

List of Examples, Figures, and Tables

- Example 2.1: Guo Wenjing, *She Huo*, rehearsal number 6
- Example 2.2: Guo Wenjing, *She Huo*, rehearsal number 26
- Table 2.1: Chronology 1875–1965 of the institutions, works, and articles discussed in this chapter
- Example 2.3: Maurice Delage, *Ragamalika* (version for voice and piano, 1914), final section
- Example 2.4: Maurice Delage, *Sept Haï-kaïs* (1923/24), no. 5: “La lune d’automne...,” piano version
- Example 2.5: Maurice Delage, *Sept Haï-kaïs* (1923/24), no. 5: “La lune d’automne...,” orchestral version, final part
- Example 2.6: Henry Cowell, *Atlantis*, first movement, mm. 1–14
- Example 2.7: Shūkichi Mitsukuri, *Bashō kikōshū* (1930/31), no. 2: “Uma ni nete” (I slept on my horse)
- Example 2.8: Shūkichi Mitsukuri, *Bashō kikōshū* (1930/31), no. 6: “Shizukasa ya” (The stillness)
- Example 2.9: Fumio Hayasaka, *Piano Pieces (Piano shōhin shū)*, no. 11
- Example 2.10: Fumio Hayasaka, *Four Unaccompanied Songs to Poems by Haruo (Haruo no shi ni yoru yottsu no mubansō kakyoku)* (1943/44), no. 1: “Uguisu”
- Table 2.2: East West Music Encounter Conference, Tokyo 17–22 April 1961, Program and List of Participants
- Example 2.11: Henry Cowell, *Ongaku*, first movement – pitch structures
- Example 2.12: Toshirō Mayuzumi, *Bugaku*, part 1, mm. 1–5 (vln. 2)
- Example 2.13: Luciano Berio, *Sinfonia*, rehearsal number AA
- Example 2.14: Hans Zender, *Chief Joseph*, Act I, Scene 2b
- Table 2.3: Hans Zender, *Fūrin no kyō*; four versions of the Ikkyū poem *Fūrin* in Japanese, English, German, and Chinese (standardized transliteration: Modified Hepburn and Hanyu Pinyin)
- Example 2.15: Hans Zender, *Fūrin no kyō*, mm. 182–193, soprano part and schematic representation of the language structure of the first stanza
- Example 2.16: Hans Zender, *Fūrin no kyō*, mm. 194–196
- Example 2.17: Jorge Sánchez-Chiong, *Teatro Shanghai – Bühnenmusik*, second movement: *Descarga for sheng and Chinese ensemble*, mm. 911–913
- Example 2.18: Sandeep Bhagwati, *Illusies van harder en zacht for viola and sheng*, I, mm. 13–23
- Example 2.19: Simeon Pironkoff, *Fall/Wende for sheng and accordion*, I, mm. 1–5; III, mm. 40–42
- Example 2.20: Wolfgang Suppan, *Studie II for sheng and live-electronics*, section 1

- Example 3.1: He Luting, *Buffalo Boy's Flute* (*Mutong duandi*), mm. 1–11
- Example 3.2: Zhu Jian'er, Second Symphony op. 28, rehearsal number 16+3–6: main theme with the underlying words *weishenme, weishenme zheyang, weishenme zheyang dou* (“Why? Why so? Why is it such a struggle?”)
- Figure 3.1: Letter from Wolfgang Fraenkel to Arnold Schoenberg, 14 September 1949
- Figure 3.2: Fraenkel's portrait in the newspaper preview of the Shanghai Songsters' concerts, 18 and 20/2/1941 (*The Shanghai Sunday Times*, 2/2/1941)
- Figure 3.3: Program booklet for the concert at the Lyceum Theater Shanghai, 01/03/1946; Fraenkel conducted the China Symphonic Orchestra
- Table 3.1: Concerts 1939–1946, in which Wolfgang Fraenkel participated; lit. est., ANA 496, Sch. 5, “Programme” and “Zeitungsartikel und Kritiken”
- Table 3.2: Wolfgang Fraenkel's students in China
- Example 3.3: Sang Tong, *Yeijing* for violin and piano, p. 1
- Example 3.4: Sang Tong, *Zai na yaoyuan de difang* for piano, p. 1
- Example 3.5: Wolfgang Fraenkel, *Drei zweistimmige Praeludien*, p. 1
- Figure 3.4: Wolfgang Fraenkel, calligraphy from the appendix to the *Drei Orchesterlieder*; the poem “Spring Night” (*Chun xiao*) by Su Dong-Bo (Su Shi) is shown, which is set in the first movement; left: the English translation of each individual character is placed on the Chinese characters using transparent paper; right: calligraphy without transparent paper
- Example 3.6: Wolfgang Fraenkel, row analysis in the appendix of the score of *Drei Orchesterlieder*: first line: prime twelve-tone row; below: row forms and variants used in the movements 1 to 3
- Example 3.7: Wolfgang Fraenkel, *Drei Orchesterlieder*, no. 2 “Am frühen Frühlingstage,” score, mm. 25–27
- Table 3.3: *Molihua*, overview of sources, transcriptions, and editions
- Example 3.8: Nine Versions of *Molihua*, a. Kambra 1795 (based on Hüttner's transcription 1793/94), b. Barrow 1804 (Hüttner's transcription 1793/94), c. Ambros 1862 (source: Irwin 1797; *: A4 instead of B4 in third edition 1887, also in Irwin 1797), d. van Aalst 1884; e. Fassini-Camossi's music box (1920; recorded in the 1970s); f. Puccini, *Turandot* (1920–24), Act I, rehearsal number 19 (boys choir); g. *gong chepu* transcription (Chinese solmisation notation) from 1821 (after Qian, *Zhong guo jingdian mingge jianshang zhinan*, vol. 1, 103), h. modern transcription of the folk song from Jiangsu province (after *ibid.*, 101), i. Tan Dun, *Symphony 1997*, I. *Heaven*, mm. 129–143 (children's choir)
- Example 3.9: *Molihua* – “imperial” version: harmonizations by Puccini (*Turandot*, Act I, rehearsal number 48) and Tan Dun (*Symphony 1997*, I. *Heaven*, mm. 115–119)
- Table 3.4: *Molihua*, different versions of the song text (pinyin transliteration)
- Table 3.5: Polarization of Korean and European music in Isang Yun's radio program “Musik und Instrumente des alten Korea” (1963)
- Example 3.10: Tōru Takemitsu, *Distance* for oboe and *shō*, p. 5–6
- Example 3.11: Iannis Xenakis, *Pithoprakta* for string orchestra, two trombones, and percussion, p. 10
- Example 3.12: José Maceda, *Pagsamba* for 241 performers, II. “Gloria / *Luwalhati*,” Opening
- Example 3.13: José Maceda, *Udlot-Udlot* for 6, 60, 600 or more performers
- Example 3.14: José Maceda, *Suling, Suling*, mm. 266–269

- Example 3.15: Ge Ganru, *Yi Feng* for Violoncello solo; newly edited version of the handwritten score from 1983, p. 1–2
- Example 3.16: Yūji Takahashi, *Koto nado asobi*; “koto,” model A
- Example 3.17: Yūji Takahashi, *Koto nado asobi*; “-- nado asobi” for any instruments; models
- Example 3.18: Yūji Takahashi, *Tori mo tsukai ka*, orchestra model 1
- Example 3.19: Yūji Takahashi, *The Song of the Blue Sword*, Section D1
- Example 3.20: Yūji Takahashi, *Sangen sanju* for shamisen, beginning
- Example 3.21: Qin Wenchen, *He-Yi*, rehearsal number 5
- Example 3.22: Guo Wenjing, *Ye Yan*, Scene 1, entrance aria of Hong Zhu (soprano), accompanied by the *pipa*
- Example 3.23: Chen Xiaoyong, *Invisible Landscapes* for *zheng*, piano, percussion and ensemble, m. 42
- Example 3.24: Chen Xiaoyong, *Speechlessness, Clearness and Ease*, mm. 32–39
- Example 3.25: Zhu Jian'er, Sixth Symphony, third movement, left: after rehearsal number 15; right: before rehearsal number 19; Tape I: upper system: song of the Yi girls; lower system: Naxi song (above: women, below: men)
- Example 3.26: Eun-Hye Kim, *Kayagum*, III, mm. 14–19
- Example 3.27: Jin-Hi Kim, *Nong Rock* for *kōmun'go* and string quartet, I. *Nong*, mm. 1–5
- Example 3.28: Bonu Koo, *nah/fern* for *kayagūm* (upper system) and string trio, mm. 1–14
- Example 3.29: Bonu Koo, *nah/fern* for *kayagūm* (upper system) and string trio, mm. 154–160
- Example 3.30: Kunsu Shim, *cello/hören* (I), excerpt
- Example 3.31: Kunsu Shim, *Luftrand* for string trio, violin part, part A, no. 16–24
- Example 3.32: Toshio Hosokawa, *Koto-Uta* for singer and *koto*, rehearsal number 4
- Example 3.33: Yūji Takahashi, *Nasuno kasane*, excerpt
- Table 3.5: Three generation groups of Taiwanese composers
- Example 3.34: Lee Tai-Hsiang, *Yunxing sanbian*, III, staff systems 1–2
- Example 3.35: Lee Tai-Hsiang, *Yunxing sanbian*, I, staff system 6
- Example 3.36: Lee Tai-Hsiang, *Da Shenji*, II, *Chengren li* (Initiation Ritual), mm. 37–45
- Example 3.37: Lee Tai-Hsiang, *Da Shenji*, III, *Qi ge* (Worship), voices, mm. 55–63
- Example 3.38: Hsu Po-Yun, *Zhongguo xiqu mingxiang*, p. 27
- Example 3.39: Hsu Po-Yun, *Han Shi*, p. 2
- Example 3.40: Pan Hwang-Long, String Quartet no. 3, IV, mm. 144–147
- Example 3.41: Pan Hwang-Long, *Wujing, qingjing, yijing*, mm. 27–29
- Example 3.42: Lee Tzyy-Sheng, *Wang guo shi I*, mm. 80–83
- Example 3.43: Tung Chao-Ming, *Formosa*, II. *Wudao*, m. 63
- Example 3.44: Tung Chao-Ming, *Formosa*, I. *Fangwu luocheng ge*, p. 6
- Example 3.45: Tung Chao-Ming, *Die Gesichter des Buddha*, p. 20
- Example 4.1: Pitches playable on the *shō*; the diamond noteheads indicate the pitches that are only available on the modern instrument and are not used in traditional music.
- Example 4.2: Schematic presentation of the eleven *aitake* chords of the *shō* in traditional *tōgaku* repertoire
- Example 4.3: The beginning of the *shō* part in the famous piece *Etenraku* (in the mode *hyōjo*) from the *tōgaku* repertoire with the characteristic position changes known as *te-utsuri* (Miki, *Nihon gakkai hō*, 79)
- Example 4.4: Fingering table of the 17-pitched *shō* (Kō Ishikawa)

- Example 4.5: Toshio Hosokawa, “*Wie ein Atem im Lichte*” for *shō* solo, opening
- Example 4.6: Toshio Hosokawa, *Landscape V* for *shō* and string quartet, harmonic reduction and pitch-class set analysis
- Example 4.7: Klaus Huber, *black plaint* for *shō* and percussion, p. 8
- Example 4.8: Gerhard Stäbler, *JLIFE* for *shō*, *hichiriki* and glass chimes, III, ending
- Example 4.9: Chaya Czernowin, *Die Kreuzung* for *ū*, alto saxophone, and double bass, beginning of section C
- Example 4.10: Yūji Takahashi, *Mimi no ho*, score pages *shō* (left) and viola (right); under the instructions for the viola player (section C) one finds the final *shō* glissandi with which the piece ends
- Example 4.11: Yūji Takahashi, *Sōjō rinzetsu* for one or two *shō*, part 2; right: transcription in Western notation by the composer
- Example 4.12: Above: beginning of the *shō* part of *Etenraku* (in the *hyōjō* mode; transcription after Miki, *Nihon gakki hō*, 79); below: Helmut Lachenmann, *Das Mädchen mit den Schwefelhölzern*, scene 23: *Shō*, *shō* part, mm. 544–556
- Example 4.13: Above: chord progression *otsu-bō-jū-ge-otsu* from *Etenraku*; below: Lachenmann, *Das Mädchen mit den Schwefelhölzern*, scene 23: *Shō*, *shō* chords, mm. 516–518, 540, each with a graphic representation of the fingerings and fingering changes
- Example 4.14: Helmut Lachenmann, *Das Mädchen mit den Schwefelhölzern*, scene 23: *Shō*, analysis of the *shō*-sound fields; upper line: chord progression (gray highlights: quartal/quintal structures); lower line: analysis of the sounds according to pitch-class sets (white noteheads: whole tone segments)
- Example 4.15: Helmut Lachenmann, *Das Mädchen mit den Schwefelhölzern*, scene 23: *Shō*, simplified score reduction (without dynamics and articulations), mm. 508–539
- Example 4.16: Helmut Lachenmann, *Das Mädchen mit den Schwefelhölzern*, scene 23: *Shō*, simplified score reduction, mm. 540–582
- Example 4.17: Helmut Lachenmann, *Das Mädchen mit den Schwefelhölzern*, scene 23: *Shō*, simplified score reduction, mm. 583–646
- Example 4.18: Helmut Lachenmann, *Concertini*: analysis of the central sounds in the final section; first row: pitch sum with interval structure in semitones; second row: sequence of entries (below in brackets: included triads or four-note chords); third row: pitch content (pitch-class sets); fourth row: fifth/fourth structures
- Example 4.19: Helmut Lachenmann, *Concertini*, mm. 697–701
- Example 4.20: Helmut Lachenmann, *Concertini*, mm. 697–701, reduction of instrumental groups
- Example 4.21: Spectral analysis of the traditional *shō* chord *bō*, ordered according to loudness of the spectral components (duration of the sound: 5.532 seconds; source: CD of Miki, *Nihon gakki hō*); values above the notes denote the loudness in sone (average over the entire duration of the sound)
- Example 4.22: Spectral analysis of the final chord of Lachenmann’s *Concertini* (m. 699), comparison of the recordings by Ensemble Modern (2006, above) and Klangforum Wien (2009, below)
- Table 4.1: Helmut Lachenmann, *Das Mädchen mit den Schwefelhölzern*, scene 23: *Shō*, analysis of temporal divisions
- Table 4.2: Helmut Lachenmann, *Concertini*, final section, analysis of temporal divisions

- Table 5.1: Gradation of the areas between spoken voice and singing by George List with placement of the examples discussed by List
- Table 5.2: Gradations between speech and song in the four most important vocal genres of traditional Japanese music using Hirano's classification of *ginshō*, *rōshō*, and *eishō*
- Example 5.1: The three vocal delivery techniques *shirakoe*, *kudoki*, and *sanjū* in transcriptions of the *heikyoku* piece *Suzuki* (performer: Tsutomu Imai; transcription: Komoda, *Heike no ongaku*, 404–417)
- Example 5.2: Hanji Chikamatsu, *Imoseyama onna teikin* (Mount Imo and Mount Se. A Parable of Female Virtue). Section from the scene *Yama no dan* (Mountain Scene), based on a performance by Sumitayū Takemoto, recitation, and Kizaemon Nozawa, *futozao shamisen*
- Example 5.3: Tan Dun, *Silk Road* for soprano and percussion, 3, systems 1+2
- Example 5.4: Tan Dun, *Marco Polo. An Opera within an Opera*, Scene *Sea*; Part “Water,” mm. 35–70
- Example 5.5: Different instructions for voice articulation in Arnold Schoenberg's *Pierrot lunaire* op. 21, no. 3: *Der Dandy*, mm. 6–11, 15–20, 30–31
- Example 5.6: Hifumi Shimoyama, *Monolog* for *shamisen* and vocal soloist, p. 4, systems 1–3
- Example 5.7: Hifumi Shimoyama, *Breath* for three voices, two percussionists, and piano, five vocal articulations (a–e) from pages 3, 13, 11, 2, 7 of the score
- Example 5.8: Yūji Takahashi, *Unebiyama* for five-string zither and incantation, p. 1
- Example 5.9: Salvatore Sciarrino, *Luci mie traditrici*, variants of the “*sillabazione scivolata*”: [a]–[c] scene 1, *Il Malaspina* (baritone), mm. 15, 17, 29–30; [d], [e] scene 8, *La Malaspina* (soprano)/*Il Malaspina* (baritone), mm. 67–69, 83
- Example 5.10: György Ligeti, *Concerto for Piano and Orchestra*, third movement, mm. 1–9
- Example 5.11: György Ligeti, *Concerto for Piano and Orchestra*, third movement, mm. 83–85, layers
- Example 5.12: György Ligeti, *Concerto for Piano and Orchestra*, third movement, mm. 71–76, piano solo/xylophone
- Table 5.3: György Ligeti, *Concerto for Piano and Orchestra*, third movement, mm. 71–76: pulse layers, data in sixteenth note values (* = offset), ostinato pulses marked in bold
- Example 5.13: György Ligeti, *Concerto for Piano and Orchestra*, third movement, mm. 71–76, accent layers in three registers A, B and C; wedges: common accents piano and xylophone; circles: accents xylophone (without piano)
- Table 5.4: György Ligeti, *Concerto for Piano and Orchestra*, third movement, mm. 71–76, accent layers in three registers A, B and C, represented on the basis of an adapted Time-Unit Box System (TUBS), developed by Philip Harland
- Example 5.14: György Ligeti, *Concerto for Piano and Orchestra*, third movement, mm. 71–76, resulting rhythms of layers A (left) and C/B (right); accents: common accents piano/xylophone; circles: impulses xylophone
- Example 5.15: *E Juba* – beginning of a popular song from South Sudan (transcription: Gerhard Kubik; Kubik, “Musikgestaltung in Afrika,” 36)
- Example 5.16: *Tan'b'oloko se?* – song from a fairy tale of the Yoruba, West Africa (transcription: Gerhard Kubik; Kubik, “Musikgestaltung in Afrika,” 37)
- Table 5.5: Representation of Example 5.15 in the Time-Unit Box System (TUBS); metric periodicities of the patterns are marked by changing gray levels

- Table 5.6: Pulse speeds and metric patterns in Example 5.15
- Table 5.7: Representation of Example 5.16 in the Time-Unit Box System (TUBS); metric periodicities of the patterns are marked by changing gray levels
- Table 5.8: Pulse speeds and metric patterns in Example 5.16
- Table 5.9: Categories of metric dissonance in Classical-Romantic music
- Example 5.17: Chaya Czernowin, *Excavated Dialogues – Fragments*, second movement, a. mm. 1–3 (string instruments); b. mm. 7–19 (*bangdi*/oboe); c. mm. 37–42 (tutti)
- Example 6.1: Christian Utz, *Interference*, first movement: chord structure of the *sheng*
- Example 6.2: Christian Utz, *Interference*, third movement, p. 26
- Figure 6.1: Structural grid of rhythmic periods for Christian Utz, *the wasteland of minds*, mm. 1–20
- Example 6.3: Christian Utz, *the wasteland of minds*, tuning of the *zheng*. The accidentals marked with an arrow indicate a retuning of the pitch by 30 cents (higher/lower). In the score (see Ex. 6.5), the other parts with the same notation show a quartertone offset (+/- 50 cents).
- Example 6.4: Christian Utz, *the wasteland of minds*, compositional sketches of the harmony
- Example 6.5: Christian Utz, *the wasteland of minds*, mm. 43–45 (end of the first section)
- Example 6.6: Christian Utz, *Glasakkord*, mm. 1–17, *shō* part; chord progression: 7-2-2 pitches
- Example 6.7: Christian Utz, *Glasakkord*; “glass chords” of the strings obtained by spectral analysis of glass sounds
- Example 6.8: Christian Utz, *Glasakkord*; “glass chords” of the strings: realization in the score, mm. 1–7
- Example 6.9: Christian Utz, *Glasakkord*, mm. 151–155
- Example 6.10: *Sangnyōngsan* from the *Yōngsan hoesang* suite (Korean court music): first verse, *kāk* 2+3 (*Anthology of Korean Traditional Music*, vol. 5, edited by National Classical Music Institute, Seoul, n. d.)
- Example 6.11: Christian Utz, *together//apart*, mm. 4–6
- Example 6.12: Christian Utz, *together//apart*, mm. 84–87
- Example 6.13: Christian Utz, *Zersplitterung*, first interlude (p. 5), reference of *Saeya, saeya* (whistled by the pianist)
- Example 6.14: Transcription of *pyōng sijo* by Chang Sa-hun, “Art Song.” In *Survey of Korean Arts – Traditional Music*, Seoul 1973, 194 (quoted in Reese, “Gattungen des Kunstliedes,” 106)
- Example 6.15: Christian Utz, *Zersplitterung*, beginning of the second part (p. 6)
- Example 6.16: Christian Utz, *Zersplitterung*, second interlude; breakage of the glass plate (p. 11).
- Table 6.1: Christian Utz, *Zersplitterung* (2002), Libretto
- Table 6.2: Christian Utz, *telinga – mulut* (ears – mouth) (2009)
- Example 6.17: Christian Utz, *telinga – mulut*, tone systems
- Table 6.3: Christian Utz, *telinga – mulut*, synopsis. Line numbers for the poem refer to the English translation (see Table 6.2), although the verse structure differs from that of the Indonesian original in some instances.
- Example 6.18: Christian Utz, *telinga – mulut*, beginnings of sections A1 (mm. 1–6), A2 (mm. 72–79), A3 (mm. 186–192), A4 (mm. 238–243)
- Example 6.19: Christian Utz, *telinga – mulut*, section B2, mm. 177–185

- Example 6.20: Christian Utz, *telinga – mulut*, section A4.2, mm. 275–282
- Figure 6.2: Christian Utz, *the wasteland of minds*, mm. 1–8, sonagram and rudimentary transcription; the graphic elements suggest four different modes of listening: “analytical” (small gray boxes and dotted lines), “holistic” (large black box around the entire sonagram excerpt), “cue-oriented” (arrows and vertical lines), and “presentist” (mid-size gray boxes)
- Figure 6.3: A map of musical simultaneities
- Example 6.21: Anton Webern, *Symphonie* op. 21, second movement, variation V; the structural model explored in Utz, *walls* for ensemble and electronics
- Example 6.22: Christian Utz, *walls* for ensemble and electronics, opening, mm. 1–9
- Example 6.23: Christian Utz, *walls* for ensemble and electronics, beginning of the closing section, mm. 144–151

