Panel Discussion (Kunstuniversität Graz, 21 Nov. 2005) with Helmut Lachenmann  
Chair: Clemens Gadenstätter and Christian Utz

Klang, Magie, Struktur.  
Ästhetische und strukturelle Dimensionen in der Musik Helmut Lachenmanns  
[Sound, Magic, Structure. Aesthetical and Structural Dimensions in the Music of Helmut Lachenmann]

During this 5-hour-discussion, Helmut Lachenmann explains the foundations of his music in great, unprecedented detail. The discussion consists of three sections, focusing on Lachenmann’s compositional aesthetics, the relationship between constructivity and freedom in his music, and a detailed discussion with the audience respectively.

In the beginning, Lachenmann responds to Clemens Gadenstätter’s and Dieter Kleinrath’s analytical approaches to his second string quartet (see Kleinrath, Fraktalklang in this volume) arguing that a »chemical« analysis should always reference social preconditions and modes of listening instigated by the musical structure. Although music does not only have a structure, but is a structure, Lachenmann doubts that is possible to listen to music merely structurally; his music rather aims at a »liberated perception« which he labels the »last great humanity-related utopia«.

Elaborating on his often cited idea that a (»structure«-)sound may become identical with large-scale form, Lachenmann explains his concepts of (sound) »families« that are triggered by means of an »arpeggio«. A sound family might assemble highly diverse timbres by relating them to the same harmonic entity or the same basic playing technique – a principle that Lachenmann has derived from the analysis of European music. Introducing examples by Anton Webern and Gustav Mahler, Lachenmann shows how unconventional timbral organisation in their works sheds a completely new light on conventional structural topoi.

The composer then explains his theory of listening which distinguishes between Hören (hearing) and Zuhören (listening). Familiar sound structures in music or everyday life usually do not challenge listening habits and thereby immerse the listener in a magical sphere. This mode of listening is especially obvious in functional music such as the German national anthem. The European concept of art, however, is crucially based on the idea of breaching, of intervening into these magical modes of listening, eventually resulting in a unique stylistic development over the centuries.

In the second part, Lachenmann explains the multiple ways in which he confronts post-serial structures as represented by the (»structure-« or »time-«)»net« during the beginning of a compositional process. In most of his works, this net is the result of a highly complex structural arrangement of twelve-tone rows, yet it usually merely serves as a kind of »memory« and might be ignored or torn down at specific moments during the compositional work. The function of this net, ultimately, is to push the composer into new situations that he would not have confronted otherwise. In this
context, Lachenmann defends the historical works of post-war serialism such as Boulez’ *Structures Ia*, arguing that »freedom« in that specific historical situation also meant to liberate oneself from a stereotyped fantasy by means of the »diving suit« of serial structure.

After arguing that much of his music is based on the implicit double character of »process« (Prozess) and »condition« (Zustand), rather than separating these categories too rigidly, Lachenmann explains the ways in which he transforms »consonant« chords and sounds from tonal music. This practice in fact dates back to works of the early 1960s when he assembled a repertoire of interval collections such as constant sets (e.g. 2-2-2… semitones), continuously increasing/decreasing sets (e.g. 1-2-3-4…), cyclic sets (e.g. 2-3-2-3…) and harmonic as well as non-harmonic overtone sets. The playful, but not ironic integration of these collections into Lachenmann's music is exemplified by a large section from *Ausklang* (1984/85) where a »fortissimo« C major tutti forms the final point of a transformation from toneless to resonant sounds.

During the discussion with the audience, Lachenmann describes his compositional methods as making a »necessity out of the arbitrary« or forming »consistency out of contingency« – the serialist structural data assembled in the beginning of the compositional process provoke resistance, creative energy, and eventually become conscious as part of a personal musical vision. Similarly, a large-scale formal plan, although usually set out in the beginning, might be extended or revoked at any time in order to »let the idea of the piece discover itself«.

Finally, discussing the current knowledge of extended playing techniques among professional musicians, Lachenmann argues against the tendency of becoming obsessed with alienated sounds as a »stylistic prison« and describes composition as a broadening of the mind.

*Clemens Gadenstätter*

Helmut Lachenmann. Kurzportrait mit Selbstportrait

[Helmut Lachenmann. Short Portrait with Self-Portrait]

Characteristics of Helmut Lachenmann’s music are approached through the author’s own music and musical thinking, intertwining portrait and self-portrait. Lachenmann’s music reflects problems of a recent history of composition and asks key questions about music’s relation to society. It challenges, for example, the position of composers/writers towards collective standards, but also reflects what critical thinking can mean in a society that consumes criticism and makes it part of its own system.

Polyvalent structural relationships within Lachenmann’s music reflect his insistent method of observing and perceiving, of re-working, re-shaping traditional modes of listening. Whereas the terms »revolutionary« and »novelty« (not only in contemporary music) have become commodities or matters of fast changing trends, Helmut Lachenmann can be characterized as a »homo differentialis« whose work substantiates an existential necessity to bring music to the ear of the listener.
This article tries to approach Helmut Lachenmann’s music from the perspective of the cognitive sciences. The first part examines important theoretical concepts developed in Lachenmann’s own writings such as »polyphony of allocations« (Polyphonie von Anordnungen), »structure sound« (Strukturklang), »family« (Familie), »screening process« (Abtast-Prozess), modes of listening »(Hin-)Hören« vs. »Zu-Hören« and points at their cognitive implications.

The second part discusses interrelations between Lachenmann’s and Ludwig Wittgenstein’s concepts of »family«. These concepts share an anti-essentialist perspective and argue that »families« might assemble highly heterogeneous mixtures of components. Theories of cognitive categorization based on Wittgenstein’s notion of »family resemblance« include Irene Deliège’s concept of »cue-abstraction«, based on the identification of salient features in musical contexts and their similarity, and Adam Ockelford’s »zygonic model« that criticizes this emphasis on similarity-relations; according to Ockelford, members of a category (or family) do not necessarily share a single property (or essence), but might be connected by association or contiguity.

In the third part, two analytical examples related to Lachenmann’s concept of a »musique concrète instrumentale«, Pression (1969/70) and Allegro Sostenuto (1986/88), exemplify the composer’s intuitive use of cognitive principles, based mainly on Gestalt laws. The consistency of cognitive features in Pression for solo violoncello provides counter evidence against Hans-Peter Jahn’s thesis that the order of sections in this piece is arbitrary. Allegro Sostenuto demonstrates Lachenmann’s inventive play with Gestalt principles that serve as tools for categorical transformation: reference pitches, for example, provide clear levels of listening orientation for sounds that metaphorically »extinguish« or »mask« each other.

The conclusion argues that Lachenmann’s theoretical ideas and theories of cognitive categorization tend to converge and might be transformed into a theory of musical context that is crucial for an adequate understanding of Lachenmann’s works.

Martin Kallenecker
Subtraktion und Inkarnation.
Hören und Sehen in der Klangkunst und der »musique concrète instrumentale«
[Subtraction and Incarnation. Hearing and Seeing in Sound Art and »musique concrète instrumentale«]
whereas *subtraction* dissolves him into an ideal silhouette, into a real but invisible person on stage.

In many contemporary art forms such as happenings or sound installations both extremes may be observed, leading either to an emphasis on theatricality, or reducing the work to one single effect: »One sound may be enough« (David Toop). Both forms, however, aim towards a specific kind of *presence*, demanding utmost concentration with specific religious undertones: no discourse, no structure is transmitted, rather epiphanies emerge directly from colours, fragrances or sounds.

Various forms of this polarity appear in the techniques and ceremonies of contemporary *ars electronica* which the article considers as a (possible) challenge to »classical« contemporary music that is fixed in a score. Helmut Lachenmann’s views on analytical listening and perception (a key metaphor since the end of the twentieth century) are examined in this context, focussing on the musician’s body in selected works including *Air* (1968/69), *Kontrakadenz* (1970/71) and *NUN* (1999/2002). All three examples make clear that »listening« to Lachenmann’s music often implicates seeing how this music is performed in order to grasp how »heterogeneous series« connect diverse sound producing media and techniques. The relationship between hearing and seeing in Lachenmann’s music has recently been isolated by choreographer Xavier Le Roy who has produced ritualistic as well as »subtracting« versions of works such as *Salut für Caudwell* (1977) and *Mouve ment* (1982/84). A completely »mute« performance of the latter work (Le Roy lets the musicians perform the complete piece without instruments), however, tends to simplify this relationship that might be described as an attempt to breach hearing by seeing and seeing by hearing.

**Christian Utz**

Klangkadenz und Himmelsmechanik. Alterität und Selbstreferentialität in Helmut Lachenmanns *Das Mäd chen mit den Schwefelhölzern* und *Concertini*

[Sound Cadence and Celestial Mechanics. Alterity and Self-Referentiality in Helmut Lachenmann’s *The Little Match Girl* and *Concertini*]

Helmut Lachenmann’s theory of perception highlights musical moments that step out of a coherent stream of self-contained musical logic and challenges established categories of musical experience. The penultimate scene (No. 23: *Shō*) of Lachenmann’s »opera« *The Little Match Girl* (1991-96/2001) and the airy chords in the final section of his large ensemble work *Concertini* (2004/2005) arguably represent such moments of fundamental musical alterity in the composer’s recent output that are characterised by a specific auratic emphasis. Closer examination, however, suggests that these sections are also multiply mediated by self-references with the larger musical structure of these extensive works. This article provides a loosely connected series of discussions on how a balance between alterity and self-referentiality is achieved in these two examples. The discussions acknowledge the distinction between »extra-opus« and »intra-
opus« references derived from cognitive science and music theory and focus on pitch organisation, sectional time structure, narrativity and interculturality.

The Japanese mouth organ shō that figures prominently in the opera scene and, according to the composer, provides the »scale« for the concluding sounds in Concertini, without doubt symbolizes a moment of fundamental alterity due to its unique timbre, its unalienated sound and a basic articulation derived from the Japanese court music repertoire jōgaku. A detailed analysis of fingerings and pitch organisation, however, reveals a »double-codings« of Lachenmann’s material: on the »extra-opus« realm it refers to or »deconstructs« both Japanese and European musical conventions, on the »intra-opus« realm it connects to the framing scenes of the opera and forms part of a large-scale »cadence sounds« that reconsider the complete spectrum between pitched and unpitched sounds within the three closing scenes. The »utopian« shō-chords played by wind instruments in the final section of Concertini, in contrast, create a more fragmentary type of »cadence sounds« due to their short durations, but nevertheless exert a »magnetic« attraction that temporarily assembles the heterogeneous »sound families« of the piece into transient sonic entities.

A detailed overview of the sectional time structures reveals that in both cases the music follows a rather rigid sequence of proportions derived from Fibonacci series and the golden section, and includes several quasi symmetrical time layers. In both examples this time structure supports pivotal formal processes: in the shō-scene from the Little Match Girl it suggests a shift from the predominance of shō-sounds to their increasingly independent orchestral »resonances«, in Concertini the symmetrical position of the »shō-chords« within the final section emphasizes their cadential function and »magnetic« effect.

The concluding discussions on narrativity and interculturality suggest that – partly in contrast to the preceding arguments of this essay – the analysed sections tend to subvert the conventional closure concept of a »cadence« and rather create open endings. The self-referential elements in the Little Match Girl’s construction of the shō and its inclusion in a re-invented type of »celestial mechanics« discloses non-essentialist, polyvalent strata of musical meaning that match Lachenmann’s concept of non-conventional musical narrativity and non-exploitative musical interculturality (a concept that he has critically discussed at length in a recent article). This is especially cogent when his shō-music is compared to other recent works for the Japanese mouth organ that recontextualize its sounds by »demythologization« in a much more obvious, arguably didactic manner. Finally, Lachenmann’s key idea of »liberated perception« is associated with this discussion on interculturality and traced back to moments in Keiji Nishitani’s philosophy – leaving this article open to further research.
Elisabeth Egger
Kontinuität, Verdichtung, Synchronizität. Zu den großformalen Funktionen des
gepressten Bogenstrichs in Helmut Lachenmanns Streichquartetten
[Continuity, Condensation, Synchronicity. On the Large-scale Formal Functions of the Pressed Bow in
Helmut Lachenmann’s String Quartets]

Helmut Lachenmann’s three string quartets Gran Torso. Musik für Streichquartett
rev. 2002) introduce a huge variety of extended playing techniques that are first listed
systematically allowing for a comparison between the three works on a purely techni-
cal level. It becomes obvious that most of the extended techniques are introduced in
the first quartet and that the subsequent quartets show increasingly smaller selections
of these techniques. This especially applies to the most prominent of these techniques:
the pressed bow, described by the composer as »rattlings«, which symbolizes Lachen-
mann’s sound world like no other technique. Although the statistics again show the
highest degree of timbral differentiation in the first quartet, the pressed bow indeed
takes a crucial formal function in all three works.

Each quartet includes a relatively long section or field in which this technique
dominate. Although the transformation processes by which these fields are integrated
show some degree of similarity, a separate predominant function can be discerned for
each field. In Gran Torso, the pressed bow section is part of a complex continuous
transformation from »tenuto« sounds to single impulses, not least due to its »perfo-
rated« sound quality. Whereas this transformation integrates a huge variety of different
timbres, »Reigen seliger Geister« condenses the music to two main sound qualities, »flau-
tato« sounds and pizzicato-impulses. The pressed bow field here forms part of a much
more concentrated large-scale development and most prominently figures in the
retransition from pizzicato-chords to »toneless« impulses towards the end of the piece. In
»Grido«, the pressed bow fields integrate other playing techniques as well as pitched
sounds, and can be characterized by a tendency towards rhythmic and pitch-related
synchronicity that also describes a large-scale formal tendency in this work. Except for
the pressed bow sections, the musical flow in this work cannot be characterised by
playing techniques anymore, but might be divided into »calm« and »agitated« fields
that are interconnected by the »rattling fields«.

The analysis provides evidence for the argument that the pressed bow technique,
which often was misunderstood as a simple »negation« of beautiful sound, fulfills an
essential structural function in Lachenmann’s music.
This analysis examines similarities between different levels of the formal structure in Helmut Lachenmann’s second string quartet. The methodological approach presents a visual model of structural entities based on a categorization of sound structures that expands Lachenmann’s well-known »Klangtypen« (sound types), namely »sound processes«, »sound conditions« and »structure sounds«. It also describes three main types of categorical transformation relevant to the analysis, namely timbral transformation, transformation to impulse-categories, and transformation from horizontal to vertical sounds.

An overview of the large-scale form reveals five main sections that introduce (1) flautato-, trill-/tremolo-, and noise-variants (all played »tenuto«), (2) »inverted pizzicati«/glissandi, (3) pizzicati, (4) pizzicato-chords and (5) »toneless« noise-variants respectively. The overall form might also be described as a process leading from »toneless« sounds to pitched sounds and back to »toneless« sounds again. This fade-in/fade-out of pitched sounds can also be observed on microformal levels, e.g. frequently in trill-variants, providing an example for formal self-similarity.

In the main part of the analysis three sections comprising the first 19 bars of the quartet are analysed in detail, applying a hierarchical system of »supersounds« and »subsounds«. It can be argued that all three sections describe self-similar relationships with the large-scale form (and, consequently, among each other). The first five bars, for example, can be described as »tenuto«-sounds that are increasingly »perforated«, eventually resulting in short impulses – a process that is (self-)similar to the first three sections of the large-scale form. The further development of the piece up to bar 40 is considered a first major step towards what the composer has described as a »super-instrument« which combines all four instruments into a single sound body. Bars 35-40 in particular, can again be compared to the large-scale formal development, representing a first climax of four major realms of categorical transformation: horizontal to vertical, noise to pitch, solo to tutti, tenuto to impulse.

Finally, the article argues that, although Lachenmann has probably conceived of the sound structures in his second string quartet in different terms than those introduced here, the revealed connections between different levels of the formal structure have been uncovered by his specific compositional methods.