

Simultaneities and Chimeric Sound

Composing, Performing, and Perceiving Music Anti-Hierarchically

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- (1) description of *non-hierarchical musical simultaneity* as a “compositional problem” and “inner-artistic” “solutions” [artistic practice as principal medium of research]
- (2) expanding this “problem” by creating a “map of musical simultaneities” [artistic practice contextualized by scholarly theories and methods]
- (3) feedback into compositional concepts or other areas of musical practice and theory (“replicability”)

1. Non-hierarchical Simultaneity as Compositional Problem

challenge: *musical interculturality; dynamic, non-essentialist way of combining Western and East Asian instruments*

→ ensemble pieces with bi-cultural instrumentation 2001-2006

Interference for piano and 8 Chinese instruments, 2001

together // apart for kayagum, taegum, saenghwang, violoncello, piano and electronics, 2001

repercussion.camouflage.report for flute/bass flute, trombone, sheng/xun, percussion and live-electronics, 2003

the wasteland of minds for sheng, zheng, Western instruments and live-electronics, 2003/2004

Glasakkord for shō, shakuhachi and Western instruments (bassclarinet (B); violin; viola; violoncello; percussion), 2006

10

C

clarinet (A)

Musical score for clarinet (A) in treble clef. It features complex rhythmic patterns with triplets and quintuplets, dynamic markings of *ppp* and *pp*, and a key signature change to one sharp (F#) in the final measure.

sheng
(Chin. mouth organ)

Musical score for sheng in treble clef. It consists of sustained chords and single notes with dynamic markings of *pp* and *p*.

zheng
(Chin. zither)

Musical score for zheng in treble and bass staves. The treble staff has sustained chords, while the bass staff has a melodic line with *sffz* markings. A dynamic marking of *f* appears in the final measure. A note is marked with a circled 24 and an asterisk.

* string number

accordion

Musical score for accordion in treble and bass staves. It features melodic lines with triplets and dynamic markings of *pp* and *mf*. A circled 24 with an asterisk is present in the final measure of the treble staff.

violin

Musical score for violin in treble clef. It includes melodic lines with dynamic markings of *pp*, *p*, and *mf*.

cello

Musical score for cello in bass clef. It features long, sustained notes with dynamic markings of *p*.

live-electronics

Musical score for live-electronics, represented by a single line with a long, continuous horizontal line indicating a sustained sound.

(Vc. TRANS 2 ----> Clar. TRANS 1)

■ = ♯

	9-Ton-Zentrum	9-Ton-Zentrum	12-Ton-Zentrum	16-Ton-Zentrum
1a (15 ♯)	Max/MSP: Cl./1 Cl./2 Cl./2 → Vc./1 Vc./2 Vc./2 →		Cl./1 Cl./2 Cl./2 → Vc./1	Vc./2
1b				
(15,875 ♯) Klarinette		Violoncello	—	Violoncello
2a (5 ♯)	Zheng, oberes System	—	—	Zheng (unt. Sys.)
2b (5,825 ♯)	Zheng, unteres System	—	Klarinette	Zheng (ob. Sys.)
3a (2,5 ♯)	—	Zheng, oberes System	Akkordeon, oberes Sys. [x9]	Sheng (polyphon)
3b (2,812 ♯)	—	Zheng, unteres System	Akkordeon, unteres Sys. [x8]	Sheng (polyphon)
4a (1,5 ♯)	Violine	Sheng	Violoncello [x9]	Klarinette
4b (1,887 ♯)	Violoncello	Akkordeon [x8]	Violine	Violine
5a (1 ♯)	Sheng	Violine [x9]	Zheng [x8]	Akkordeon (ob. Sys.) [x9]
5b (1,125 ♯)	Akkordeon	Klarinette [x8]	Sheng	Akkordeon (unt. Sys.) [x8]

Utz, the wasteland of minds, system of layers

The Wasteland of Minds

Christian Utz
(2003/2004)

for 2 Chinese and 4 Western instruments and live-electronics

© UtzMusic/Prinze Vienna, 2004

A $\text{♩} = 60$

1b (16,875 ♩ x 2)

clarinet (A)

5a (1 ♩ x 6 x 5,5)

sheng

2a (5 ♩ x 3 x 2)

zheng

2b (5,625 ♩ x 3 x 2)

5b (1,125 ♩ x 6 x 5)

accordion

4a (1,5 ♩ x 5 x 4,5)

4b (1,66 ♩ x 5 x 4)

violin

viola/cello

1a (15 ♩ x 2)
(Clar. TRANS 1)

(Clar. TRANS 2)

Max/MSP

ppp

pp

mf

arco

v

ppp

pp

pp

pp

sffz

pp

sffz

pp

4

1b (16,875 ♩ x 2)

clar. (A)

5a (1 ♩ x 6 x 5,5)

sheng

2a (5 ♩ x 3 x 2)

3a (2,5 ♩ x 4 x 3)

4a (1,5 ♩ x 5 x 4,5)

zheng

2b (5,625 ♩ x 3 x 2)

3b (2,812 ♩ x 4 x 3)

5b (1,125 ♩ x 6 x 5)

4b (1,66 ♩ x 5 x 4)

acc.

4a (1,5 ♩ x 5 x 4,5)

5a (1 ♩ x 6 x 5,5)

viol.

4b (1,66 ♩ x 5 x 4)

1b (16,875 ♩ x 2)

vc.

1a (15 ♩ x 2)

Max/MSP

B

5b (1,125 ♩ x 6 x 5)

4a (1,5 ♩ x 5 x 4,5)

3b (2,812 ♩ x 4 x 3)

4b (1,66 ♩ x 5 x 4)

5a (1 ♩ x 6 x 5,5)

1b (16,875 ♩ x 2)

1a (15 ♩ x 2)

(Clar. TRANS 2 ----> Vc. TRANS 1)



Utz_Wasteland_2004_T1-8.avi

audio example 1

Utz, the wasteland of minds, bars 1-8

Wu Wei, sheng

Yeh Jiuan-Reng, zheng

ensemble on_line [PHACE Contemporary Music]

Simeon Pironkoff, conductor

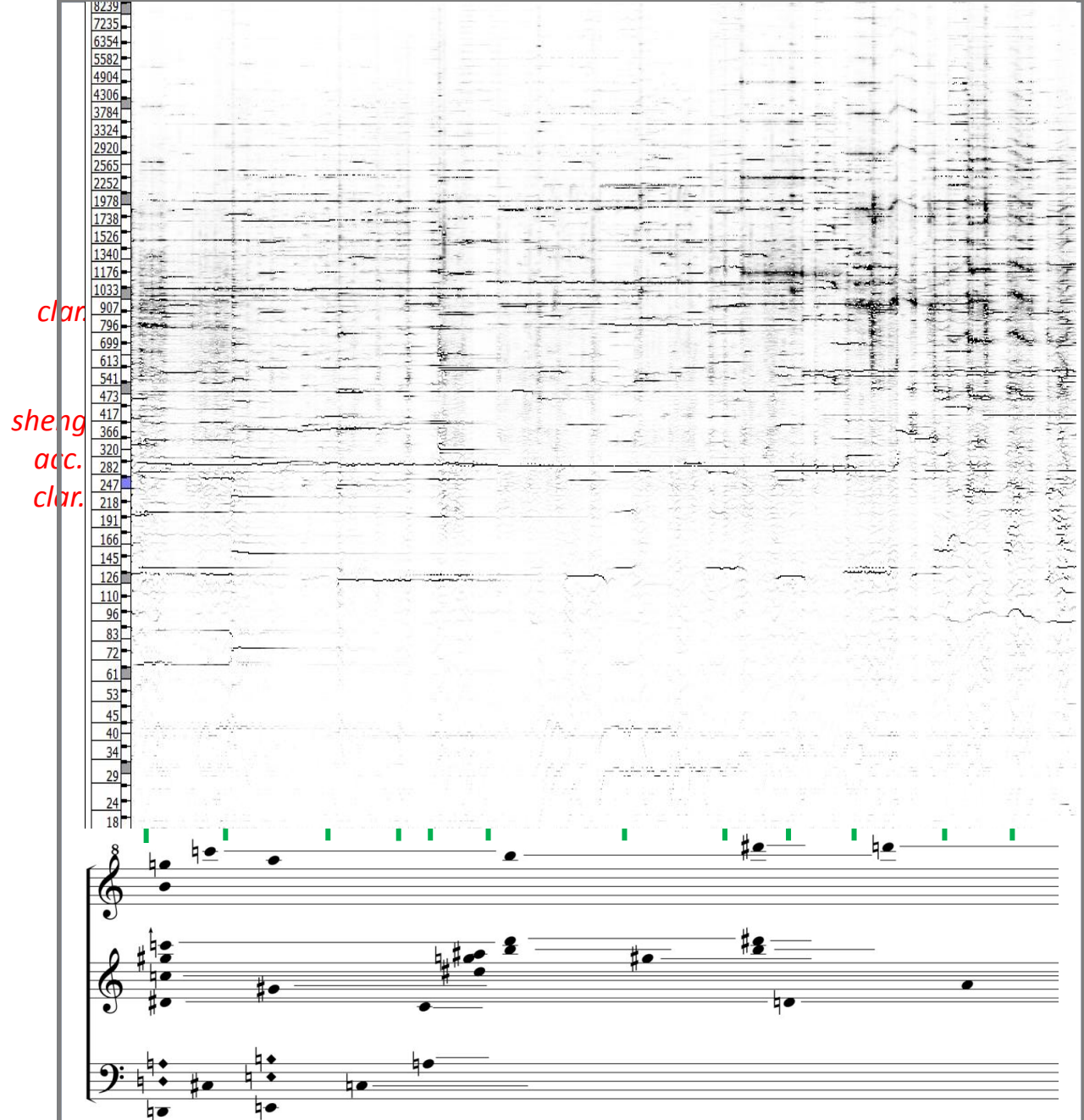
KUG-based
research project

CTPSO (*A Context-
Sensitive Theory of
Post-tonal Sound
Organization*,
2012-2014)

theories and methods
of *performative
listening*

four modes of listening

1. **analytical**
2. **holistic**
3. **cue-oriented**
4. **"presentist"**



Utz, the wasteland of minds, bars 1-8,
sonagramm + rudimentary transcription

Clar. (A)

sheng

zheng

acc.

viol.

vc.

Max/MSP

ff p

pp p

pp

mf f mp

loco

3

f pp

fffpp

pp

f

sul ponticello

7

pp

sul tasto

11:8

fff f

pp

s

ppp

f

(Vc. TRANS 2 ---> sheng TRANS 1)

40

clar. (A)

mf

f

fff

f < >

p

sheng

pppp

zheng

f

*at 40-42: always press lower string to raise the pitch higher than the pitch of the upper string.

acc.

p

ppp

fff

ffff

viol.

f < ff

ord.

mf

3

pizz.

mf

3

arco

p

3

vc.

mp

11:8

f

pp

11:8

Max/MSP

(sheng TRANS 2)

ritenuto.....

43

clar. (A)

sheng

zheng

acc.

viol.

vc.

Max/MSP

(sheng TRANS 1)

100%

100%

100%

100%

attaca



Utz_Wasteland_2004_T61-72.avi

audio example 2

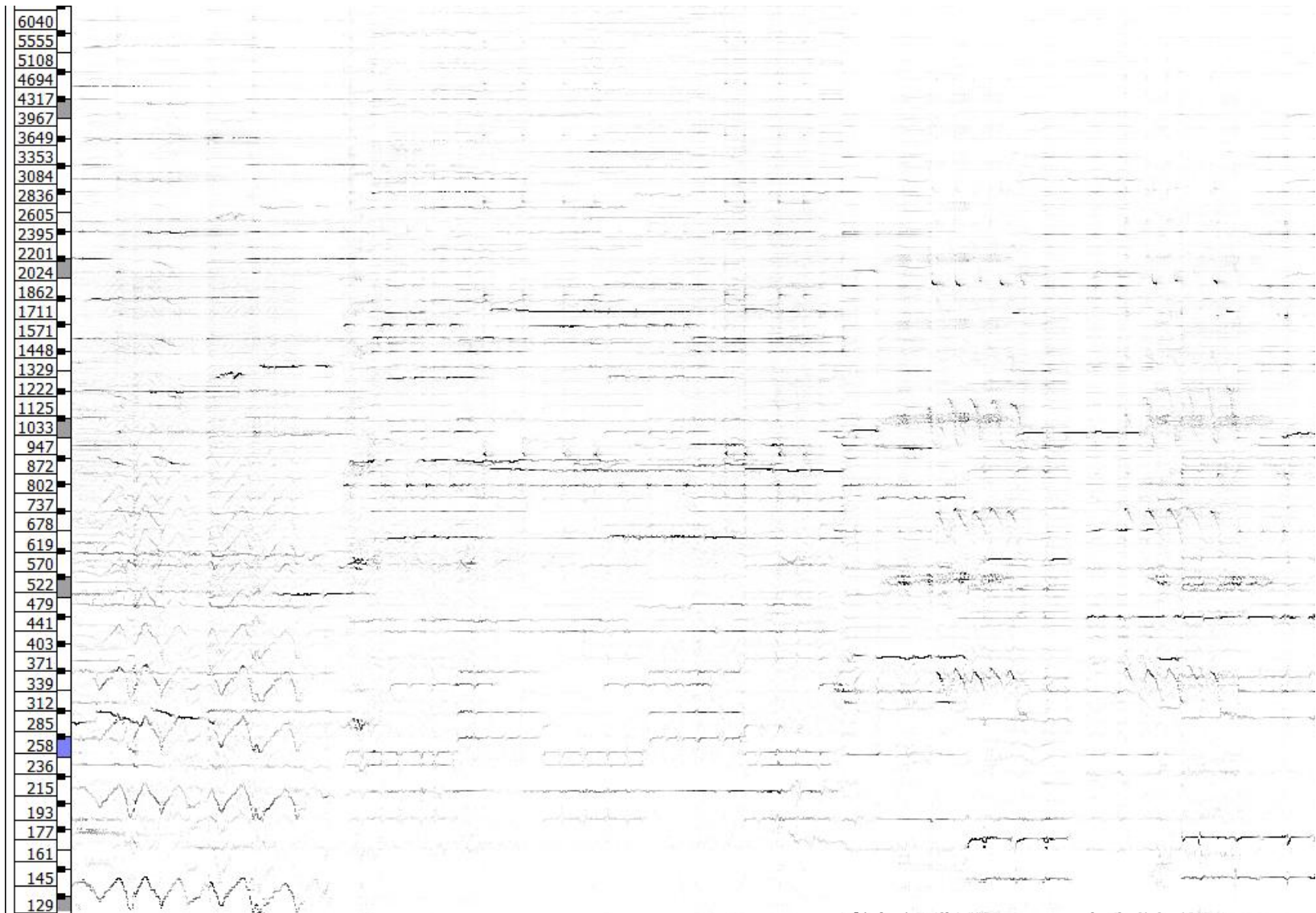
Utz, the wasteland of minds, bars 61-72

Wu Wei, sheng

Yeh Jiuan-Reng, zheng

ensemble on_line [PHACE Contemporary Music]

Simeon Pironkoff, conductor



Utz, the wasteland of minds, b. 61-72

Aa



126

clar. (A)

sheng

XUN (d)

4/4

zheng

pp

acc.

pp

viol.

vc.

pp

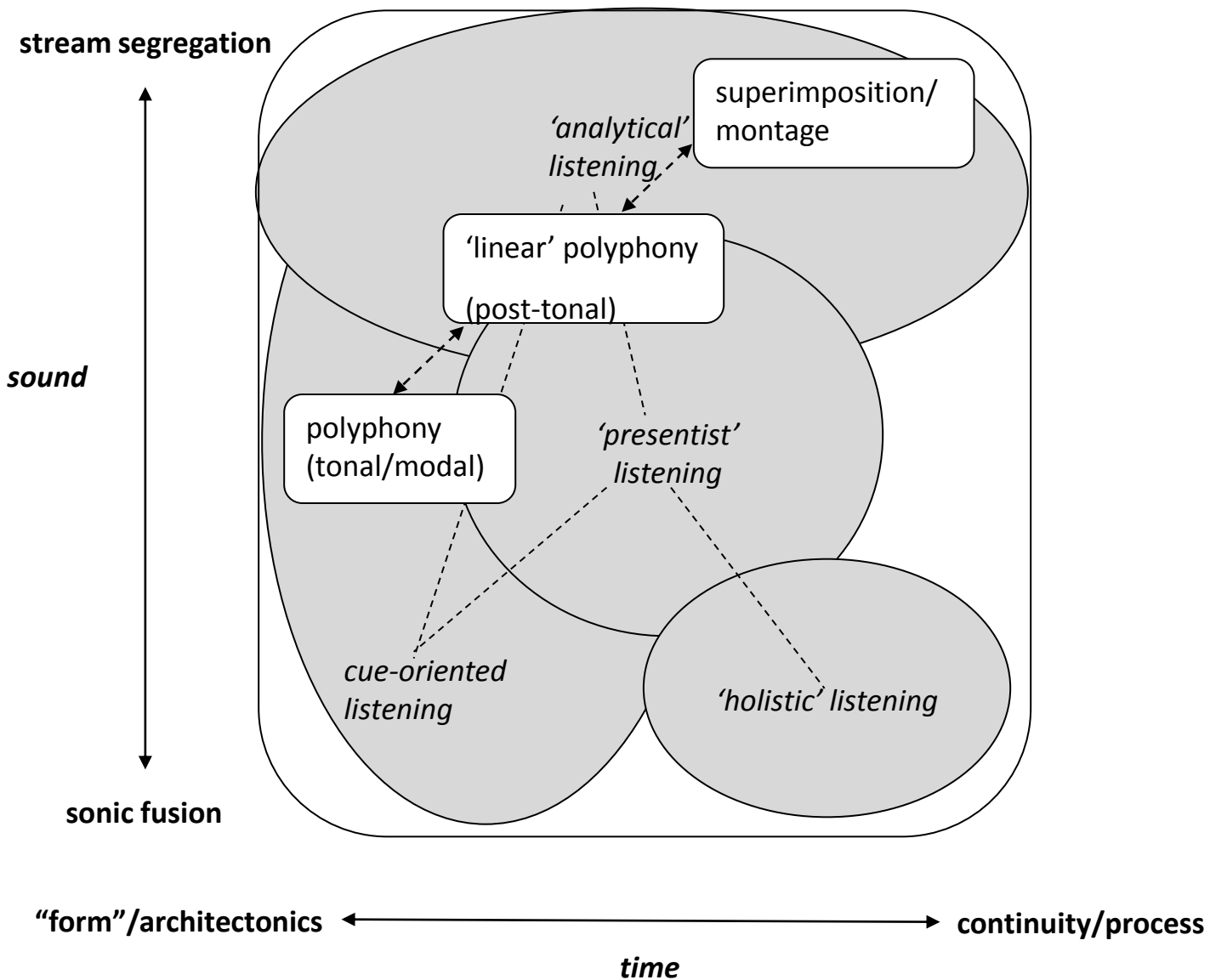
4/4

Max/MSP

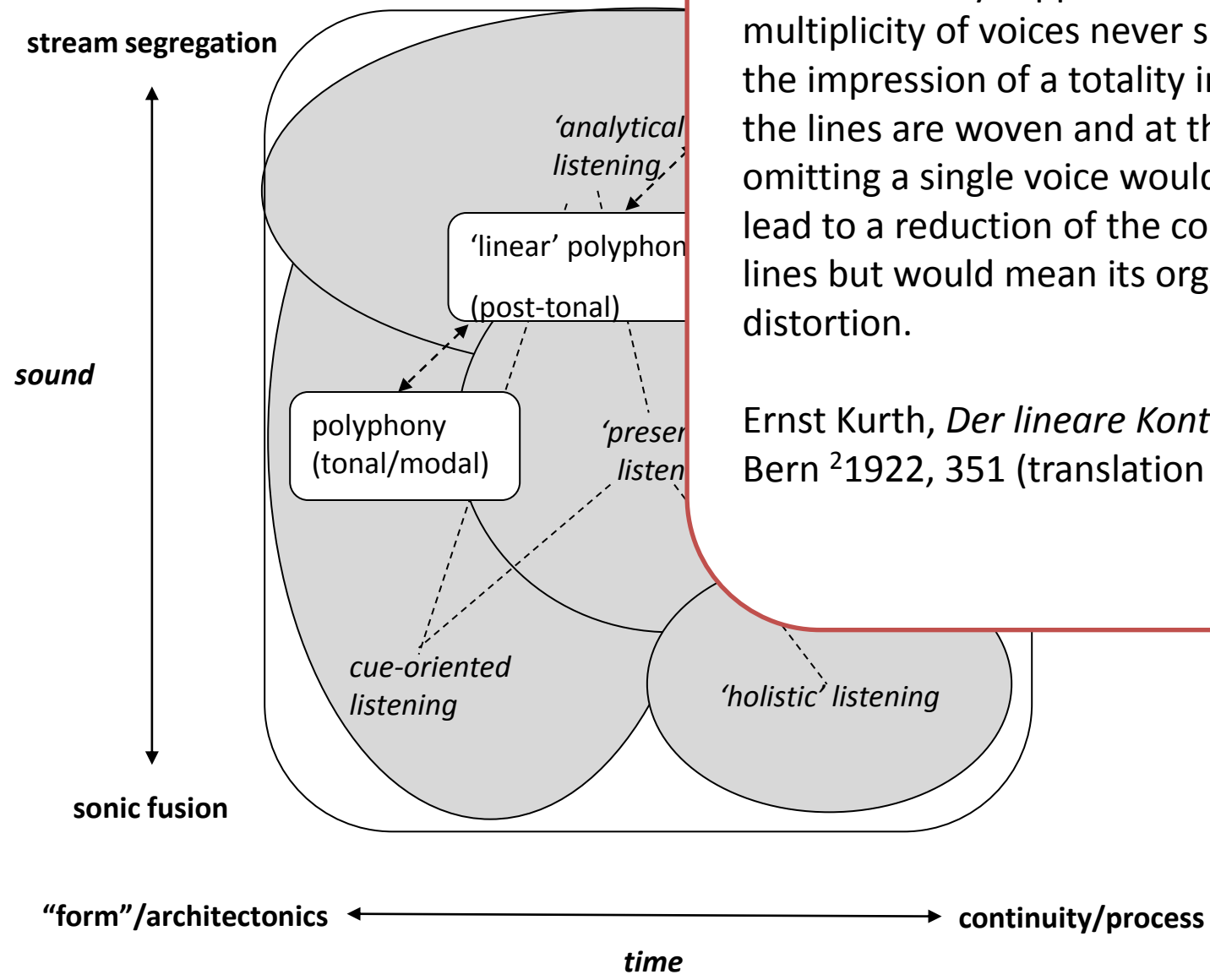
(zheng + Vc.)

(Clar. + Viol.)

2. A Map of Musical Simultaneity



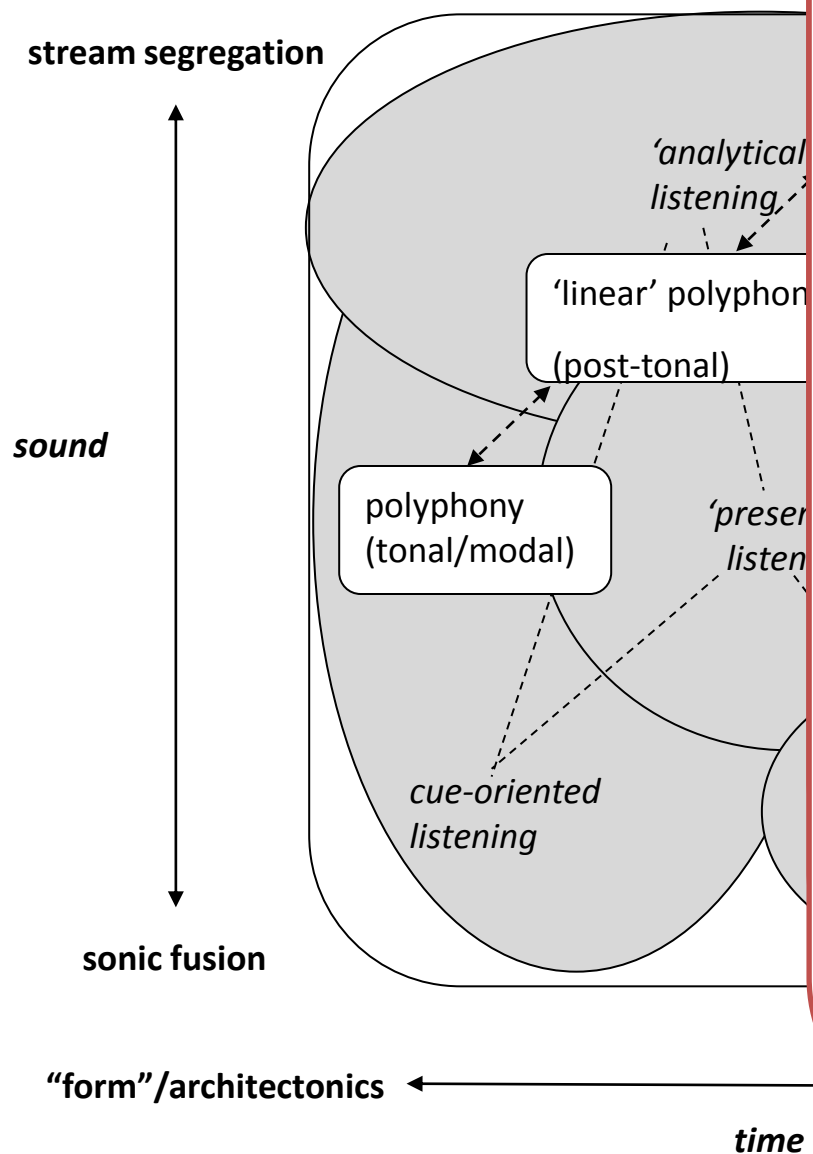
2. A Map of Musical Simultaneity



The primary law of polyphonic structure can be found in the fact that the complex of voices always appears as a unity; the multiplicity of voices never suppresses the impression of a totality into which the lines are woven and at the same time omitting a single voice would not only lead to a reduction of the complex of lines but would mean its organic distortion.

Ernst Kurth, *Der lineare Kontrapunkt*, Bern ²1922, 351 (translation CU)

2. A Map of Musical Simultaneity



Selbständigkeit der Stimmen ist nicht bloß so aufzufassen, dass sie nach ihrem horizontalen Verlauf von einander nicht abhängen [...], sondern dass sie **auch in harmonischer Beziehung von einander unabhängig sein sollen**; d.h. [...]

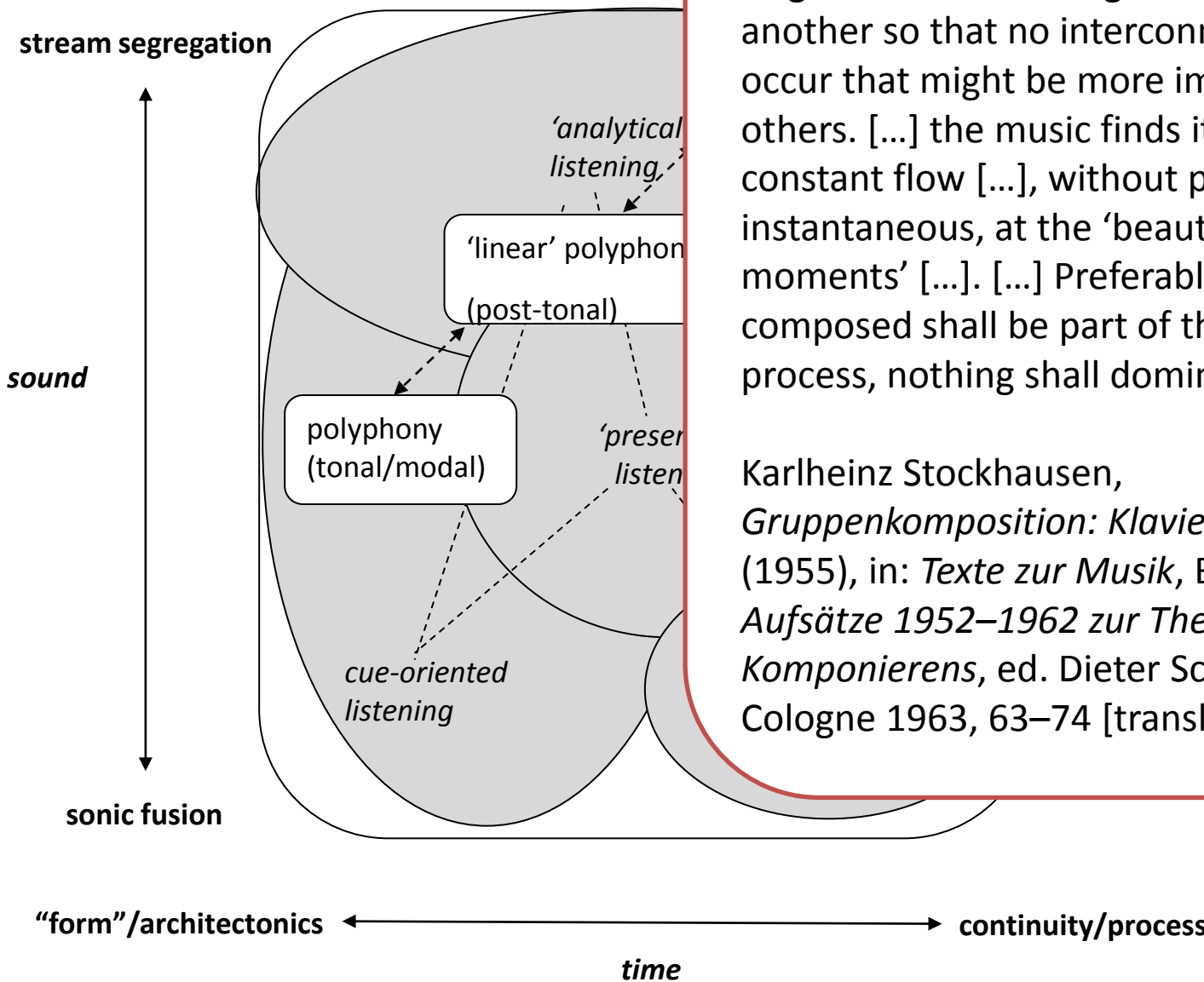
a) dass sie nicht zu gleicher Zeit auf eine gemeinsame Harmonie bezogen werden müssen [...]

c) dass sie womöglich dissonnante [sic!] Zusammenklänge ergeben – sollen (als äußeres Zeichen der **Unbekümmertheit**)

d) dass das **Entstehen harmonischer** ("registrierbarer") Folgen wie z.B. **Cadenzen, oder sonst benennbarer Fundamentalschritte nicht anzustreben ist** und für ihre Funktion unmaßgeblich ist. [...]

Arnold Schonberg, *Der lineare Kontrapunkt* [1931, Ms.]

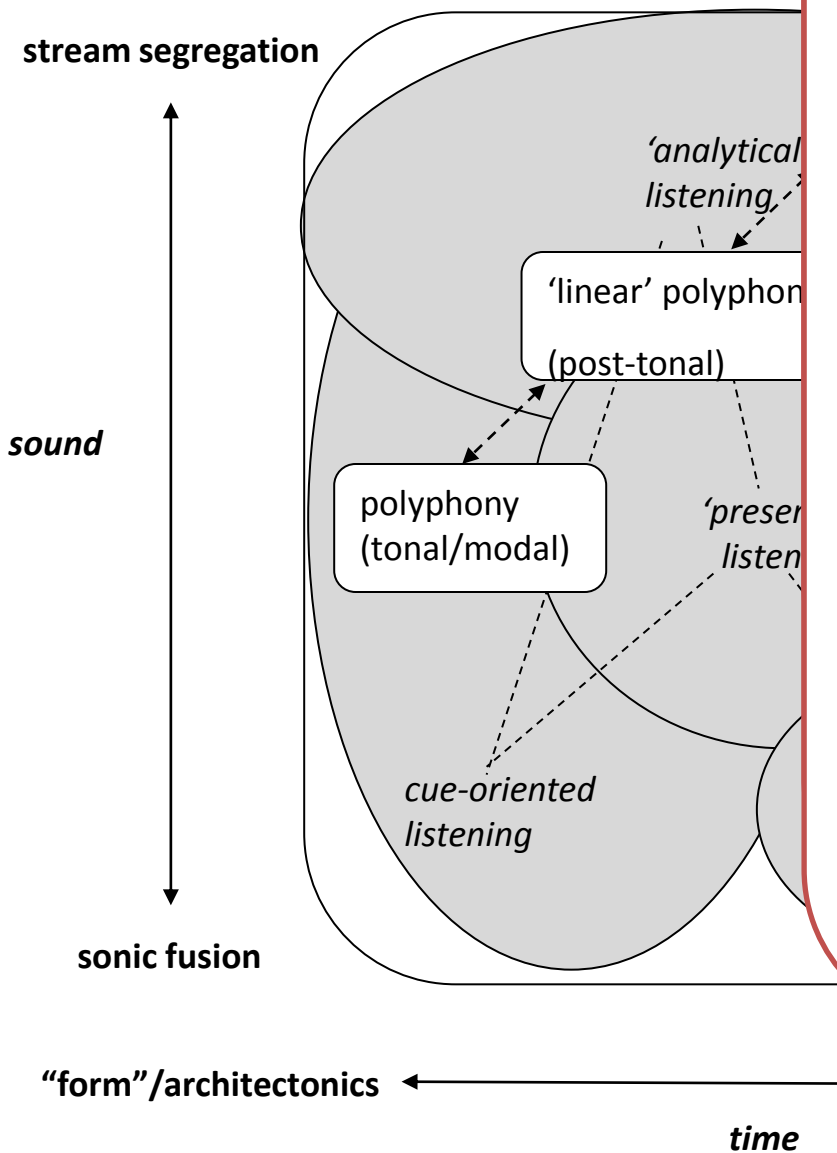
2. A Map of Musical Simultaneity



We listen to the entirety, keeping a synoptic impression, in which singularities are distinguished from one another so that no interconnections occur that might be more important than others. [...] the music finds itself in a constant flow [...], without pausing at the instantaneous, at the ‘beautiful moments’ [...]. [...] Preferably everything composed shall be part of the formal process, nothing shall dominate [...].

Karlheinz Stockhausen,
Gruppenkomposition: Klavierstück I
(1955), in: *Texte zur Musik*, Bd. 1:
*Aufsätze 1952–1962 zur Theorie des
Komponierens*, ed. Dieter Schnebel,
Cologne 1963, 63–74 [translation CU]

2. A Map of Musical Simultaneity



Helmut Lachenmann
“structural sonority”
→ defined as “polyphony of ordered juxtapositions [Anordnungen]”

(Klangtypen der Neuen Musik [1963/66/93], in: Musik als existentielle Erfahrung, hrsg. von Josef Häusler, Wiesbaden 1996, 18, Translation CU)

→ posits that the “development of each element is traceable by the listener”
→ results in “a sort of montage of different structures [that] actively dispels any sense of hierarchy or priority”

(Abigail Heathcote, Liberating sounds: philosophical perspectives on the music and writings of Helmut Lachenmann, PhD dissertation, Durham University 2003, 28)

→ idea of “sound families”



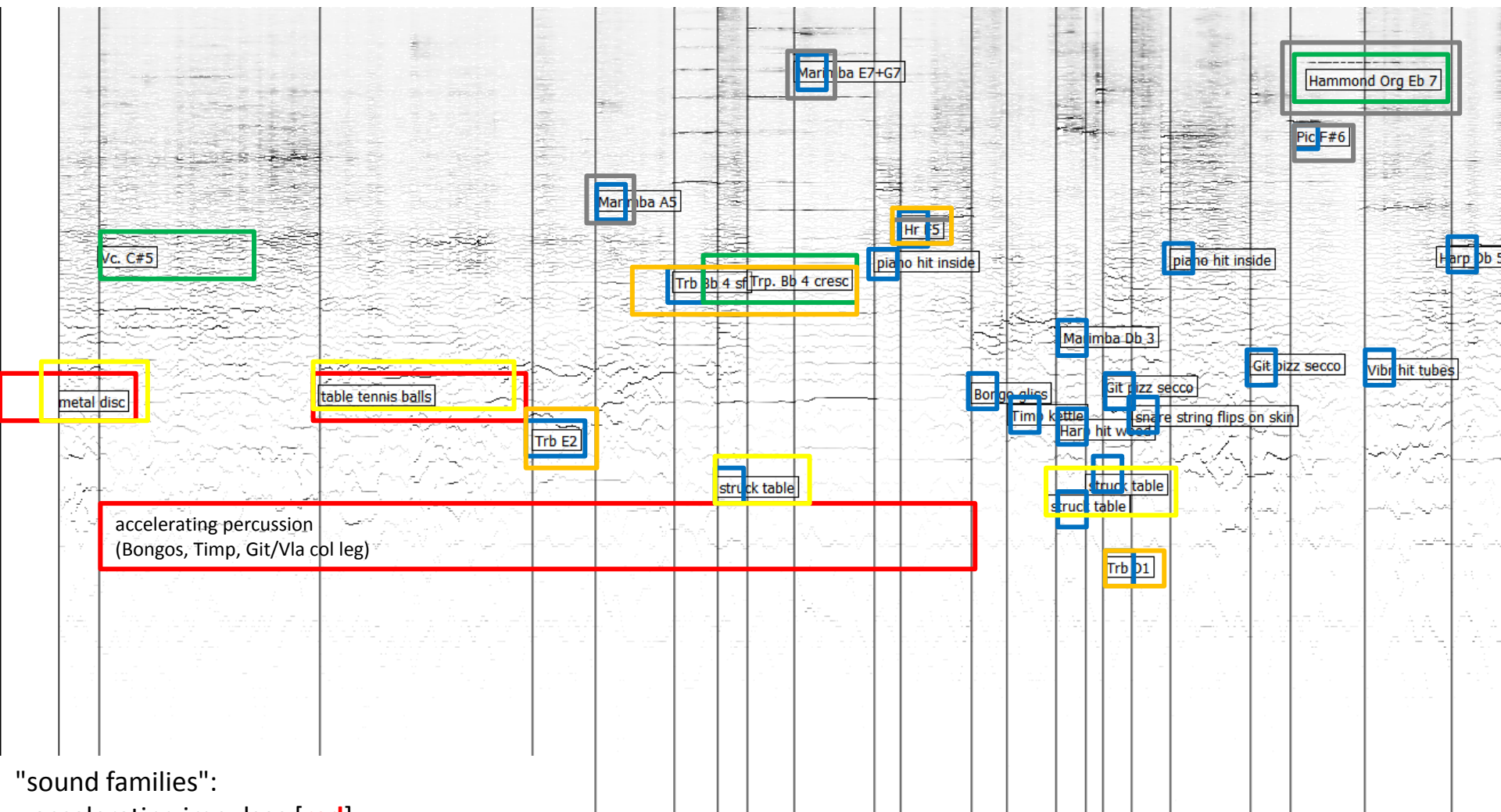
Lachenmann_Kontrakadenz_T21-28.avi

audio example 3

Helmut Lachenmann, *Kontrakadenz* (1970) for orchestra, bars 21-28

Ensemble Modern Orchestra

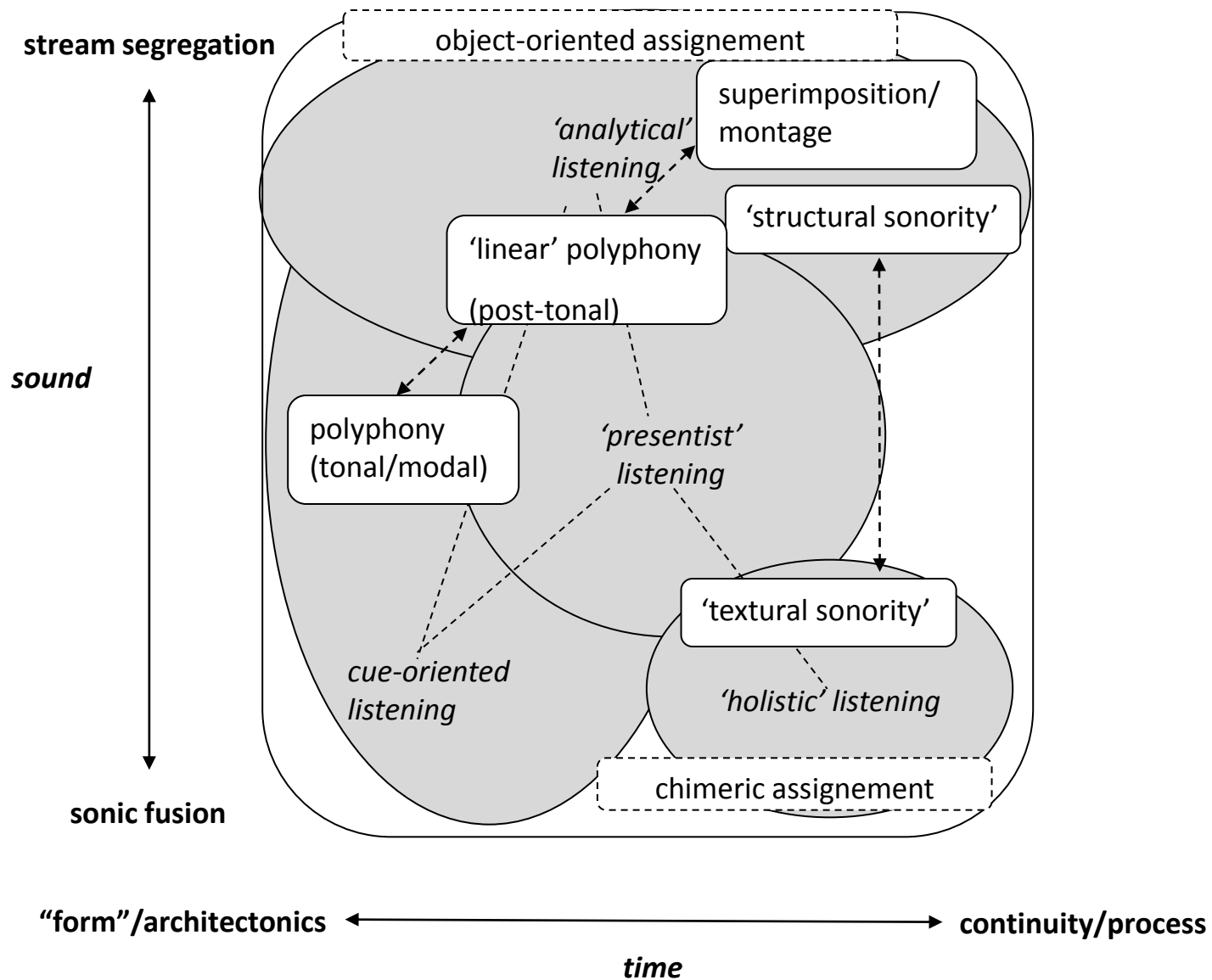
Brad Lubman



"sound families":

- accelerating impulses [red]
- short impulses [blue]
- sustained pitches [green]
- pitched sounds in high register [grey]
- brass [orange]
- external objects [yellow]
- etc.

Lachenmann, *Kontrakadenz* (1970), bars 21-28



6 $\text{♩} = 60$ With great transparency and luminosity

pp < <

pp → ff (dynamics performed intuitively within the given range, according to the flow of the music, except where indicated)

B

C

D

6 $\frac{6}{4}$

violine

ppp

sul tasto

ord.

viola

pp

sul tasto

ord.

sul tasto

pp

[scordatura: C-string tuned to F#1]

violoncello

pp

Glasakkord 6a

viol.

pppp

pp

sul pont.

ord.

via.

ppp

p

pp

ord.

vc.

mf

pppp

Glasakkord 6c

Glasakkord 5a

Christian Utz,
Glasakkord
for *shō*, *shakuhachi*
and Western
instruments (bass
clarinet (B); string
trio; tubular bells),
2006

independent layers:

shō (top) and
string trio (bottom)

69

M

shō

shaku-
hachibass
clarinet
(B)tub.
bells

violin

viola

cello

shō

shaku-
hachi

bass
clarinet
(B)

tub.
bells

violin

viola

cello

(non vib.)

mp

p

mp

3:5

F#

E♭

3

mp

ord.

pppp

f

ord.

sul pont.

p

ppp

ord.

sul pont.

ord.

pp

Utz, *Glasakkord*, p. 18-19

73

shō

shak.

(ord.)

f p mp mf

bass cl. (B)

tub. bells

mf p

viol.

ppp p pp mf ppp

pp mp ppp

3

3:5

sul p. ord. sul p.

ppp

ppp

p f

4:5

pp

sul p. ord. sul p.

ppp

Utz, *Glasakkord*, p. 18-19



Utz_Glasakkord_2006_T65-82.avi

audio example 4

Christian Utz, *Glasakkord* (2006) for *shō*, *shakuhachi*, bass clarinet, tubular bells and string trio, bars 61-72

Kō Ishikawa, *shō*

Tony Clark, *shakuhachi*

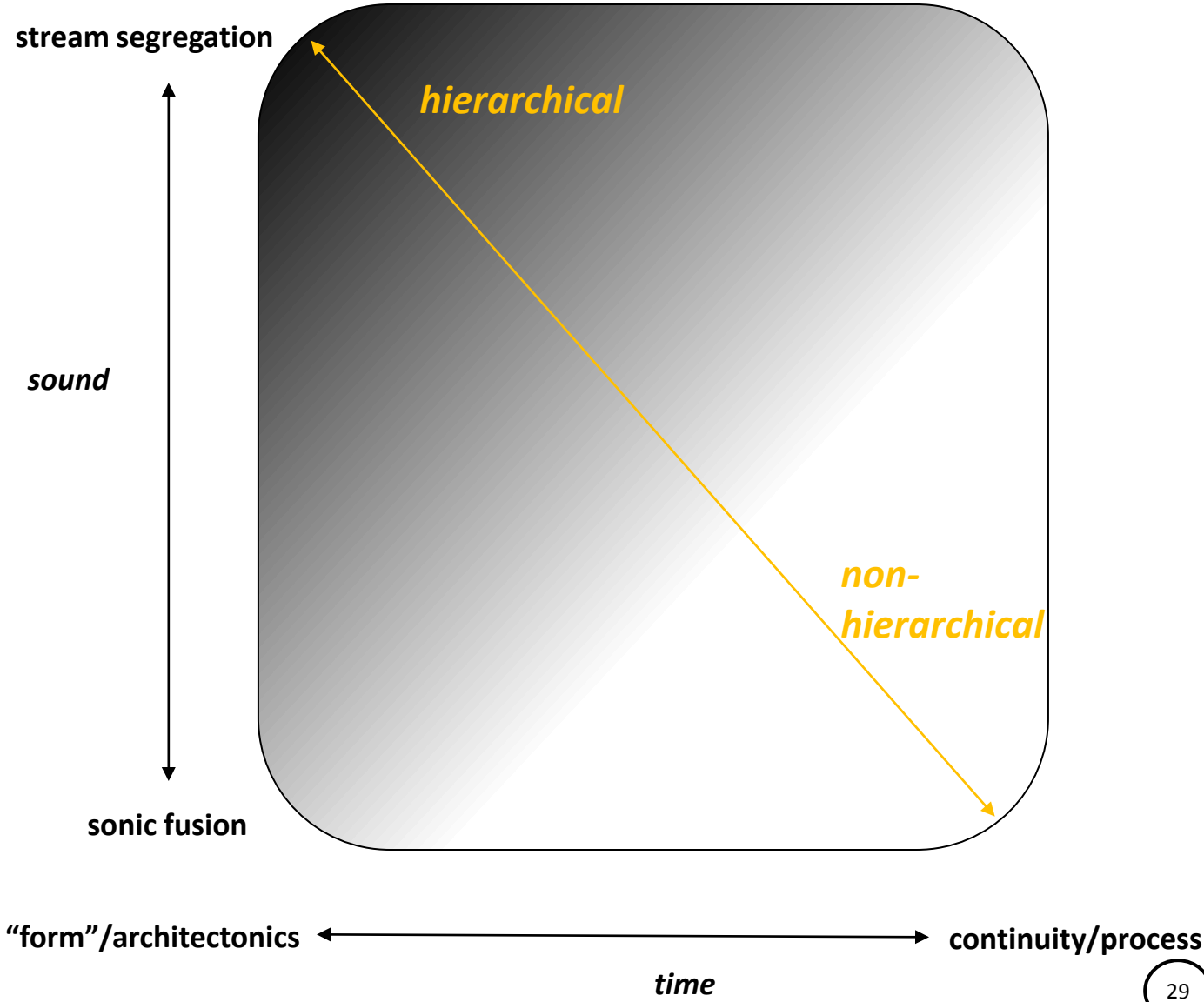
ensemble on_line [PHACE Contemporary Music]

Simeon Pironkoff, conductor

3. Consequences for Composition, Performance, and Analysis

musical hierarchies

- hierarchy of events in time
("horizontal" → form)
- hierarchy of simultaneous events
("vertical" → polyphony/
superimposition)



multivalent sound-time-constellations

deconstruct analytical and holistic listening

**demonstrate the
multiplicity of perceptual and performative
approaches encoded in a complex score
through performative analysis**

**changing, movable, transforming centres of
perceptual attention**

create non-hierarchies in performance

increasing and decreasing hierarchies

change a field of devastation into a force field