsets of four elements [112]
- 7.2 Trichordal disposition in the last section of *Composition for Four Instruments* [114]
- 7.3 The opening block of a four-part all-partition array [117]
- 7.4 Duration patterns in *Composition for Four Instruments* [120]
- 7.5 Time-point rows and an aggregate realisation [121]
- 8.1 Pitch-class multiplication as described by Boulez. e^*c (ec) results from realising each one of the ordered pitch-class intervals that occur above the bass in e (the multiplicand) over each pitch-class of c (the multiplier) [126]
- 8.2 Annotated reproduction of pre-compositional table for 'Séquence', from Third Piano Sonata. Paul Sacher Foundation, Pierre Boulez Collection (Mappe H, Dossier 2 f,1) [127]
- 8.3a and b Transformation graph modelling the partitioned row and other levels of structure in 'Séquence', from Third Piano Sonata; partitioned row for 'Séquence' [129]
- 8.4 Summary of serial developmental techniques [131]
- 8.5 The consequence of transposing a chord by the retrograde of embedded pitch intervals (in registral space) is a common tone in pitch space [132]
- 10.1a and b *Composizione per orchestra [No. 1]* (1951). Sketch of the precompositional material for bb. 17–25, Archivio Luigi Nono (facsimile) [159]
- 10.2a and b *Polifonica–Monodia–Ritmica* (1951). Generation of 'degrading' intervallic material of the opening four-part canon of *Polifonica* (bb. 1–40) [162]
- 10.3 *Polifonica–Monodia–Ritmica* (1951). Four-part canon (bb. 1–40) built by reading each of the four derivations right to left, bottom up, beginning with sparse sounds and gradually filling the space (score, *Ars Viva*, excerpts: bb. 1–28) [165]

- 10.4 *Polifonica–Monodia–Ritmica* (1951). Serial permutations of the Afro-Brazilian rhythm ('Jemanjá') employed in the movement *Polifonica* (sketch, Archivio Luigi Nono; facsimile) [166]
- 10.5 Typescript of Luigi Nono with text selection and sketches for *Cori di Didone* (Archivio Luigi Nono) [170]
- 10.6 *Il canto sospeso*, no. 2: schematic rendering of the first three rotations of the parametric series [175]
- 10.7 *Il canto sospeso*, no. 2: the final outcome of Nono's compositional device as represented in the score (Ars Viva AV 50) [176]
- 10.8 Multi-parametric module prepared for *Sarà dolce tacere* (used in the second section, bb. 26–67) [179]
- 10.9 Representation of the various group types obtained from the transformation of an original group [182]
- 11.1 *Cantata*, 'Ricerca II', overlapping sets [184]
- 11.2 *Cantata*, sketch page showing serial variants [185]
- 11.3 *In memoriam Dylan Thomas*, diplomatic transcription of sketch page [187]
- 11.4 Vlad's chart of various forms of *Threni* row [191]
- 11.5 *Threni* condensed orchestral score, bb. 5–18. © 1958 by Boosey & Co. Ltd. All Rights Reserved. Reprinted by Permission. [192]
- 11.6 *Movements*, original (prime) row, split into hexachords α and β [195]
- 11.7 *Movements*, diplomatic transcription of sketch page, annotated with rotation of hexachord 6–7 [196]
- 11.8 *Elegy for J.F.K.*, diplomatic transcription of sketch page [200]
- 12.1a and b O. Messiaen, 'Île de feu 2' (scale subjected to permutation) and 'Île de feu 2', bb. 8–27. © Durand S.A. [208]
- 12.2 Michel Fano, *Étude for 15 instruments*, bb. 1–10 (sounds as written) [213]
- 12.3 Bo Nilsson, *Zwanzig Gruppen*, excerpt from the piccolo part [222]
- 17.1a and b Luo Zhongrong's tone row and *Picking Lotus Flowers*, bb. 1–8 [284]
- 17.2a, b, and c *Gagaku* melody, tone row, and Yoristsune Matsudaira, 'Variations', bb. 1–3 [292]

- 18.1 Anton Webern, draft of first variation, third movement of Piano Variations op. 27, bb. 12–23 [307]
- 18.2 Anton Webern, draft of fourth variation, third movement of Piano Variations op. 27, bb. 56–66 [307]
- 20.1 Milton Babbitt sketch, perhaps for *Composition for Synthesizer* (1961) or *Ensembles for Synthesizer* (1964), showing how music notation was translated into the five-channel parameters of the RCA Mark II. Columbia-Princeton Electronic Music Center Records, 1958–2014. Rare Book & Manuscript Library, Columbia University Libraries. Temporary inventory box CPEMC-00264 [351]
- 20.2 Yellow Magic Orchestra, ‘Technopolis’, sectional formal plan. Dotted line marks temporal halfway point. X = groove, A = Japanese melody, B = flute melody, C = trumpet canon [355]
- 20.3 Programming the MC-8 using numeric translations of pitch and duration at specific timepoints (for example, measures and beats or ‘steps’). Owner’s manual, p. 24 [357]