view" – a word that appears repeatedly in Toshio Hosokawa's statements with good reason.[48] But not only that extensive reference to the canon and myth of the *shō*, designed by Hosokawa's own music, produces a worldview, the term also applies to the myth-critical counter-positions described above, especially to those that implicitly pretend to have overcome the dimension of worldviews entirely, such as John Cage's Number Pieces, instead submitting to the facts of the sounds in the attempt to escape the myth.

A way out of this polarization between a reproduction of canonized repertoire or mythological aura on the one hand, and the mythology of a "pure sound" on the other, is suggested by those reflective positions outlined here, which critically take up the myth of the *shō* but neither negate its cultural historicity nor absolutize it aesthetically. Of course, it is inevitable that they, too, internalize the "myth" of the instrument, historically shaped in the unification of the *gagaku* repertoire since the mid-nineteenth century and its aestheticist essentialization. What is decisive, however, is that they allow this myth to be experienced in perspective, while deforming, perhaps distorting previous practice, continuing to rethink and transform the *shō* in a "hypoleptic" manner. Perhaps this is a measure of intercultural composition as a whole, which is certainly attained by the following, more thoroughly discussed example of *shō* reception.

2. The *shō* as a Medium of Alterity and Self-Referentiality in Helmut Lachenmann's Music

Aura and Alterity

When the chords of the Japanese *shō* sound in the penultimate scene of Helmut Lachenmann's *Das Mädchen mit den Schwefelhölzern* (The Little Match Girl, 1990–96), or when we hear the breathy wind chords in the final section of his large ensemble work *Concertini* (2004–05), these moments undoubtedly bring about what the composer has often described in his listening phenomenology: a conscious *hearing-in* ("Hin-Hören") takes place, a moment that makes the act of listening conscious and makes it possible, perhaps even inescapable, to listen sensuously for the sake of listening itself, to break out of the "listening grammar" that seemed unproblematic a few seconds earlier. When *hearing-in*, one questions the rules of this grammar, and with it the aesthetic and cultural agreements on which it is based (→ I.1).[49]

Such an overt break with the directly preceding sound world refers in particular to that auratic component of the musical material, which Lachenmann accords a central position as the

48 "And to paint or sing this vivid line – I always need that mother chord and it can be like a very tight silence. – And for me this is like a worldview: there must always be something in the background and there must be two different layers. That can be silence, that can be flowing sounds – and a line. Analogously, one can call these layers: universe and human, nature and human." ("Und um diese lebendige Linie zu malen oder zu singen – dazu brauche ich immer diesen Mutterakkord und der kann auch wie ein sehr dichtes Schweigen sein. – Und das ist für mich wie eine Weltanschauung: Es muss auch im Hintergrund immer etwas da sein, und es müssen zwei verschiedene Schichten entstehen. Das kann Schweigen sein, das können fließende Klänge sein – und eine Linie. Analog kann man diese Schichten nennen: Universum und Mensch, Natur und Mensch." Hosokawa quoted in Sparrer, "Toshio Hosokawa," 8.)

49 A theory of "hearing-in" as an oscillation between metaphorical and non-metaphorical listening has been developed by Andy Hamilton in correspondence to Richard Wollheim's theory of "seeing-in" (see Hamilton, *Aesthetics and Music*, 95–111 and Hamilton, "The Sound of Music," 171).

"bearer of familiar experiences in existential reality,"[50] whose significance for his work he emphasized early on (→ IV.1). In his studies on "event and aura," Dieter Mersch has shown that a perception of the auratic in the arts is closely linked to the principle of alterity (→ I.3) as developed by Emmanuel Lévinas, among others.[51] Mersch attempts to understand auratically qualifiable processes of perception by an "ek-static" basic principle, by "encountering an 'outside of me,' which is part of the tendency to limit or confuse my concepts and signification schemata and to overthrow them."[52] It is thus central to this understanding that, on the basis of the principle of alterity, this form of perception retains a fundamental riddle-character (in Lévinas: "enigma"), thereby "letting the form suspend itself in favor of the act of appearance."[53]

This connection between breaking with an established and dominant state, the resulting discontinuity, and the categorial otherness of the newly emerging state can be experienced again and again in Lachenmann's music and serves the composer as a means of advancing to the concrete utopia of a "liberated perception."[54] It quickly becomes audible and visible that, however this alterity is enacted (e.g., through musical structure, timbre, tempo, polyphony/density, sound-to-sound relationships, cultural and narrative contexts), polarities that initially seem "incompatible" emerge as "dialectical" in the further unfolding of events. Thus the aspect of the auratic and magical is successively captured by refractions and critique that Lachenmann considers key to an understanding of the European concept of art.[55] Not least, these forms of mediation presuppose the awareness and the possibility of musical self-referentiality, in which musical language skills constantly question themselves rather than being simply "set."[56] So it is hardly coincidental that, in *The Little Match Girl*'s *shō* scene, the initially "solemnly" enacted unbroken sound field (stretched to 76 quarter notes) – at whose center is the perfect fourth B4–E5 – is contradicted in the second half of the scene by its "negative," a sound field that is only two quarters longer in length, in which the *shō* is completely silent and which is dominated exclusively by "perforated" string sounds created by increased bowing pressure. Similarly, it can be argued that the music of this scene from the beginning is subjected to a double (cultural and historical) coding, and therefore the musical material, in addition to a constant self-interrogation (on the "intra-opus" level), continuously refers to different con-texts (or "extra-opus" levels).[57] Therefore, this music deliberately bypasses a simplistic construction of alterity.

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50 Lachenmann, "Vier Grundbestimmungen des Musikhörens," 61 ("Trägerin von vertrauten Erfahrungen aus der existentiellen Wirklichkeit").

51 Mersch, *Ereignis und Aura*, 14–15, 50–52, as well as Lévinas, *Alterity and Transcendence*.

52 Mersch, *Ereignis und Aura*, 27 ("Begegnung mit einem 'Außer-mir', das in der Tendenz steht, meine Begriffe und Signifikationsschemata zu entgrenzen oder zu verwirren und umzustürzen").

53 Ibid., 50–51 ("wo sich die Form zugunsten des Erscheinens selbst suspendiert"). See Lévinas, "Phenomenon and Enigma."

54 Lachenmann, "Zum Problem des Strukturalismus," 90 ("befreite Wahrnehmung"). See also Lachenmann, Gadenstätter, and Utz, "Klang, Magie, Struktur," 19.

55 See Lachenmann, Gadenstätter, and Utz, "Klang, Magie, Struktur," 27–28 and Lachenmann, "East meets West?," 87–90.

56 This aesthetic demand can be traced in particular to Lachenmann's well-known debate with Hans Werner Henze, see Lachenmann, "Offener Brief an Hans Werner Henze."

57 The distinction between "intra-opus" and "extra-opus" knowledge was introduced, in particular, in the framework of cognitive-oriented currents of music theory, to describe different levels of reference formation that play a role in listening to and hearing music (see above all Narmour, "Hierarchical Expectation and Musical Style"). Of course, the distinction can easily be transferred to an "co-composing" "implicit listener," as it were,

The "staging" of the Japanese instrument follows a general aural dramaturgy that Lachenmann has repeatedly implemented and developed in a wide variety of situations and with the most diverse sound resources. Thus the staging seems, at first, to have little to do with the fact that the instrument has a different cultural context (Japanese *gagaku* court music) than other instruments and voices (of European origin) "deconstructed" by Lachenmann. At first sight, this assessment is supported by several statements made by the composer in recent years, which demonstrated a sustained and fundamental skepticism about the possibilities of musical "interculturality" (→ I.3, II.6).[58] Legitimate doubts, however, can be raised against the assumption that the treatment of the *shō* here is little more than a tried and tested means of extracting a new "effect" via Lachenmann's fundamental strategy of "refraction," supposedly merely serving as the negation of the negation of a sound ideal, which can be represented very aptly by the unbroken, "pure," fusing sound of the *shō*. In fact, Lachenmann himself hinted that he had resorted to the "scale" of the *shō* not only in his "opera" but also at the end of his ensemble work *Concertini*,[59] implying that connections with traditional repertoire and the performance practice of the instrument (→ IV.1) – and not just a celebration of its sounding aura – are intended.

Against this background, this chapter pursues the goal of analytically reconstructing structural and narrative contexts in which the principles of alterity and self-referentiality, as well as "extra-opus" and "intra-opus" references, materialize in the final stages of *The Little Match Girl* and the ending of *Concertini*. The discussion follows a series of short, loosely interconnected reflections on "sound organization," "split sound and structural sound," "temporal sections," "narrativity," and "interculturality."

Sound Organization

In the 1970s, Lachenmann critically remarked that the dialectic between consonance and dissonance was "infinitely expandable," and that it would be possible that

> any musical experience, even if it is completely alien, can be attributed to the tonal principle as an experience of dissonance whose excitement increases as it moves away from the tonal middle toward whatever periphery. In other words, there is nothing that cannot be grasped with the categories of tonality and is correspondingly usable.[60]

In compositional terms, Lachenmann has addressed this "claim to totality" of the concept of tonality by entering the "lion's den" and constantly picking up, deconstructing, and reinventing genres, style characteristics, pitch structural models, and music-theoretical fundamentals of tonal music – analogously to the "traditionalism" in the institutional contexts of his composing (chamber music, orchestra, opera). In the same vein, Daniel Kötter has shown how, in *The Little Match Girl*, starting from a distanced, quasi-quotational treatment of the "debris field" of tonal

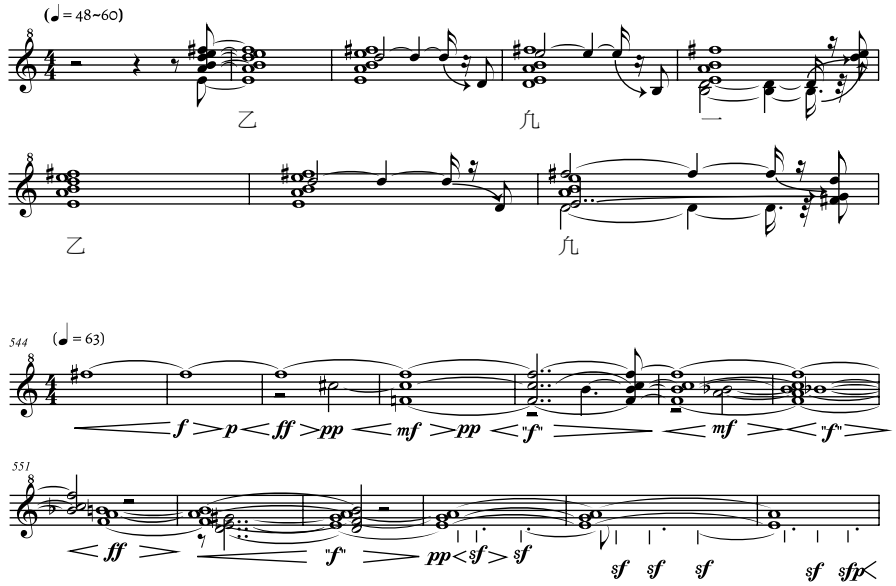
that is, to more or less conscious reference formations in the context of the compositional process. See Utz, "Das zweifelnde Gehör."

58 See particularly Lachenmann, "East meets West?"

59 Ibid., 84.

60 Lachenmann, "Vier Grundbestimmungen des Musikhörens," 55 ("jegliche Musikerfahrung, und sei sie noch so fremdartig, dem tonalen Prinzip zuzuordnen als Dissonanzerfahrung, deren Spannungsreiz in dem Maß noch zunimmt, wie sie sich von der tonalen Mitte weg in welche Peripherien auch immer entfernt. Anders gesagt: Es gibt nichts, was mit den Kategorien der Tonalität nicht erfaßbar und entsprechend nutzbar wäre.")

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*



"flotsam," elements from the world of tonality become more and more "self-evident means of composition."[61] Lachenmann has emphasized in this context that his basic compositional techniques of such a game of culturally familiar material layers, such as musical intervals ordered according to constant (equidistant), continuous (successively increasing), or cyclical (symmetrical) principles, were developed as early as the 1960s.[62] With his "Kadenzklang" (cadential sound), Lachenmann bases his "sound types," conceived in 1963–66, on a musical archetype whose simple progression from calm to motion to calm, in addition to the acoustic transient-decay process, also associates common "primordial models" of tonality, as developed, among others, by Adolf Bernhard Marx or Ernst Kurth.[63] In contrast to the monistic concept of tonality, Lachenmann's post-structural cosmos of music, of course, constantly changes the system of reference and thus the imaginary "middle ground" from which movement emerges, and to which it flows back.

61 Kötter, "Die Irreführung der Oper," 45 ("Trümmerfeld," "Hörreste," "selbstverständliche[] Mittel[] der Komposition").

62 Lachenmann, Gadenstätter, and Utz, "Klang, Magie, Struktur," 46.

63 See Lachenmann, "Klangtypen der Neuen Musik," 1–8; Marx, *Die Lehre von der musikalischen Komposition*, vol. 1, 23; Kurth, *Grundlagen des linearen Kontrapunkts*, 43. Both theorists start from the major scale to exemplify their model of motion. In Marx, the octave (e.g., C3–C4) represents the principle of calm, the intermediate stages (e.g., D-E-F-G-A-B) the principal of motion. For Kurth, who subdivides the octave into the tetrachords C-F and G-C, F represents a first target and resting point, anticipated by the intermediate leading tone E; with G, a new ascent begins. Overall, the upper tetrachord is more tense than the lower tetrachord for Kurth because of the leading tone B.

In the *shō* scene, one of these systems of reference is undoubtedly the instrument itself, whose uniqueness is underlined not least by the fact that it does not appear once in any of the preceding 22 scenes. It is unmistakable that Lachenmann starts from the traditional playing style of this instrument: the gentle rise and fall of the sound follows the rhythm of the breath, as in the *tōgaku* repertoire of *gagaku*. Thus, Lachenmann brings a significant organological characteristic of the *shō* to the listener's awareness – its ability to create an uninterrupted sound field. At the same time, an "intra-opus" layer is emphasized, in that this continuous sound takes up the model of a "potentially infinite song" that was introduced in previous scenes, in particular by the soloistic vocal parts.[64]

The finger position changes (*te-utsuri*) between the chords and the changes between inhaling and exhaling (*ikigahe*) in traditional *shō* performance practice strictly follow codified rules, as shown above (→ IV.1). A comparison of the *shō* part from the most famous *tōgaku* piece – *Etenraku* – with a section of Lachenmann's *shō* part (mm. 544–556) clearly reveals as a common principle the successive addition or removal of individual tones during the swelling and decay process (Ex. 4.12). "Cadential sound" and traditional *shō* phrasing thus here form a double coding of Lachenmann's sound design.

While the changes of color – and thus the chords – in *tōgaku* are intimately connected with the complicated arrangement of the 15 pitches on the instrument and the traditionally codified assignment of fingers to tones – every *te-utsuri*-change seems to emerge from this haptic performance feel (→ IV.1) –, Lachenmann has obviously taken little account of the traditional fingering technique in constructing his sounds, as a conversation with soloist Mayumi Miyata confirmed.[65] Example 4.13, top line, shows the sequence of the chords *otsu-bō-jū-ge-otsu* from *Etenraku* including a schematic representation of the underlying fingering, and the bottom line shows Lachenmann's *shō* chords in measures 516 to 518 and 540.[66] To play these chords, Mayumi Miyata needed to replace the C6-tone bamboo tube to have what is normally an inside hole on the outside of the instrument, as well as developing many unconventional fingering techniques, including the non-standard covering of several holes with the same finger. Lachenmann calls for a similarly radical change in the playing habits of the Japanese instrument as he usually does for European instruments, but leaves its familiar traditional timbre intact.

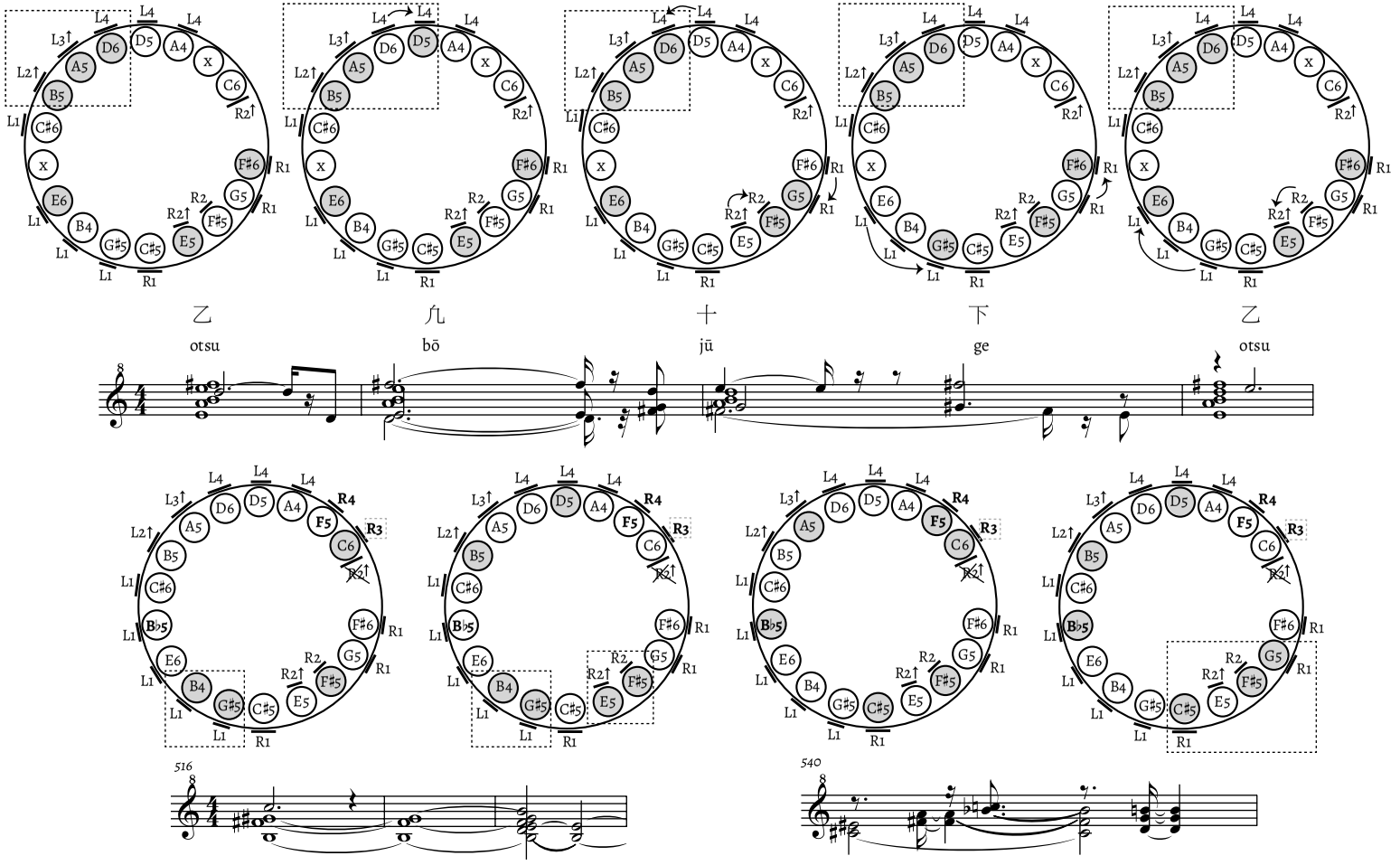
The Pythagorean tuning of the *shō* is based on a cycle of perfect fifths, which also forms the structural basis for the *aitake* chords (→ IV.1). A structural reduction of the *shō* sounds in Lachenmann's composition (Ex. 4.14) also reveals numerous quartal and quintal structures (shaded in gray), culminating in the aforementioned "celebrated" fourth B4-E5 (mm. 518–532), in which oboes, violas (later clarinets) and trumpets are added to the *shō*. This fourth acquires special meaning, since it is played for 57 quarter notes without any accompaniment. Later, the quintal-quartal structures even allow a purely pentatonic chord to emerge that can be regarded as a slightly "compressed" variant of the *bō-aitake* (m. 622, based on the pentatonic scale E-F♯-G♯-B-C♯; instead of D5-E5-A5-B5-E6-F♯6 [*bō-aitake*], Lachenmann uses F♯4-G♯4-B4-C♯6-E6-F♯6). This pentatonic harmony, introduced after the aforementioned expanded field of "per-

64 See Kötter, "Die Irreführung der Oper," 41.

65 Personal conversation with Mayumi Miyata, Tokyo, 29/3/2008.

66 The fingerings are given by means of the usual abbreviations l1: left thumb, l2: left ring finger, etc. Small vertical arrows next to the finger symbols indicate raised finger holes. Arrows between finger symbols represent the finger movement from the preceding chord (*Etenraku*). Dashed framed finger symbols denote fingerings in which several holes must be covered by the same finger (Lachenmann). The bamboo tube for the tone C6, which is to be replaced due to the fingering structure in the chords of Lachenmann, is also shown in the diagram.

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)*

forated sounds," which entirely dispenses with the sound of the *shō* over a total of 78 quarter notes, has a special auditory-psychological significance.

In addition, one can detect formations of interval structure in the *shō* chords and in the orchestra characteristic of Lachenmann's harmony during the 1980s and 1990s,[67] such as triadic stratifications at the interval of the (major or minor) second or tritone (indicated in brackets under the chords in Example 4.14), "continuants" (continuous 5-4-3-2 semitones in measure 532), "constants" (such as the numerous fragments of the whole-tone scale, marked in the score example by white noteheads), and cyclic interval arrangements (2-3-2-3-2 in measure 622). Such configurations can already be partially found in the *aitake* chords (→ IV.1, Ex. 4.2). For example, continuous interval sequences are found in the chord *ge* (2-1-2-3-4) and the chord *bi* (1-2-[1-2]-4 [→ 1-2-3-4]); the chords *gyō* (2-3-2-2) and *hi* (2-1-2-2-2) contain whole tone segments; triads superimposed by seconds are contained in the chords *jū* (D major/E minor) and *hi* (A minor/B minor); and a cyclical structure in particular can be found in the chord *bō* (2-5-2-5-2).[68] In the harmonic structures, therefore, one can equally speak of unmistakable double codes that permit two or more different interpretations.

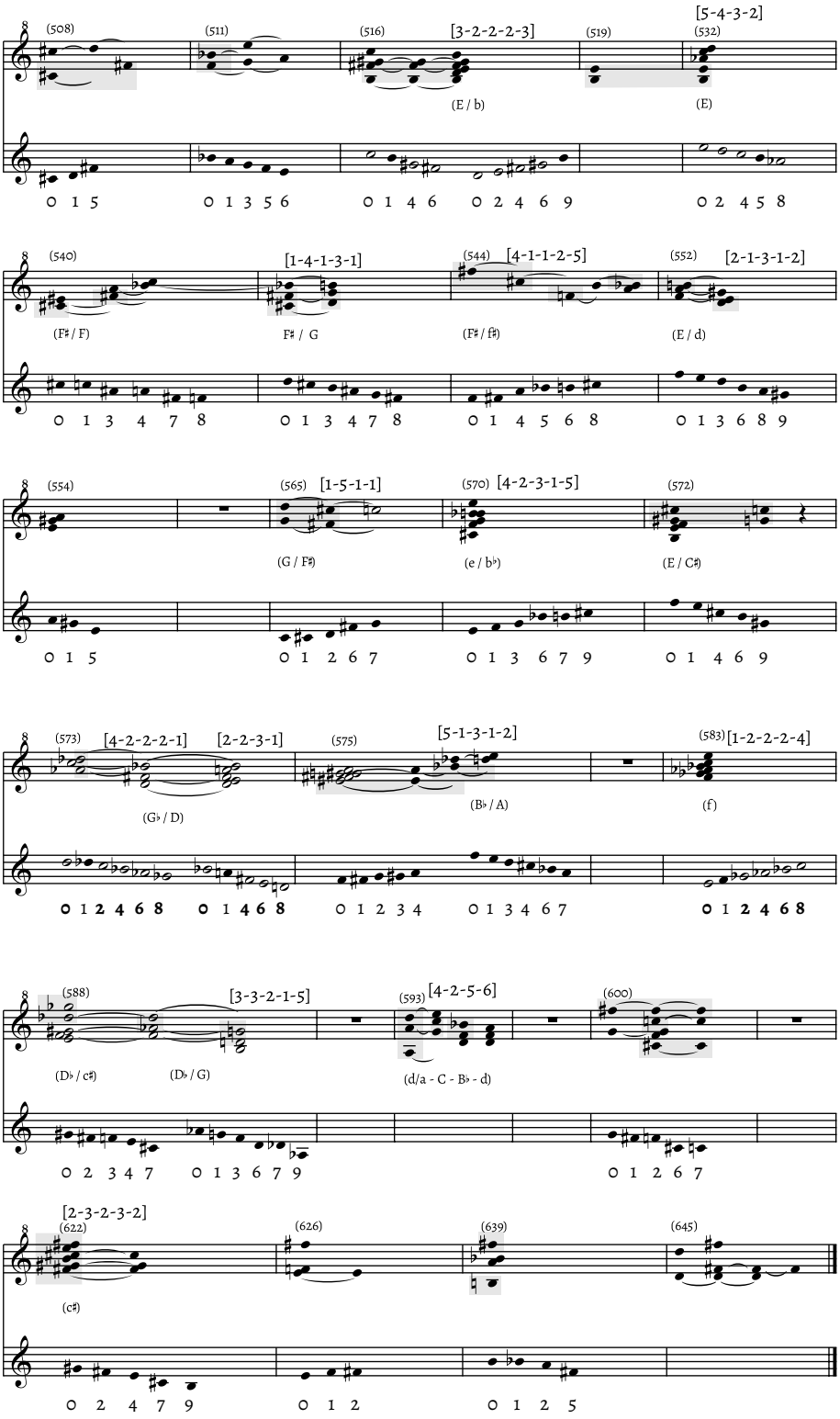
This ambiguity of sound design is intensified if one includes the orchestral part in the analysis, which, according to Lachenmann, forms a "'court' around the silvery removed sound of the 'Shō'"[69] and is to be understood as complex, quasi-spectral extension of the *shō* sounds. The orchestra also establishes an echo-like sound processes continuing from the preceding scene (no. 22: *Himmelfahrt* [Ascension]) and, toward the end of the scene, where increasingly noisy structures are developed, transforms into the sparse sonority of the final scene (no. 24: *Epilog ["Aber in der kalten Morgenstunde"]* / Epilogue ["But in the cold dawn"]). In the interplay of *shō* and orchestra, in particular until around measure 608, there is an abundance of additional harmonic layers of meaning (Ex. 4.15–4.17).

By adding the orchestra, the first sound field of the *shō* (mm. 508–509) is interpreted in the sense of a D major cadenza ($A^{(7)}$-D), while the second sound field (mm. 511–514) is characterized by an intertwined sequence of fifths $B^{(7)}$-E-A (Ex. 4.15). At the same time, however, these orchestral additions are to be understood as deformed overtone spectra, in keeping with another basic harmonic technique frequently used by Lachenmann. The following enharmonically-mediated (G♯-A♭, D♯-E♭) echo of two quartal chords C-F-B♭ / E♭-A♭-D♭ (mm. 513–516), stratified at a distance of a minor third, points to the large quartal field from measure 518 (the fourth is probably the most conspicuous interval from the beginning, since the second *shō* phrase enters on the fourth F5-B♭5, m. 511, anticipated by the piano in the same octave, m. 509). The fourth A♭5-D♭6 in the *shō*, which marks the end of the quartal field in measure 532, thus refers back to the echo of measures 513–515. The resonances of bowed cymbals (mm. 514–519), which appear for the first time with that echo, also return here and add a long decay to the quartal field (mm. 532–540).

67 See, among other, Zink, "Strukturen," 39–41 and Cavallotti, *Differenzen*, 114–124. See also footnote 62.

68 Interval data here and subsequently are provided in semitones.

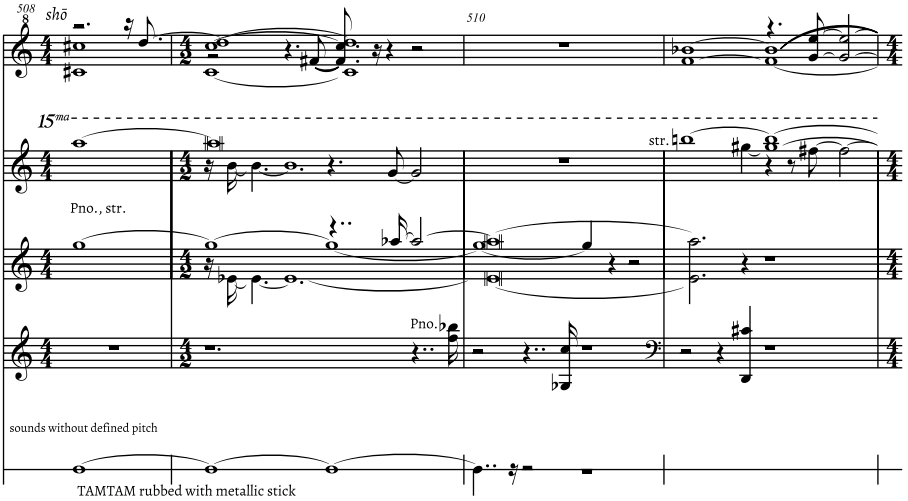
69 Lachenmann, "A Musical Plot," 16 (see the section *Narrativity* below).



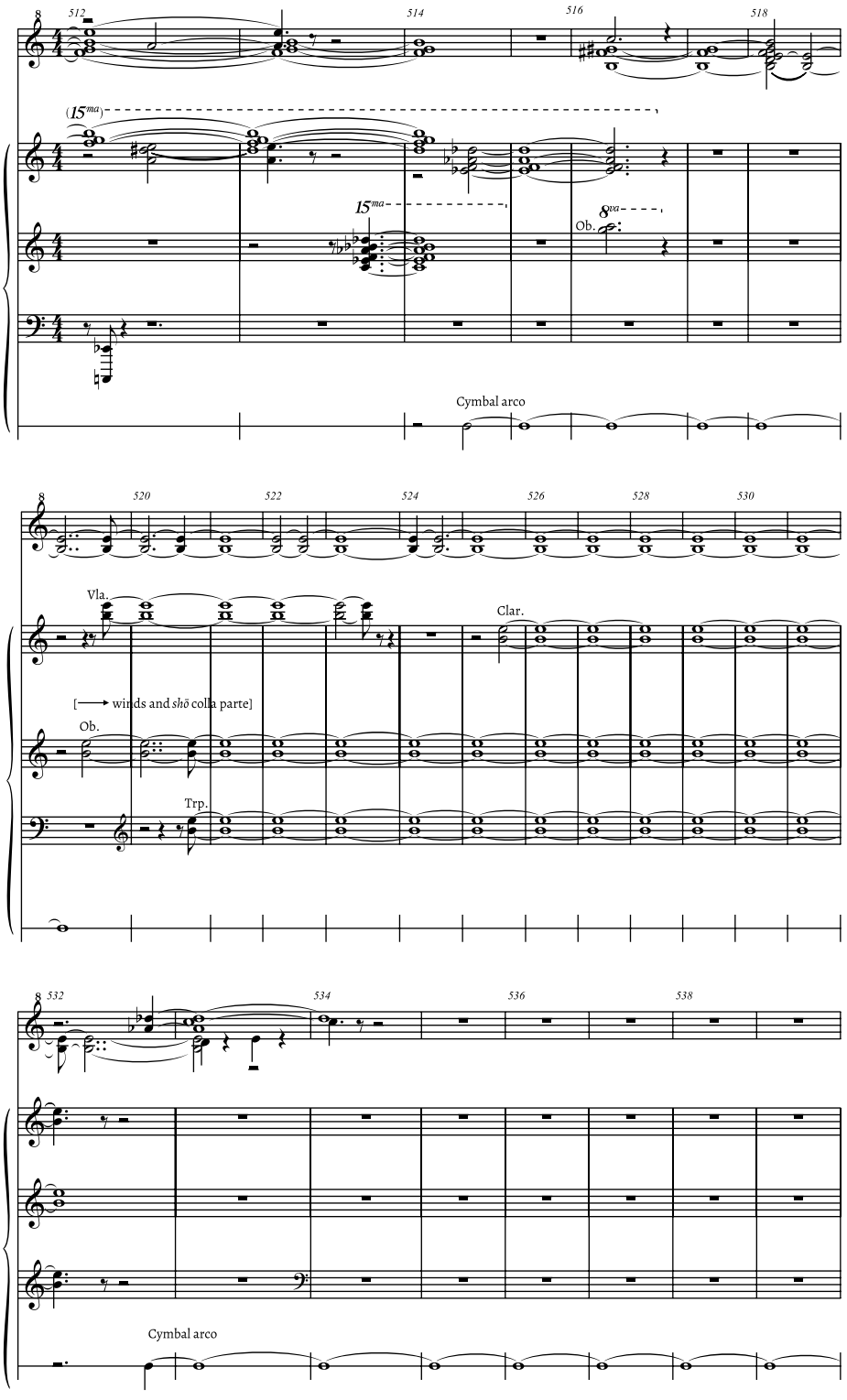
In measure 540 (Ex. 4.16) the cymbal resonances transform into a C8 in the violins, which remains as a reference pitch over 20 measures and frames a series of descending interval sequences, starting from the impulsive F major/F♯ major/G major progression exposed in the *shō*. These descending interval chains in celesta, electric organ, and vibraphone are prefigured in the preceding scene 22, starting again from intervals of a fourth (first F7-B♭7 in measure 544, a remote echo of the fourth F5-B♭5 in measures 509 and 511) and swirling downward in a cyclical sequence twice at the beginning, before the intervals gradually decrease, starting from the middle position, down to the harp's low-pitched noise-like second B♯1-C♯2. This second resonates in the reference tone lowered to C(5) (Viola) and then in the toneless strings. The entire progression is embedded in continuously narrowing interval sequences:[70] 5[-1-]4[-1-]3[-1-]4 // [-1-]5[-1-]4[-1-]3[-1-]4 // [-1-]5[-1-]4[-1-]5[-1-]4[-1-]3[-1-]2[-1-]1; mm. 544–548 / 549–552 / 556–561). The fifth sound field of the *shō* (mm. 544–556) sets up a highly complex harmonic relationship with the reference pitch C8, the air resonances of the brass (which according to the score are to be "exactly synchronized with the *shō*"), and the interval chains of the bell-like instrumental sounds. Thus, for example, the intervallic structure of the *shō*'s six-note chord completed in measure 549 – 4-1-1-2-5 (or including the celesta's A5-D6 4-1-[1-2-]1-4) – may be interpreted as a variant of the symmetrical interval chain 4-1-3-1-4 of the celesta group; and the second six-note chord of the *shō* completed in measure 552 thus may appear as a compressed variant of this interval chain (**2**-1-3-1-**2** vs. **4**-1-3-1-**4**), with the celesta's third E5-G♯5 (m. 551) being implied in the *shō*'s harmony.

Once again a pulsating, rapid sequence of triads in measure 565 (G major/F♯ major, with the triad's thirds supplied by the flutes) ruptures the music, opening up into the glaring high fourth C6-F6, probably as an echo of the last phrases of the vocal solo parts from the previ-

Example 4.15: Helmut Lachenmann, ***Das Mädchen mit den Schwefelhölzern****, scene 23:* ***Shō****, simplified score reduction (without dynamics and articulations), mm. 508–539*

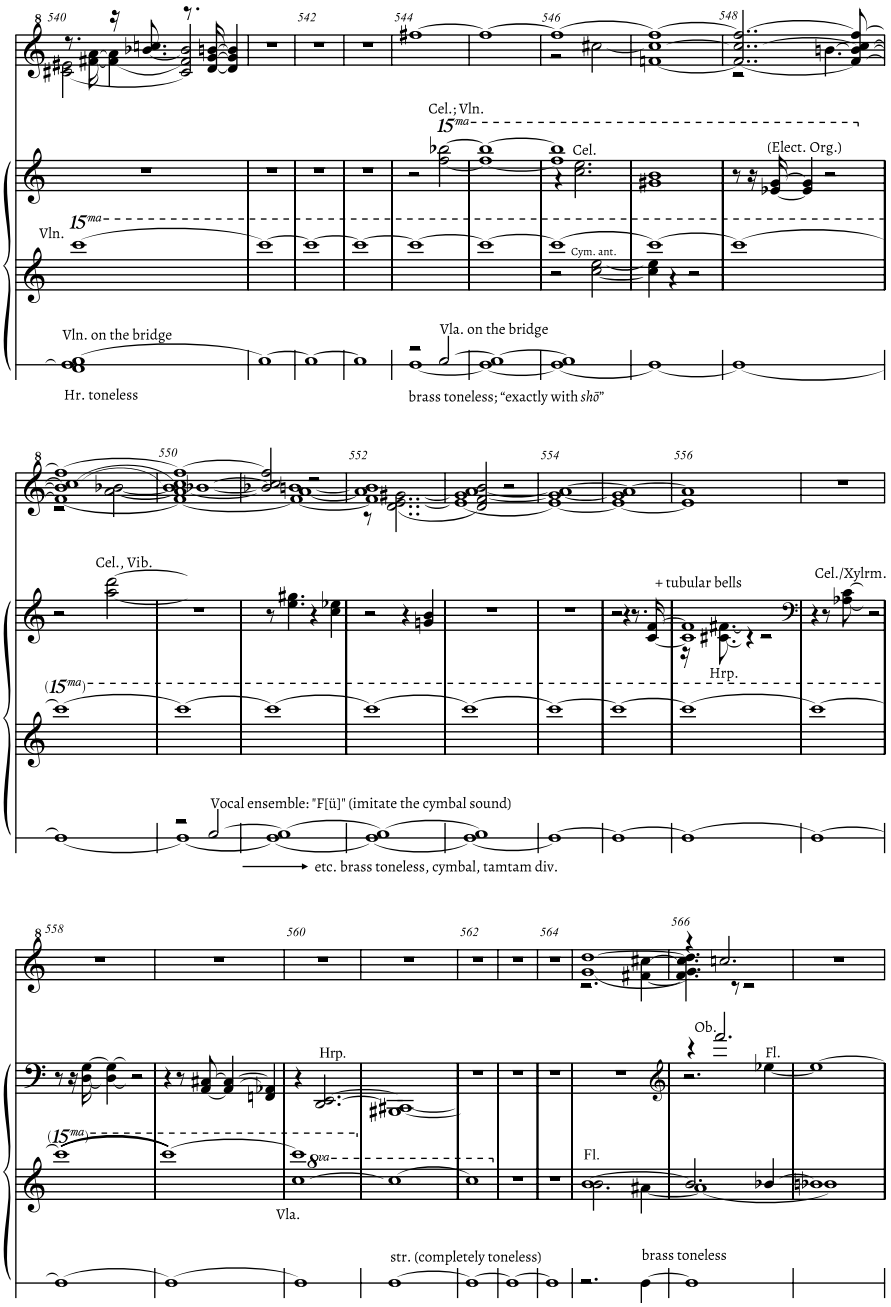


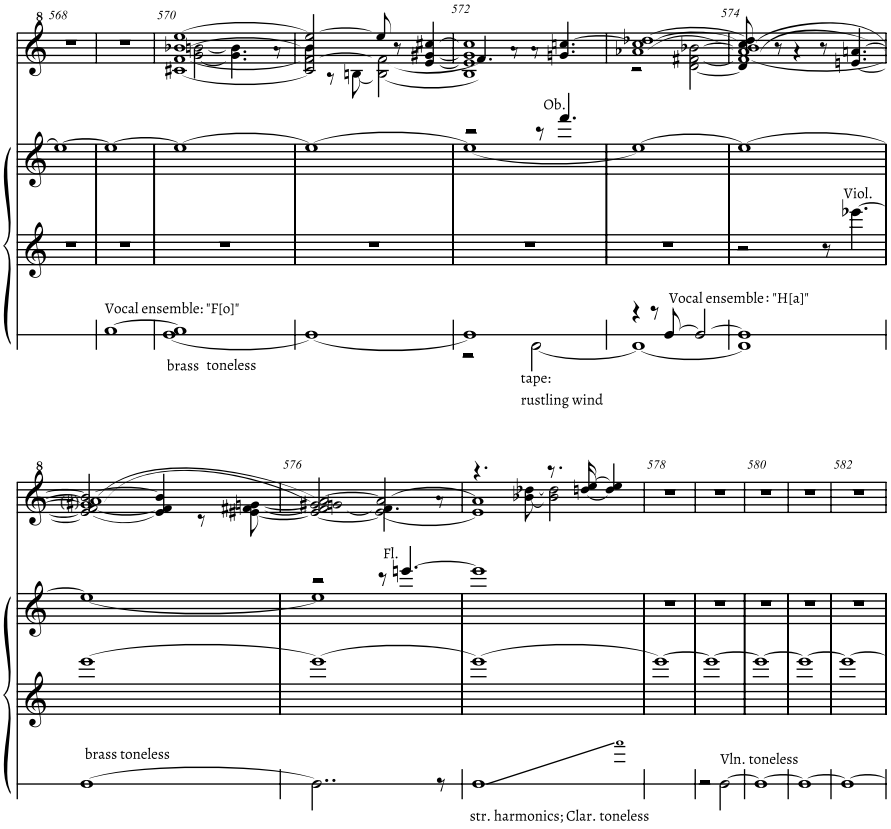
70 Bracketed intervals indicate the step to the next interval, 5[-1-]4 denotes a fourth followed by a major third, where the upper pitch of this major third is a minor second below the lower note of the preceding fourth.



ous scene, in which a high F6 had been reached the first and only time (no. 22: *Himmelfahrt*, mm. 465–466: B-D♯/E-G♯/A-C/D♭-F or measure 477 unison F6 in *fff*). From this impulse, the fourth B♭4-E♭5 emerges, with the pitch E♭5 (later E♭6) remaining as a new reference pitch over the following 17 measures. The high F echo returns in the oboe a few measures later (m. 572), accompanied by rustling wind sounds played from the tape. The complex seventh sound field

Example 4.16: Helmut Lachenmann, ***Das Mädchen mit den Schwefelhölzern****, scene 23:* ***Shō****, simplified score reduction, mm. 540–582*





of the *shō* (mm. 570–577) again brings intertwined combinations of fourths (F5-B♭5, G♯5-C♯6, G5-C6, A♭5-D♭6, E5-A5, see also Ex. 4.14).

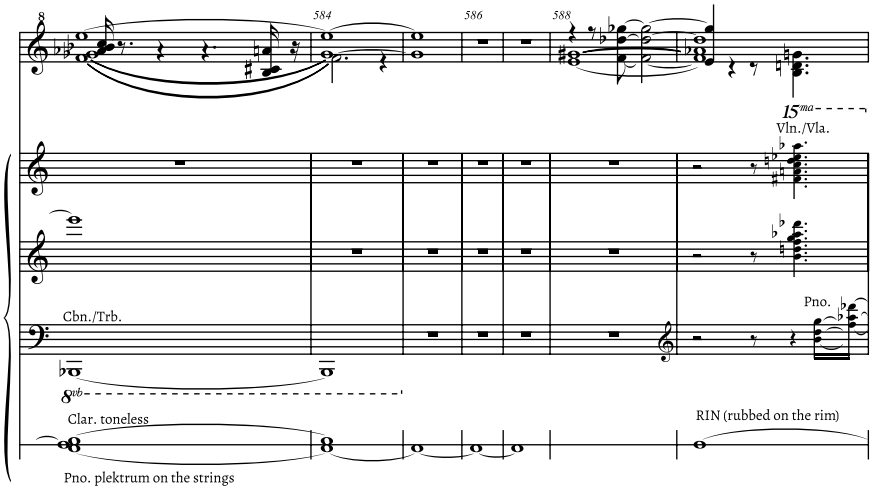
In measure 583 (Ex. 4.17) we hear, for the first time, a long and sustained low pedal tone (B♭2 in contrabassoon and trombones), followed by more pedal tones in measures 600 to 603 (B♭2, double bass clarinet) and 606 to 608 (A2, piano and tuba), as if it were a signal of the overall pitched sound passing completely into noise. Consequently, the next triad impulse of the *shō* (mm. 588–589), this time with strings and piano added (*shō*: D♭ major/C♯ minor; orchestra: A♭ major/D major, G major/D♭ major), is followed only by resonances of the rubbed Japanese temple bells (*rin*) instead of further pitch processes,[71] over which the plain fifths, fourths, and triads of the *shō*'s tenth sound field are unfurled (mm. 593–597, C major/B♭ major/D minor). This comes before, in measure 600, the "perforated" strings enter simultaneously with the eleventh *shō* sound field. The *shō* seems to react to this new sonority with sharper second- and tritone-dominated sounds (by means of the symmetric interval structure 6[4-2]-5-6).

71 The resonances through continuous circular rubbing of the *rin* bells were first used by Lachenmann in *Air* for a percussionist and orchestra (1968–69); see Lachenmann, "East meets West?," 84.

The long decaying fourth C♯5-F♯6 after the end of the large perforation field (mm. 608–621), echoing the three large "Ritsch"[72] scenes of the work (12, 16a, 20a), returns together with the aforementioned pentatonic twelfth *shō* sound field in the vocal ensemble and orchestra. Here the fourth C♯4–F♯7 is spread out even further (mm. 622–624), which unfolds a powerful resonating effect and markedly breaks with the perforation field. The F♯6, which remains as a reference pitch, leads to a quasi-symmetrical *shō* harmony (mm. 626–630), whose second intervals, analogous to the eleventh *shō* sound field (m. 600 onwards), now initiate a fabric of "toneless" sounds with integrated Morse-code-like impulses of the two highest piano keys played *ppp*; until the end of the subsequent final scene (no. 24) this texture extends into a 77-measure permutative structure designed by mechanical means.[73] The last two extremely short *shō* sound fields produce echo-like reminiscences, whereby the closing octave D5-D6 may have an "imaginary" resolution function in relation to the opening octave C♯5-C♯6.

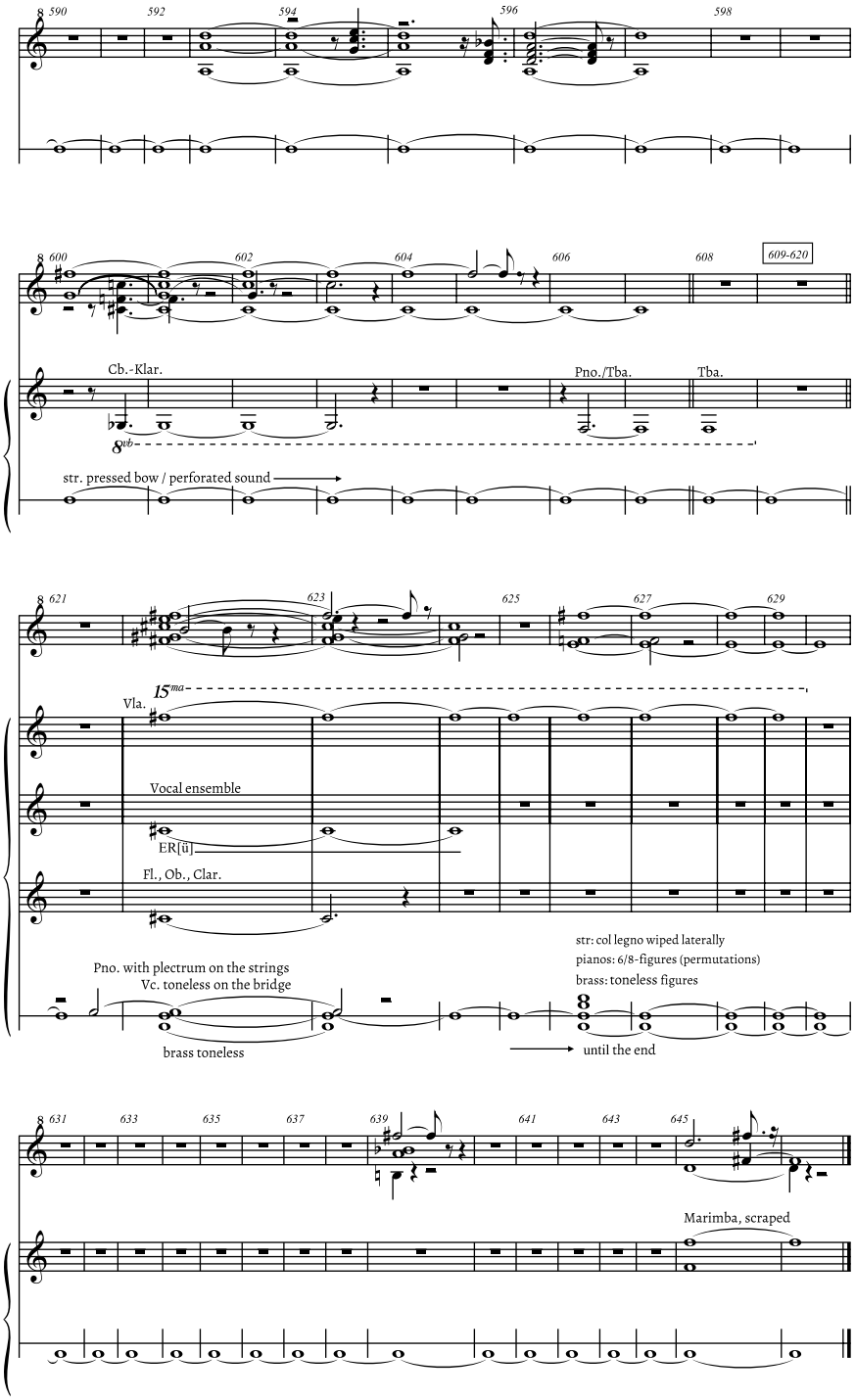
Significant in terms of the pitch relations shown is therefore their multiple referentiality. The "intra-opus" dimension plays in particular with references to scenes 22 and 24 that frame the *shō* scene: from the beginning to the oboe's piercing F6 impulses, the sonority and downward direction of the *Ascension* resonate in many ways. As a result of the perforation field, especially from measure 626, the "toneless" structure of the final scene and the permutation sequence on the two high piano keys begin. This "external framework" corresponds to the analogy between the two central sections within scene 23, the quartal field and the perforation field, which on the "intra-opus" level, however, have rather opposing functions: while, in the quartal field, the harmony established by the *shō* reaches its imaginary center and thus places

Example 4.17: Helmut Lachenmann, ***Das Mädchen mit den Schwefelhölzern****, scene 23:* ***Shō****, simplified score reduction, mm. 583–646*

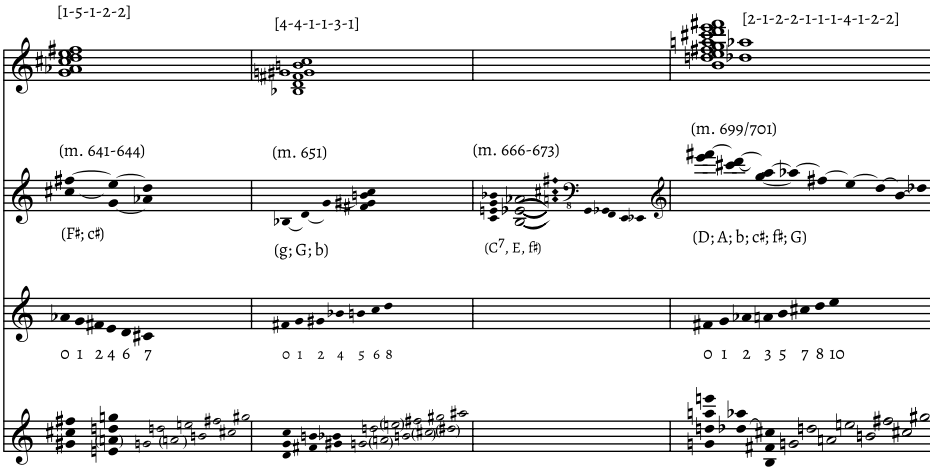


72 "Ritsch!" is the onomatopoetic word for the lighting of the matches used by Hans Christian Andersen in the fairy tale on which Lachenmann's work is based. This sound is explored through a particular abundance of orchestral-vocal constellations and timbres throughout the entire opera. Of the four scenes entitled *Ritsch*, no. 14: *Ritsch 2 "gedeckter Tisch / Hauswand 3"* [Ritsch 2 / Set Table / House Wall 3] eventually was not composed but kept in the order of the scenes (so that no. 15a immediately follows no. 13).

73 See Lachenmann, Gadenstätter, and Utz, "Klang, Magie, Struktur," 61–62, particularly note 63.



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*



lasting emphasis on the principle of alterity, the perforation field goes far back to the three "Ritsch" scenes and thus adds a particularly lasting self-referential emphasis. These two basic referential gestures can also be clearly understood on the "extra-opus" level: while the manifold references to musical layers that form the traditional context of the *shō* introduce an element of categorial, cultural alterity, the music of this scene simultaneously remains understandable also as a phenomenon of "cultural self-referentiality," considering the deformations of European tonality traceable in the *shō*'s sound processes, which are generally characteristic of Lachenmann's harmonic design.

Lachenmann suggests in his essay on sound types that (post-)tonal models such as the "cadential sound" can be decisive not only in the compositional microstructure, but also for large-scale formal trajectories.[74] This thought has been taken up variously in the exegesis of his works. Against this background, it is possible to derive factors from the close structural linkage of the last three scenes of *The Little Match Girl*, which allow us to interpret this series of scenes as a closing cadence – a cadential sound – of the entire two-hour "Music with Images." Evidence for this interpretation can be found, for example, in the fundamentally (self-)referential character of the pitch processes shown, but also in the extreme contrast between unbroken, seemingly "elevated" sound magic and an extremely barren "toneless" – or at least "pitchless" – environment on the threshold of silence. In "cadencing," after all, these properties present the entire diversity of sounds in this "opera" once again in condensed form.

Lachenmann's large ensemble work *Concertini* pursues a somewhat related formal model: broad exposition-like areas (mm. 1–275), in which both the ensemble as a collective and individual "concertante instruments" such as trombone (mm. 7–19), guitar (mm. 178–209), and harp

74 See Lachenmann, "Klangtypen der Neuen Musik," 20.

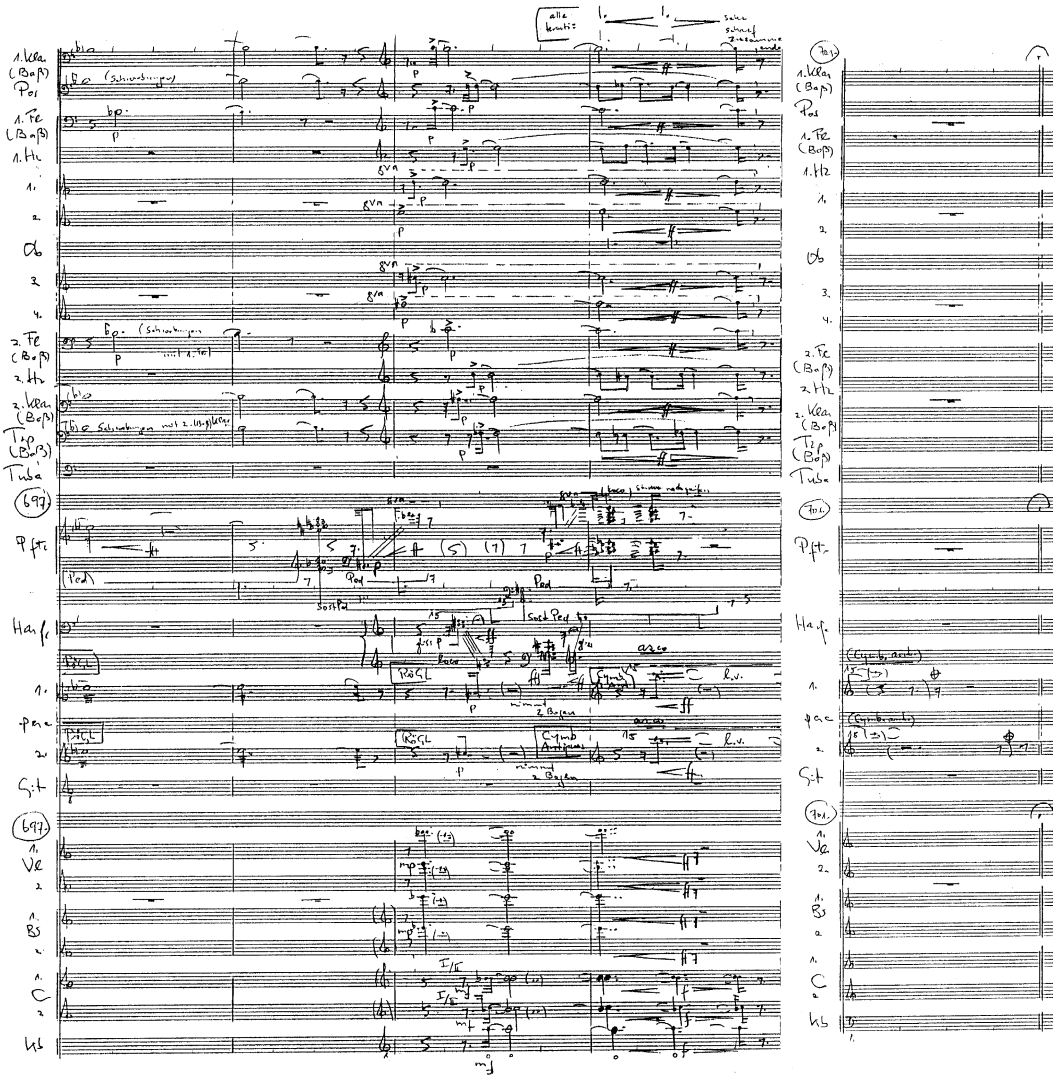
(mm. 210–275) are acting in a "soloistic" manner. Three intensified zones follow, determined by an increasing urge to movement; repeatedly interrupted (mm. 276–417, 418–489, 490–610/614), these zones are characterized by ostinato figurations, changes of tempo, and general pauses that serve as structural markers. After this sequence of intensifying zones there is, analogously to the formal model of the *Little Match Girl*, a broad "cadencing" section (mm. 615–701), lasting about a quarter of the total duration, characterized by a distinctly slower tempo (𝅗𝅥 = 38) than the basic tempo that initially dominated for a long time (𝅗𝅥 = 56). In this "cadential sound" a "verticalization" or calming of the musical texture is evident; only a few isolated virtuoso figures reminiscent of the preceding sections remain.

At the "harmonic" level, this final section fulfills its cadential function insofar as the pitch configurations scattered over the entire duration, usually fragmentarily distributed, building up on a pitch organization that basically grows out of beating seconds, are consolidated – if only temporarily – in two or three "cadential" sonorities, potentially verifying Lachenmann's statement that the "tone scale" of the *shō* had been important for this work (see above). Here, too, the principle of superimposed fifths is fundamental (Ex. 4.18, fourth line), along with triadic (Ex. 4.18, second line) as well as continuous and equidistant formations. The conceptual starting point could have been the eight-note final sonority that swells into a *fortissimo* (mm. 699–701, Ex. 4.19), creating a complete sequence of fifths with G-D-A-E/B-F♯-C♯-G♯ and interleaving six different major and minor triads in close position. This "final cadence" is balanced out by the second central sound from the initial phase of the final section (mm. 641–644), in which only the A of a seven-part chain of fifths is missing, but which – in contrast to the final sound – is built around a quartal chord (G♯-C♯-F♯) (the fourth here also appears as a central interval in the piano part, which brings a virtuoso figuration of parallel fourths).

In other configurations in this section too, fourth and fifth harmonic layers reveal a hidden principle (Ex. 4.18). Of central importance is the fourth E♭4-A♭4 in measures 666 to 673, which is illuminated by various components in a constantly changing "crypto-tonally" shaded manner, for instance by a floating B (resulting from an E major second inversion chord), the initial dominant seventh chord on C (tubular bells, m. 666), or the chromatically descending tuba line (G1-E♭1, mm. 669–670). In addition to these three pillar-like "cadential sounds," the other harmonic formations of the final section remain of secondary importance. They can be related either to *Concertini*'s overall "beating microscopy" (for example, the beginning: mm. 615–635, or mm. 674–689), echo-like fragments of the long solo passages from the preceding sections (especially in the harp and piano from measures 646, 659, or 674), or are too fleeting to perform a truly structuring function (as in measures 651 and 661).

Of course, the quartal/quintal harmony continues to expand into these fragmentary formations, such that the "cadencing" sounds redeem something that the more complex processes between them suggest: the two framing harmonies, in particular, are also built after the transient decay model of the cadential sound or *shō* archetypes; the high wind ensemble unequivocally seeks a sonorous approach to the *shō* sound; and – most notably – all pitches in these sounds are indeed based on the "tone scale" of the Japanese instrument (although, of course, at least the final sonority – even with a highly unconventional fingering – would hardly be playable, such that a "utopian" *shō* becomes audible in it). It can therefore be concluded that the final section of *Concertini* has a similarly concentrating, "cadential" function as scene 23 in *The Little Match Girl*. Decisive for this function is the demonstrated simultaneity of alterity and self-referentiality, which, in addition to an obvious "break" with what precedes it, also develops a synthesizing and "unbroken magical" magnetic effect in which heterogeneous "sound families" briefly come together in a fleeting "sonorous unity."

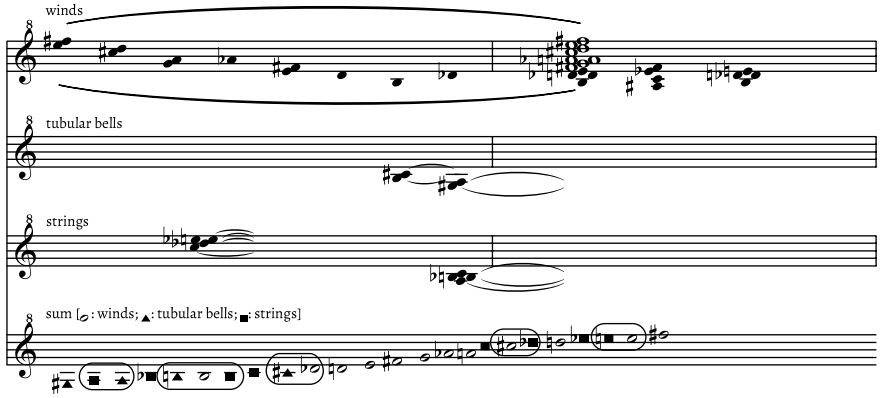
Example 4.19: Helmut Lachenmann, ***Concertini****, mm. 697–701*



Split Sound and Structural Sound

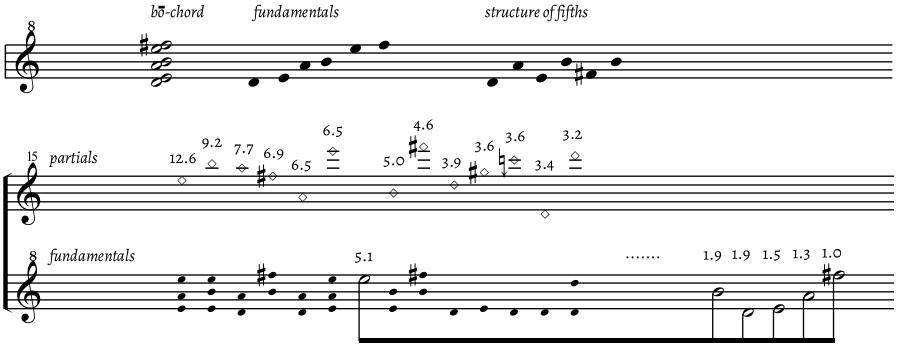
The "cadential" function of the extended final section of *Concertini* certainly appears most strongly in the last chord. In this twelve-voice sound played by wind instruments, consisting of eight different pitch-classes, an uninterrupted stratification of fifths is realized for the first time, which produces an interval structure of 2-1-2-2-1-1-1-4-1-2-2 semitones in close position (Ex. 4.20). Similar to the previous axial harmonies, this final chord is embedded in an extraordinarily complex sound spectrum composed of clusters of strings interleaved with the wind chord, resonances of the tubular bells, and a striking piano glissando.

*Example 4.20: Helmut Lachenmann, **Concertini**, mm. 697–701, reduction of instrumental groups*



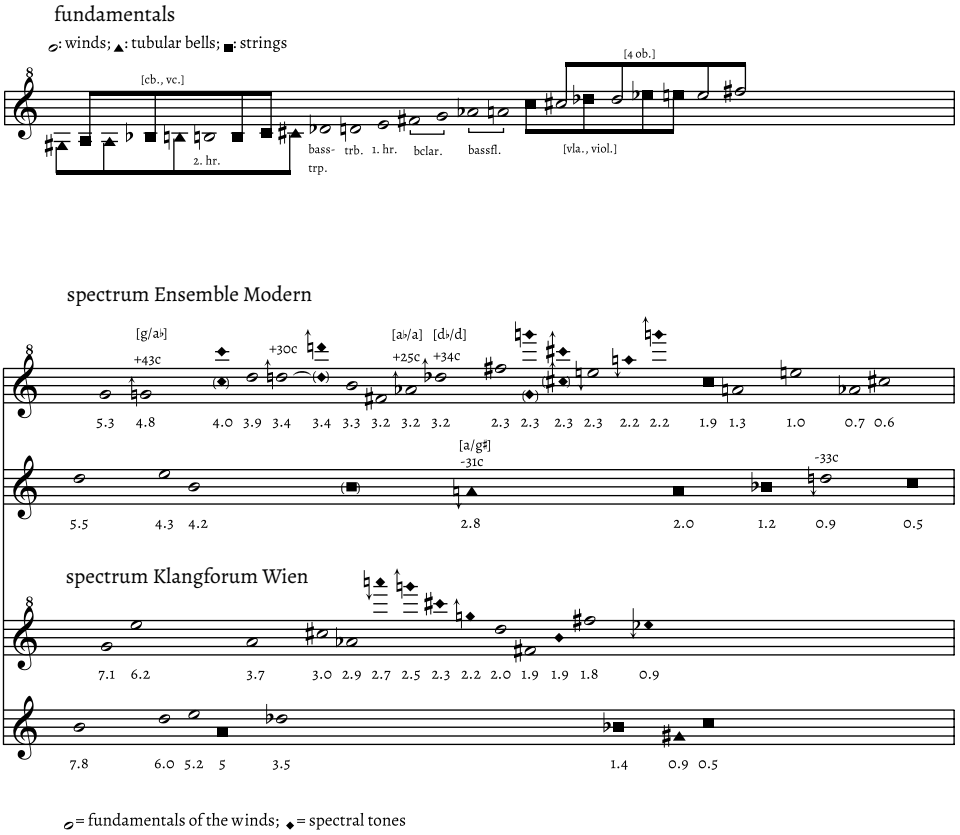
Here a *sone*-based spectral analysis[75] will be used to gain a deeper insight into the relationship between the sound of the *shō* and the final sound of Lachenmann's *Concertini*. In the spectrum of the traditional *shō* chord *bō* with the basic pitches D5-E5-A5-B5-E6-F♯6 (Ex. 4.21), based on the fifth structure D-A-E-B-F♯, the impression is confirmed that the individual pitches tend to merge into a cluster-like sound: The fundamental tones recede into the background in contrast to dominating overtones such as the fifth partial of E5 (G♯7) or the seventh partial of D5 (a C8 lowered by 31 cents). The auditory impression is thus characterized not only by a high degree of blending, which can be partly explained by the tendency of the Pythagorean tuning of the instrument as well as the high position, but also by a diffuse "textural character" (in the sense of Lachenmann's definition of "textural sound"), in which it is difficult to isolate or identify individual sound components owing to the strong presence of partials in relation to the fundamental pitches.

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)



75 This analysis was realized with the software MUSE [later re-named CTPSO] by Dieter Kleinrath in 2009. For the functionality and programming aspects of the software, as well as for further analytical applications, see Utz and Kleinrath, "Klang und Wahrnehmung bei Varèse, Scelsi und Lachenmann," 84–89.

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); notation arranged according to loudness of spectral components (values in sone); the analyzed sections of the sound comprise the quasi-stationary part between the beats 2.3 and 3.4 of measure 699 (duration: Ensemble Modern: 1.609 seconds, Klangforum Wien: 3.890 seconds)*



The spectral analysis of Lachenmann's final chord is based on a comparison of two different recordings of the work by Ensemble Modern and Klangforum Wien[76] (Ex. 4.22). Both recordings reveal – in contrast to the *bō* chord – a spectrum dominated by the lower fundamental pitches of the chords B4, D5, E5, G5, while the volume (and intonation) of the remaining notes in the two recordings varies widely. The presence of the other fundamental pitches is significantly greater in the Klangforum recording, which, together with significantly lower microtonal deviations in the individual spectral components, seems to indicate a more precise intonation. In addition, the stronger dynamic contrasts within the chord in the Klangforum recording are striking and also contribute to a more pronounced morphological profile: the perceived loudness of the seventh-loudest component (A5) is already only about half that of the loudest (B4); in the Ensemble Modern recording, the corresponding pitch is only in 14th place, so the overall dynamics of the pitches are more balanced here.

76 Helmut Lachenmann, *Concertini*: Ensemble Modern, Conductor: Brad Lubman, EMSACD 001 (2006); Klangforum Wien, Conductor: Johannes Kalitzke, Kairos 0012652KAI (2009).

Lachenmann brings about this concentration on the fundamental pitches by having the lower eight notes of the chord played throughout on low wind instruments in (partly very) high position (two horns, two bass clarinets, two bass flutes, bass trumpet, trombone). Also, the oboes in the high position bring out the fundamental tones. As with the *shō*, masking effects occur; in both cases, the highest note (F♯6) is largely obscured by the adjacent sine tone components (see Ex. 4.21 for the low loudness of the F♯6 fundamental in the *shō* spectrum).

If we now try to evaluate the results of the spectral analysis with some caution from the perspective of the composer's aesthetics, we find, perhaps surprisingly, that despite the great spectral complexity, the individual (fundamental) pitches of the chord in the spectrum remain as distinct as possible, not least when Lachenmann's chord is set in contrast to the spectral characteristics of the traditional *shō* chord, in which the intensity of the partials contributes to a maximum sound fusion and a diffusion of the fundamental tones. It could thus be concluded that even where Lachenmann presents a seemingly "conventional" type of blended sound, its internal structure shows essential characteristics of a "split sound" or "structural sound."[77] Even though the perception of Lachenmann's final sound undoubtedly "switches" perception into a "global" mode, an oscillation between such a global impression and the singling out of individual components seems to be a perfectly plausible description of the auditory process invoked. Lachenmann's important idea is that in certain situations, structural and textural sounds can easily merge into one another, "tilt" into the other state.[78] This is supported by the highly differentiated instrumentation of the chord and its surroundings. In the terminology of Albert Bregman's *Auditory Scene Analysis*, one could argue that a "natural assignment," in which an unambiguous identification of the sound sources is possible, and a "chimeric assignment," in which such identification is impossible, fluctuate here in a micro-temporal process (→ VI.4).[79] In one moment, individual instruments seem to emerge as identifiable, in the next they have disappeared in the global sound event, the "texture."

It should be pointed out that the technical method of rationalized analytical methodology, which has been "aggravated" here by spectral analysis, is insufficient for conveying the wealth of connotations or describing the implicit meanings of sounds that emerge. Lachenmann's conviction that musical sound to a considerable degree unfolds "magic" and leads to a high level of identification and a merging of listener and sound, but that magic can exist today only in the context of its negation as "broken magic," illuminates the inner connection between the "magic" of the diffuse textural character of the traditional *bō* chord and the "broken," "structuralist," fundamental-based character of Lachenmann's *Concertini* chord.

77 See Schering, "Nationale und historische Klangstile." Schering interpreted the history of music here as a constant change between the ideal of the "Verschmelzungsklang" (blended sound), dominant in vocal polyphony of the fifteenth and sixteenth centuries as well as in symphonic music from Haydn to Mahler, and the "Spaltklang" (split sound), dominant in the music of the Middle Ages, linear Baroque counterpoint, and modern music. Of course, Schering's "Spaltklang" (split sound) and Lachenmann's "Strukturklang" (structural sound) should not simply be equated here; a more nuanced discussion would have to weigh commonalities and differences in terms. One possibly significant aspect might be that both terms seem to be based on a consistently polyphonic model (→ VI.4).

78 Lachenmann, "Klangtypen des Neuen Musik," 20.

79 Bregman, *Auditory Scene Analysis*, 459–460.

Temporal Sections

In his pioneering work, Pietro Cavallotti argues that only meticulous sketch studies can actually trace and interpret those "muddled paths" that make up the substance of Lachenmann's and other composers' poststructural music:

> The importance of sketch research for the analysis of "New Music" should no longer be in question today. […] "New Music" increasingly defined itself, for the most part, through the composer's own rules, rules that differed in each work, meaning that source research is often an indispensable aid to understanding the most important structures and technical principles.[80]

In the case of Lachenmann, source studies reveal a rigorously anti-systematic, anarchic negation of regular, automated structures that are the exact opposite of a common concept of "structure." Lachenmann's structural grids are thus a medium that, on the one hand, enables an "almost complete pre-ordering of the material" and, on the other hand, includes the option of "freely editing all parts of a composition."[81] In Lachenmann's music, structure becomes a means of articulation only through conflict, friction, or synergy with an Other, with a principle of tonal, sensual, existential, or cultural alterity or through "imploding" conflicts with its self-created preconditions.

As most of the composer's works, *The Little Match Girl* and *Concertini* are based on structural grids and preformed material. Although the following considerations cannot document these preformations on the basis of the sketches, two tables clearly demonstrate the relevance of prearranged temporal sections for the perception of "cadence-like" effects, which are obviously very deliberately designed in the two sections of the works discussed here. In the case of the *shō* scene from *The Little Match Girl*, the table of temporal divisions (Table 4.1) initially shows proportions organized on the basis of the Fibonacci series or the Golden Section.[82] For example, the distance from the beginning of the large quartal field to the end of its resonances (mm. 518.3–539) and the previous distance from the beginning of the scene to the beginning of the quartal field show the ratio of 21.5:13.5 (1.592). Significantly, the duration ratios of the *shō* sound fields to their echoes (indicated in Table 4.1 by "x") are also often subdivided by Fibonacci proportions: sound field #1 3:2, sound field #5 13:8; sound field #6 2:3, sound field #7 8:5, etc.). At least two distinct Fibonacci series (starting from different points), namely 1-2-3-5-8-13-21-34 and 2-5-7-12-19-31, appear to have been used.

The numerical relationship is also significantly related to the structuring of the large-scale form: the proportion 25 (equivalent to 100 quarters/pulses) frames the section from the *shō*'s

80 Cavallotti, *Differenzen*, 12–13 ("Die Bedeutung der Skizzenforschung für die Analyse der "Neuen Musik" dürfte heute nicht mehr zur Debatte stehen. […] 'Neue Musik' konstituierte sich zum großen Teil immer mehr über vom Komponisten selbst vorgegebene und in jedem Werk anders lautende Regeln, so daß die Quellenforschung oft eine unerläßliche Hilfe zum Verständnis der wichtigsten Strukturen und technischen Prinzipien darstellt.")

81 Ibid., 126 ("fast vollständige Vorordnung des Materials;" "alle Teile einer Komposition frei zu bearbeiten").

82 In other works by Lachenmann, selected rhythmic structures, possibly also pitch processes, have certainly been developed using the Fibonacci series. For example, the entry distances of the four sound families superimposed at the end of *Mouvement (– vor der Erstarrung)* for ensemble (1982–84) (from m. 483) follow the sequence 8-5-3-2-1-2-3-5 eighths. See also Piencikowski, "Fünf Beispiele," 109. The proportion of the Golden Section (Φ), known since ancient times, is rounded to 1.618033989. The "Fibonacci series," named after the mathematician Leonardo of Pisa, called Fibonacci (c. 1170–c. 1250), is an integer approximation to this proportion. For the application of the proportion in musical contexts see among others Möller, "Goldener Schnitt" and Baltensperger, *Iannis Xenakis*.

Table 4.1: Helmut Lachenmann, ***Das Mädchen mit den Schwefelhölzern****, scene 23:* ***Shō****, analysis of temporal divisions*

measures	508	510	511	515	516			535	540	541	544	557	565	567	570	578
shō sound fields/ echoes (x)	1	x	2	x	3a (516)	3b (518.3)	3c (532.4)	x	4	x	5	x	6	x	7	x
durations (quarters)	12 [8]	8 [4]	20 [16]	4	76 [10-57-9]			20	4	12	52	32	8	12	32	20
durations (quarters)	20 [12]		24 [20]		96				16		84		20		52	
micro-formal phases (= durations/4)	3 [2]	2 [1]	5 [4]	1	19 [3-14-2]			5	1	3	13	8	2	3	8	5
	5 [3]		6 [5]		24				4		21		5		13	
	5		25					5	25				18			
	13.5 {5-8.5 }			**21.5** {16.5-5 }					**25**				**18**			

measures	583	586	588	590	593	598	600	608	622	625	626	631	639	640	645
shō sound fields/ echoes (x)	8	x	9	x	10	x	11	x	12	x	13	x	14	x	15
durations (quarters)	12	8	8	12	20	8	32	**78** [32-14-15 9-8]	12	4	20	32	4	20	8
durations (quarters)	20		20		28		110		16		52		24		8
microformal phases (= durations/4)	3	2	2	3	5	2	8	19.5	3	1	5	8	1	5	2
	5		5		7		27.5		4		13		6		2
	25							19.5	25						
	25							**19.5**	**4**		**21**				

sound field #8 to the end of the scene symmetrically (17[5–5–7] + 8 | **19.5** | 17[4–13] + 8[6–2]), with the perforation field (19.5) forming the axis of symmetry. Also in the first part of the scene, the proportion 25 figures prominently and, in particular, links the *shō* sound fields #2 and #3, as well as #4 and #5. There are also multiplicative arrangements. For example, the duration of *shō* sound field #3 (24) can be explained as a multiplication of the durations 6 (sound field #2) and 4 (sound field #4) surrounding it; equally, the duration of the *shō*'s sound field #11 and the following perforation field (27.5) might be approximated as a multiplication of the surrounding *shō* sound fields #10 (7) and #12 (4).

However consciously such time relationships may be constructed, they always create a clear distinction between the clearly marked *shō* sound fields #4, #6, #9, #11, #13, and #14, which open up wide-ranging "lingering" sound states of the orchestra (here, the length of these orchestral "echoes" clearly outweighs the *shō*'s preceding sound field), and the remaining *shō* sound fields, in which the orchestra indeed acts primarily as a frame and/or resonance of the *shō* in the foreground. In addition, the time-span organization reveals an analogy between the quasi-

Table 4.2: Helmut Lachenmann, ***Concertini****, final section, analysis of temporal divisions*

sound fields	1	2	3	4	5	6	7	8
measures	(611) 615–623 624–628 629–634 635–640	641–644	645–650 651–654	655–657 658–665	666–673	674–689	690–698	699–701
number of measures	1 (3/4) + 25 (4/4)	4	10	11	6 + 2 (4/8)	8 (4/8) + 8 (4/4)	9	3
durations (quarters)	35 (46.5) -20–24–24 (103)	16	24–16 (40)	12–32 (44)	28	48	36	12
microformal phases (=durations/4)	25.75 (8.75–5–6–6)	4	10 (6 + 4)	11 (3 + 8)	7	12	9	3
	25.75 [28.625]	4	21		7	21		3
	25.75	25			7	24		
	25.75 [28.625]	4	49					3

symmetrically arranged, perceptually highly significant large "fields of alterity" (quartal field and perforation field), whose special aural effect is underlined by the "disproportionality" of their durations.[83] Undoubtedly, in both cases these are moments in which a "ripetere ad libitum" could be prescribed to designate the points of contemplation that the composer has described as essential formal pivots in his works.[84] The analogy of these sound states corresponds to an analogy of the transformation fields at the beginning and at the end of the scene, which refer to the framing scenes (no. 22 and no. 24) in an "intra-opus" manner. The different length of the echoes from no. 22: *Himmelfahrt* in the first two *shō* sound fields of no. 23 (mm. 508–515, 5+6 = 11 proportion values) and the premature entry of the "toneless" epilogue structure at the end of no. 23 (mm. 626–645: 13+6+2 = 21 proportion values) may be explained by a large-scale tendency within the scene toward the momentum of the echoes and their emancipation from the *shō* sound fields.

Undoubtedly, the deliberate design of the temporal proportions also represents a perceptually and psychologically relevant category, since the ever-reconfiguring relations between *shō* sound fields and echoes form a decisive criterion for the listening orientation. A relevant approach applicable to further interpret this scene in its larger context is the connection between a "saturated" listening situation, in which the expectation of change in the musical structure becomes increasingly "urgent" due to a permanently evaded closure, and the experience of musical coherence as developed in the music-theoretical discourse on expectancy and implication.[85]

83 Although the proportions of 19 and 19.5 could be regarded as parts of the "alternative" Fibonacci series 2-5-7-12-19, this does not explain the combination with the proportional number 8 in the case of the perforation field. Also, in the case of the quartal field, the proportion of 5:19 would have to be constructed with the less plausible omission of the numbers 7 and 12. Therefore, it seems more consistent to regard both fields as consciously stretched "sound states" that break out of the proportional structure.

84 Lachenmann, Gadenstätter, and Utz, "Klang, Magie, Struktur," 16.

85 Leonard B. Meyer introduces the concept of "saturation" in the context of his basic concepts of "completion" and "closure": "A figure which is repeated over and over again arouses a strong expectation of change both because continuation is inhibited and because the figure is not allowed to reach completion." (Meyer, *Emotion and Meaning in Music*, 135.)

For the final section of *Concertini* one could probably develop a similar argument. Here, too, the overall proportions (Table 4.2) show a numerically very clear structure in which all three "cadential sounds" (sound fields #2, #5, and #8) are preceded by longer sections of almost exactly the same duration (here the proportional number 25 or the duration of 100 quarters also form the mean value): 25.75–**4**–21–**7**–21–**3** (with the three cadential sounds in bold). Interpreted from a different angle, one can say that there are exactly the same distances between the three cadential sounds, and besides the sum of the two framing sounds' durations (#2 and #8) gives the duration of the central fourth E♭4-A♭4 (#5): **4**–21–**7**[**4+3**]–21–**3**. The ephemeral nature of the three cadential sounds, which seem to flash up instantaneously from a sea of differences, gives this final section a more fragmentary character when compared to the three final scenes of the "opera." One might argue that, in the long "coda" of *Concertini*, the same kind of disintegration that increases constantly in scenes 22 to 24 of *The Little Match Girl* up to the "toneless" barrenness of the epilogue prevents a stabilization of the musical structure from the outset.

Narrativity

Lachenmann's text "Eine musikalische Handlung" ("A Musical Plot"), which accompanies *The Little Match Girl* instead of a libretto or synopsis, inimitably links the technical-poetic description of musical processes, references to the underlying texts of Hans Christian Andersen, Gudrun Ensslin, and Leonardo da Vinci, and musical references to his own works and those of others. The discussion that has been going on for some time in musicology as to how music, especially instrumental music, might perform narrative functions or in which cases it is appropriate, or even necessary, to apply the concept of narrativity to music (→ III.5), seems to be answered by this text in a strikingly straightforward manner:

> She dares not return home. The cold gradually becomes more aggressive, reaching for her. Music, as its image, becomes shrill, violent once again in a different manner, invoking torpor and trembling mortal fear of growing cold oneself. […]
>
> The girl comes to again in the held second and finally again the "Scratch!". Greatest sound perforation of all: rift across the vertebrae of the piano strings, just as the pattering pizzicato arpeggios, played with plectrums behind the bridge of the string instruments, transition through via a hammering wooden stick to the appearance of the Grand Mother, her giant contours sketched in one voice by the orchestra as quasi pedalled unisono line. ("*Her grandmother had never appeared so large, so beautiful*")[86]

Much has already been said about the specific pictorial character of Lachenmann's music, and differences from conventional concepts of musical narrativity have been identified in the fun-

86 Lachenmann, "A Musical Plot," 14–15 (translation adapted) ("Sie wagt nicht nach Hause zu gehen. Die Kälte wird zunehmend aggressiv, greift nach ihr. Musik, als ihr Abbild, gerät nochmals auf andere Weise ins Schrille, Gewaltsame, beschwört zugleich Erstarrung und zitternde Todesangst vor dem eigenen Erkalten. […] Das Mädchen kommt wieder zu sich im gehaltenen Sekundklang und schließlich das erneute 'Ritsch!'. Größte Geräuschperforation: Riss über die Wirbel der Klaviersaiten, ebenso wie prasselnde pizzicato-Arpeggien, ausgeführt mit Plektren hinterm Steg der Streicher, Übergang durch hämmernden Holzstab zur Erscheinung der Groß Mutter, ihre Riesenkontur vom Orchester einstimmig gezeichnet als quasi pedalisierte Unisono-Linie. *('Die Großmutter war noch nie so schön, so groß gewesen.')*" (Lachenmann, "Eine musikalische Handlung," 4, 6).

damental ambiguity of the "images" uncovered by his music. Even though Lachenmann's "listening guide" seems to suggest rather unambiguous assignments, this fundamental ambiguity results from the fact that any conventional semantics inherent in the sounds is first of all compositionally deconstructed by what the composer has called *musique concrète instrumentale*, which uncovers the physical conditions of sound production and makes it the topic of composition.[87] Similarly, the semantic character of the music may be deconstructed by means of the "crypto-tonal" techniques of pitch organization discussed above. For Lachenmann, therefore, there is no contradiction between the demand for structurally oriented listening and the exposition of pictorial associations. This clarifies his statement that "precisely 'structurally' directed listening, that is, an observing perception of the immediate sounds and the connections acting in them, is connected to internal images and sensations that by no means distract from that observation process, but remain inseparably connected to it and even lend it a special characteristic intensity."[88] In the context of such a "pictorial" narration as evoked by music, the tonal quality and symbolism of body gestures and movements, such as trembling or the igniting of a match, are of particular importance, since they converge with a repertoire of noise sounds that Lachenmann has continuously refined and expanded since the 1960s.

Perhaps the contradiction between the unambiguousness of Lachenmann's musicalized prose in the "Musical Plot" and the demand for an openness to pictorial associations could be resolved by taking this "listening guide" as only one possible, by no means binding musical-narrative structure. This can easily be understood from the final scenes discussed here. In Lachenmann's text (and score), the first use of the *shō* coincides with the arrival of the little girl in heaven, marked by Andersen's phrase "sie waren bei Gott" ("they were with God"). For Lachenmann, the "silvery removed sound of the 'Shō' […] in the happy-liberated sense" forms a "'comfortless' medium of the transcendent," then "returning seamless[ly]" to the "cold morning hour" of the final scene 24.[89]

In the context of Lachenmann's narrative structure, scene 23 thus essentially serves to concretize the celestial as a *musica coelestis* or *musica mundana*, which earlier music theory considered largely inaudible, but not actually sonically realizable. As outlined above, the *shō*, already in its earlier form as the Chinese *sheng*, was associated with the mythical phoenix owing to its shape since very early times (→ IV.1) and its sound is also closely linked to the best-known *tōgaku* repertoire piece *Etenraku*, literally "music of heaven." Moreover, due to its high position and overtone-rich, strongly fused sonority, it seems predestined for such a musical-narrative function. In Lachenmann's *Das Mädchen*, however, it is linked to the threads of the complete work via sound organization, timing, and also by the complex manner of its silencing. In its "structurality," it refutes the obvious assumption that it is only an easily accessible means of

87 See Nonnenmann, "Musik mit Bildern"; Kaltenecker, "Subtraktion und Inkarnation," and Kaltenecker, "Musique concrète instrumentale."

88 Lachenmann, "'… zwei Gefühle …'" ("[…] gerade das 'strukturell' gerichtete Hören, das heißt das beobachtende Wahrnehmen des unmittelbar Klingenden und der darin wirkenden Zusammenhänge, [ist] verbunden […] mit inneren Bildern und Empfindungen, die von jenem Beobachtungsprozess keineswegs ablenken, sondern untrennbar mit ihm verbunden bleiben und ihm sogar eine besondere charakteristische Intensität verleihen.")

89 Lachenmann, "A Musical Plot," 16 (translation adapted) (see the section *Sound Organization* above) ("Der noch verbleibende Instrumentalapparat bildet einen Hof um den silbern-entrückten Klang des 'Shô' […]: im glücklich-befreiten Sinne 'trostloses' Medium des Transzendenten, bruchlos hinüber- bzw. zurückführend in die 'kalte Morgenstunde' […]." (Lachenmann, "Eine musikalische Handlung," 6.)

generating aura; rather it seems, as the time span analysis showed, to be connected to a construction-based "celestial mechanics."

One might conclude from this constellation of ideas that there is a "harmonizing" fusion of *shō* and orchestra in scene 23 based on the hybrid combination of deconstructed "European" and "Japanese" harmonies. Analogously to the course of Andersen's narrative structure, this harmonization of opposites seems to appear only temporarily intact, designed as pure hallucination, an escapist fantasy inevitably followed by the "hard facts" of worldly reality. The image of the little girl's corpse, understood as an indictment not only of the society that shares responsibility for her death, but also of those who delight in the sentimentality of this image, appears to result in questions that cannot be answered by the hybrid sound formations of the *shō* scene; one might even argue that this scene completely fails in its futile attempt to conjure up an "idyll."[90]

Largely independently of these questions, the extraterritorial character of the *shō* sound remains an important narrative basic figure in *The Little Match Girl* that updates the topos of spatial distance – a central aesthetic figure of nineteenth- and twentieth-century music featured perhaps most prominently in Gustav Mahler's music. In *Concertini* and its spatial disposition, in which the ensemble of soloists is placed around the audience in six heterogeneous groups, this topos becomes a basic element of the temporal-spatial narrative. Proximity and distance are here not only a question of individual listening position, but inscribed in extremely sharp dynamic and gestural contrasts on every page of the score. Only in the greater focus of the final section does the music seem to withdraw into the corners of the room through dynamic-gestural reassurance. Particularly in the fleeting yet sober "cadential sounds," that pick up the narrative thread of the *shō* from the *Little Match Girl*'s ending, the topos of distance is formed into presence, an experienced moment. In its "utopian" harmony there is an inherent law which cannot be completely integrated into the harmonic matrix of the work and thus negates a conventional cadential function, as it does in the "opera." Lachenmann's musical narrativity reveals its ambiguity, especially in its open endings.

Interculturality

The analyses presented here have attempted, albeit in fragmentary fashion, to present different points of view on the question posed at the beginning, namely, how Lachenmann's music realizes the simultaneity of an "irrupting" auratic alterity and dialectical mediation in the overall context in terms of compositional technique and aesthetics. With regard to the cultural contextualization of the (real and imaginary) *shō* sounds, I have repeatedly referred to their "double coding," which evades simplistic culturalist assignments (in the sense, for example, that the *shō* would produce only "Japanese" sounds and the orchestra only "European" ones). The more complex picture emerging from this interpretive model ultimately also raises questions about the historicity of the soloistic instrument and its repertoire.

Pietro Cavallotti has shown how Lachenmann's "deconstruction" of cultural, social, self-created conventions, automatisms, and structural plans presupposes a comprehensive critique of the notion of structure, a substantial parallel to the philosophical poststructuralism of Jacques Derrida, Gilles Deleuze, and others.[91] It is therefore not surprising that the term "interculturality" was similarly extensively "deconstructed" and problematized by Lachenmann in a lecture at the 2006 Darmstadt Summer Course published in 2008:

90 See Hiekel, "Interkulturalität als existentielle Erfahrung," 75.

91 Cavallotti, *Differenzen*.

> The term "intercultural" is, not without justification, suspected of disguising or cosmetically masking what could otherwise be described differently, namely as parasitic exploitation, reverential or unrepentant, loving or cleverly idyllic use of aesthetically "interesting" because untouched, "fresh," even "authentic" sources of fascination of "other," non-European or non-Central European, but internally – still – intact habitats, that is, cultures: fresh meat for a tired culture exhausted and drained by a gymnastics of reflection and perpetual horizon-crossing, and the compositional practice trapped in it in this part of the world. […]
>
> I am glad and it is important that there are seriously initiated "intercultural" encounters, not only in music and not only in the other arts: but even the very idea of "encounter" strikes me as a one-sidedly Western proposition. […] Thinking in European terms, the intellect, however it operates, must leap beyond its own horizon, both in intercultural discourse and in dealing with itself. It actually seems ready for this in lucid moments, for the aspect of transgression is a crucial part of its tradition. […]
>
> The mystery and the magic and the beauty of traditional Japanese court music […] may fascinate us aesthetically, interest us, or even touch something deep within us – nevertheless, it strikes me as problematic and misleading to speak of such an experience, however precious, in the same breath as a typically European artistic experience […]. Perhaps it is infinitely superior in its authenticity and ritual integrity. But as an object of import in our Western reception practice, it soon becomes an exotic idyll, insofar as its aesthetic appearance, its perceived outer skin, so to speak, enters the mediating mechanisms of our bourgeois art-obsessed reception rituals: in the concert hall, or whatever replaces or supplements it today, stored on sound media and easily accessible artifacts, in the musical request program on the radio.[92]

The doubts about culturally encoded musical idiomatism as a whole, the legacy of the linguistic critique of the postwar avant-garde, is combined here with the offer to participate – through

92 Lachenmann, "East meets West?," 84, 87, 90. ("Der Begriff des Interkulturellen setzt sich, nicht zu Unrecht, dem Verdacht aus, etwas zu verschleiern bzw. kosmetisch zu maskieren, was auch anders bezeichnet werden könnte: nämlich als parasitäre Ausbeutung, ehrfurchtsvolle oder ehrfurchtslose, liebevolle oder schlau idyllisierende Nutzung von ästhetisch 'interessanten', weil unberührt 'frischen', gar 'authentischen' Faszinosa 'anderer', außereuropäischer bzw. außermitteleuropäischer, wie auch immer in sich – noch – intakter Lebensräume, sprich Kulturen: Frischfleisch für eine per Reflexions- und fortgesetzter Horizontüberschreitungsgymnastiken erschöpfte, müde, ausgelaugte Kultur und in ihr gefangenen [*sic*] Komponierpraxis hierzulande. […] Ich bin froh darüber und es ist wichtig, dass es ernsthaft in die Wege geleitete 'interkulturelle' Begegnungen gibt, nicht nur in der Musik und nicht nur in den anderen Künsten: Aber schon die Idee der 'Begegnung' selbst scheint mir ein einseitig westlich geprägtes Ansinnen zu sein. […] Das europäisch geprägte Denken, der wie auch immer denkend operierende Intellekt muss dabei im interkulturellen Diskurs und zugleich im Umgang mit sich selbst einen Sprung über den eigenen Horizont machen. Er scheint in lichten Momenten tatsächlich dazu bereit, denn gerade das Moment der Überschreitung gehört zu seiner Tradition. […] Das Geheimnis und der Zauber und die Schönheit einer traditionellen japanischen Hofmusik […] mag uns […] ästhetisch faszinieren, interessieren oder auch tief in unserem Innern berühren – dennoch, es scheint mir problematisch und irreführend, ein solches, wie auch immer kostbares, Erlebnis in einem Atem zu nennen mit einem Kunst-Erlebnis europäischer Prägung […]. Vielleicht ist jenes in seiner Authentizität und rituellen Ungebrochenheit diesem unendlich überlegen. Aber als Importgegenstand in unserer westlichen Rezeptionspraxis oxydiert es alsbald zur exotischen Idylle, insofern seine ästhetische Erscheinung, sozusagen seine wahrgenommene Außenhaut, in die Vermittlungsmechanismen unserer bürgerlichen kunstbeflissenen Rezeptionsrituale gerät: im Konzertsaal oder was immer ihn heute ersetzt oder ergänzt, auf Tonträgern gespeichert und bequem zugänglich macht, im Wunschkonzert einer Rundfunksendung.")

a leap beyond one's own horizon – in a compositional-existential way in intercultural processes, though it is hardly specified where and how exactly the boundary between a (superficial) "exploitation" and a (substantial) "self-admitting" to an "Other" would be drawn (→ I.2, I.3). By contrast, in his conceptualization of the *shō*, Lachenmann seems to take a less dualistic approach. Since the initially described first perception of the categorial alterity of the Japanese instrument in the course of scene 23 becomes an integral part of an expanded aesthetic horizon while maintaining an extremely complex networked mediation in the cosmos of Lachenmann's sound transformation, an irresolvable cultural difference is revealed, without degrading the *shō* to a mere "treasure." It seems essential that Lachenmann hardly touches the timbral peculiarities of the instrument. This becomes particularly clear when one compares Lachenmann's approach with other compositions in which far stronger interventions are made in the *shō*'s peculiar sound space, for example in Chaya Czernowin's trio *Die Kreuzung* (1995, → IV.1), where the cultural identity of all instruments is reduced to a minimum through noise structures and great virtuosity in order to implicitly point at the "gap" between their traditional contexts, or in Gene Coleman's *Yago* for *shō*, *hichiriki*, *ryūteki*, saxophone quartet, live electronics and video (2003), in which the *shō* and the other *gagaku* instruments are integrated into semi-improvisatory noise structures. While both compositions – substantially influenced by Lachenmann's method of sonic alienation – try to shatter the myth of the instrument in almost didactic clarity, Lachenmann's own approach is characterized by much subtler intermediate stages.

Something similar may apply to Lachenmann's reception of the philosophy of the Kyoto school, which has already been treated in detail by Jörn Peter Hiekel:[93] If the problematic historical-political context of this school's thought is not made explicit by Lachenmann (→ II.6), especially connections between philosophical rhetoric, nationalism, and militarism during the Second World War period,[94] Lachenmann's sensitive "searching movements," which use the texts of Nishida, Nishitani, Ueda, and Teitaro Suzuki because they "try to illuminate the nonsensible, even the unthinkable with the help of discursively operating language,"[95] successfully avoid simple attributions without slipping into the arbitrary or mystifying. One significant element seems to be a hitherto seldom discussed connection between the Kyoto school's and Lachenmann's (in his later works) increasingly accentuated impulse toward a "liberated perception."[96] In the words of Keiji Nishitani:

> What the Japanese call *mono no aware* ("the pathos of things") indicates the point where lust and joy are one with a sadness over the feeling of impermanence. In other words, the phrase signifies that where the being of man, as something bound to things in time, rises to awareness "perfumed" with the feeling of world and time and under the Form of infinity, there also the essential impermanence of all things, or sheer being-in-the-world, is *aesthetically* felt to the quick – in the Kierkegaardian sense of "aesthetic existence." It means that all the things of the world and the self itself are realized together aesthetically, in the original countenance of their manifestation.[97]

93 See Hiekel, "Interkulturalität als existentielle Erfahrung."

94 See particularly Heisig and Maraldo, *Rude Awakenings*.

95 Lachenmann, "East meets West?," 86. ("Texte eines Nishida, eines Nishitani, Ueda, Teitaro Suzuki, [die] das Nichtsagbare, gar das Nichtdenkbare mit Hilfe der diskursiv operierenden Sprache anzuleuchten versuchen.")

96 For the broader historical and aesthetic context of Lachenmann's concept of "liberated perception" see Utz, "Auf der Suche nach einer befreiten Wahrnehmung," 39–40.

97 Nishitani, *Religion and Nothingness*, 247.