

Mara Helmuth; *String Paths*. For up to 6 performers, each with 1-5 percussion instruments. Used by permission of Margaret (Mara) Helmuth, © 2007.

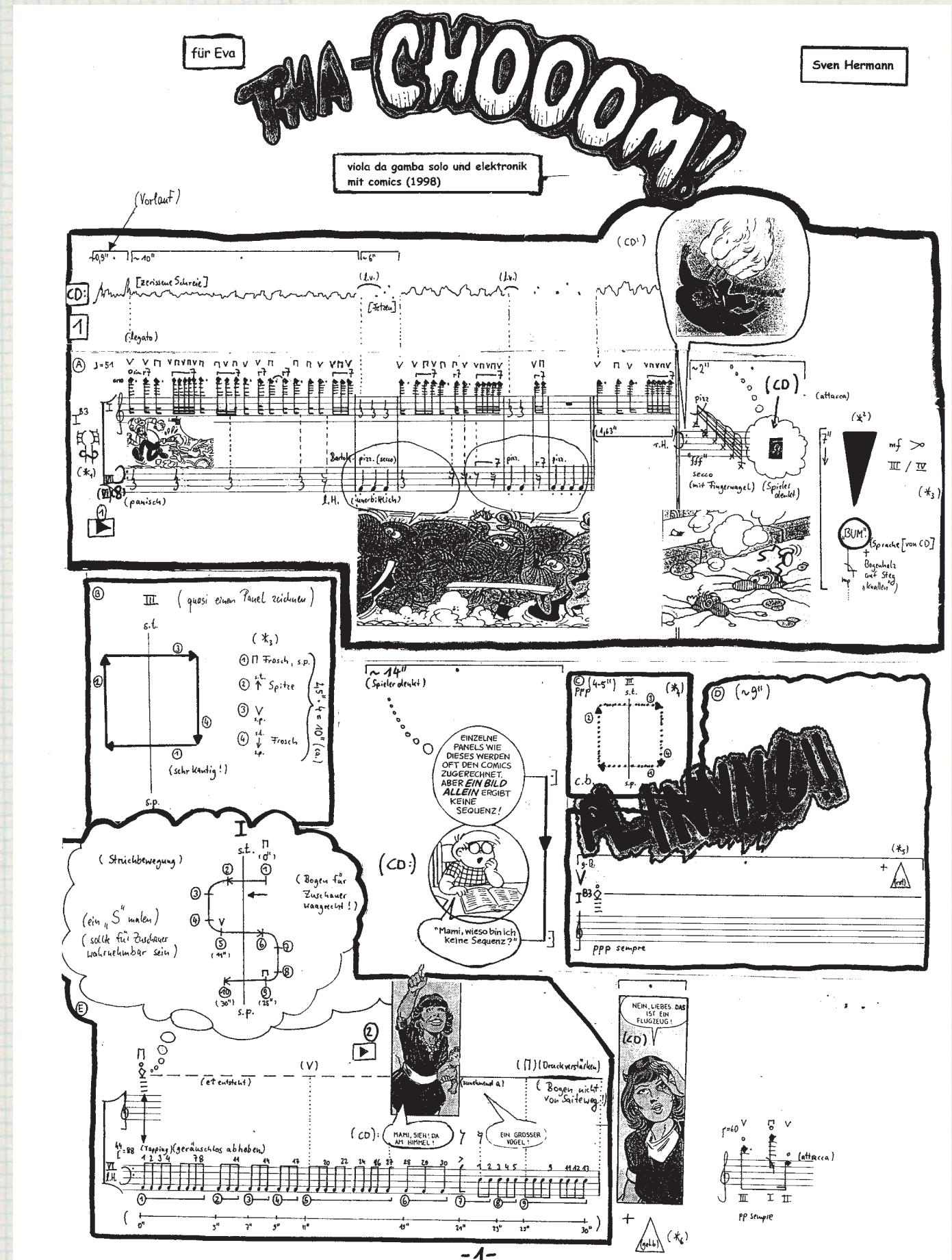
**String Paths:** Each performer chooses 1-5 percussion instruments and one color. The colored objects on the graph are derived from warped text strings. Following the path of the symbols of the chosen color, and listening to the others, the musicians compose and improvise their parts.

- color, reacting to the objects encountered.
- At all times listen to the other parts.
- Gaps in the path indicate silence.
- If during the performance, you hear sound collisions, from other performers with your part, that appear to be at different places in your path on the graph, jump to that part of the path that connects with the other musician's part.

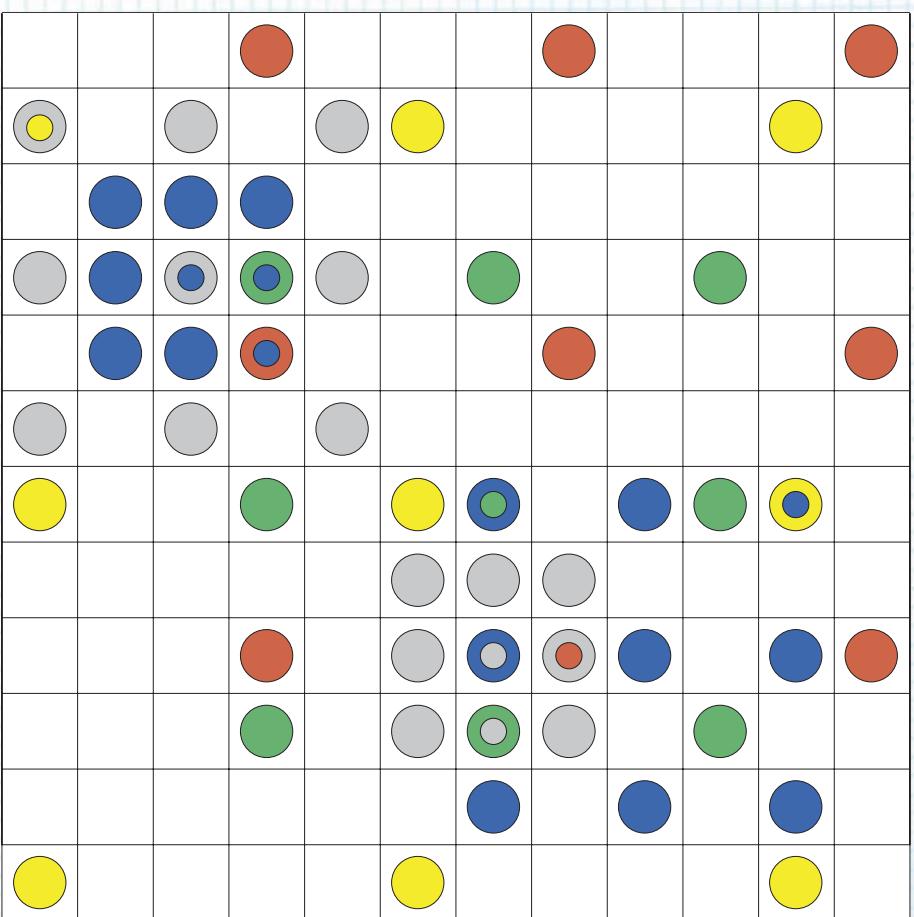
- black: *abstract*
  - red: *zapfino font*
  - green: "listen!"
  - purple: "wake up..."
  - brown: *sand font* "read the writing..."
  - blue: *hoeffler ornamental font*

### Instructions:

- Before the performance, choose a beginning point and some mappings between graphic objects of the chosen color and sounds.
  - Follow a path along the objects of your
  - You must remain on the path of your colored objects, but may move at any speed, forward or backward, loop or stop as desired.



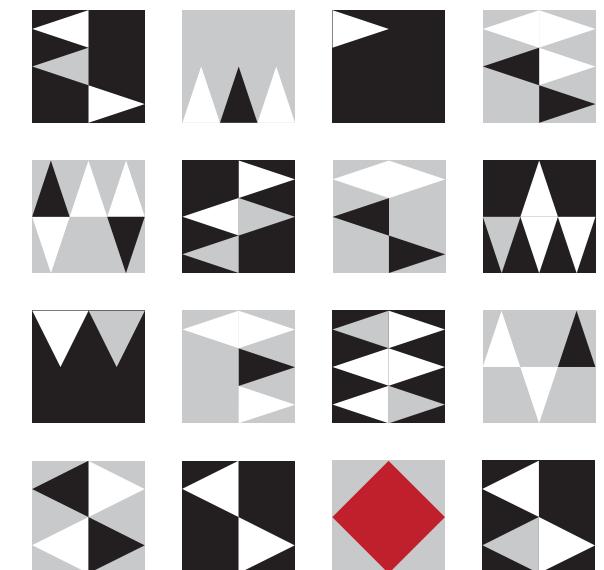
Sven Hermann: *Tha-choom!* For viola da gamba solo with CD and slide projections. Used by permission of Sven Hermann & Interzone perceptible. © 1998.



Christoph Herndl; *The Quadrature of the Keys/The Quadrature of the Strings*. For piano(s) and/or strings.

Used by permission of Christoph Herndl, © EIS 1996.

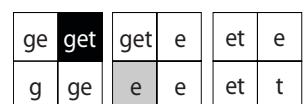
o	o	ol	o	ol	l	of	ofð	f	fð	ð	ð
o	ol	l	lo	ol	ol	ði	ð	ði	ðis	ð	ði
l	ol	l	lo	ol	l	ðis	i	ði	ði	ðis	ði
lo	lof	lo	lo	lof	lo	ðis	i	ði	ðis	i	is
lof	o	lo	lof	o	of	i	i	is	i	is	s
of	of	ofð	of	ofð	f	i	is	s	sai	sai	sai



Christoph Herndl: 39 Steps. For any instruments

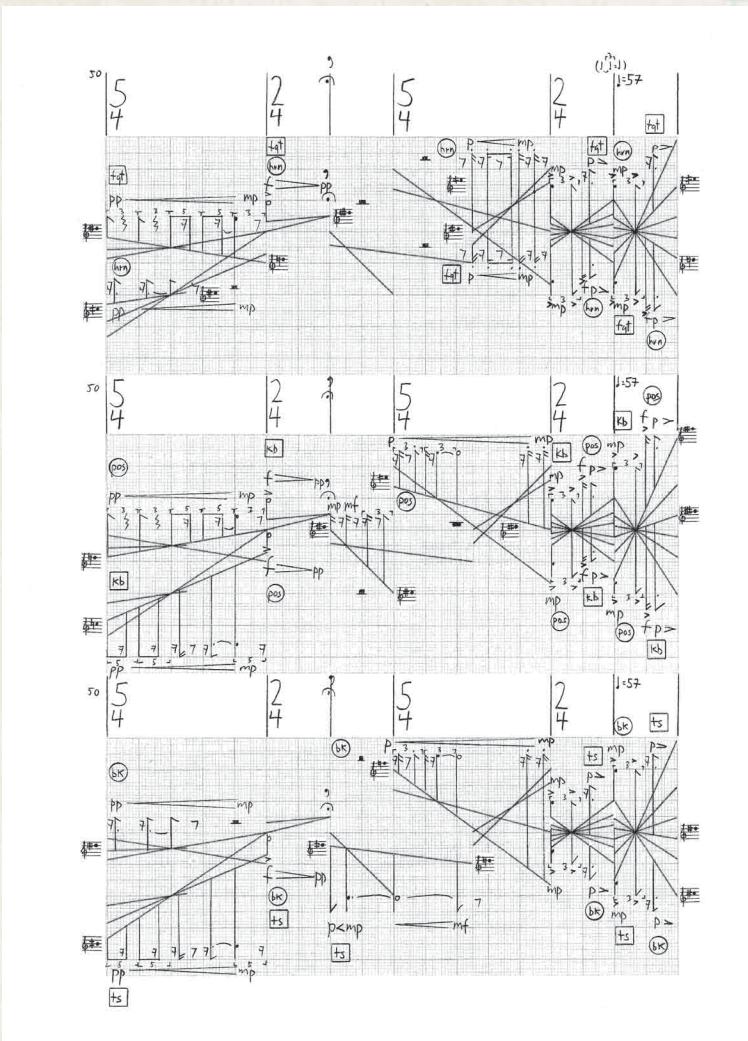
Used by permission of Christoph Herndl © EIS 1994

ai	sai	ai	ail	sai	ai	un	n	n	n	nf	n
ail	I	ls	ls	s	ls	nf	f	n	nf	f	foa
s	su	ls	s	su	sun	foag	foag	oa	foag	oa	oag
s	s	su	s	su	sun	foag	oa	oag	g	oa	oa
s	su	sun	u	sun	sun	oag	oa	oag	g	oa	oag
u	sun	u	un	sun	u	g	ge	g	g	ge	g



Christoph Herndl: *All of This I'll Soon Forget*. For voice(s).

Used by permission of Christoph Herndl © EIS 1998



Alan Hilario: *Überentwicklung-Unterentwicklung*. For bass clarinet, bassoon, tenor saxophone, French horn, trombone, and double bass. Used by permission of Alan Hilario, © 1998.

**Überentwicklung—Unterentwicklung:** The microintervallic conception in *Überentwicklung—Unterentwicklung* could be described as the negation of certain premises: instead of subdividing the whole tone into smaller intervals—quarters, eighths, sixteenths—or using the octave as a measuring unit and subdividing it into any possible number, I have notated the pitch parameter graphically so that every conceivable microtone is possible.

On grid paper, where 5 millimeters in the vertical represent the ambitus of a quartetone, a maximum of 6 straight lines were drawn, inclining or declining and crossing at definite points. The millimeter paper functions only as orientation and not as

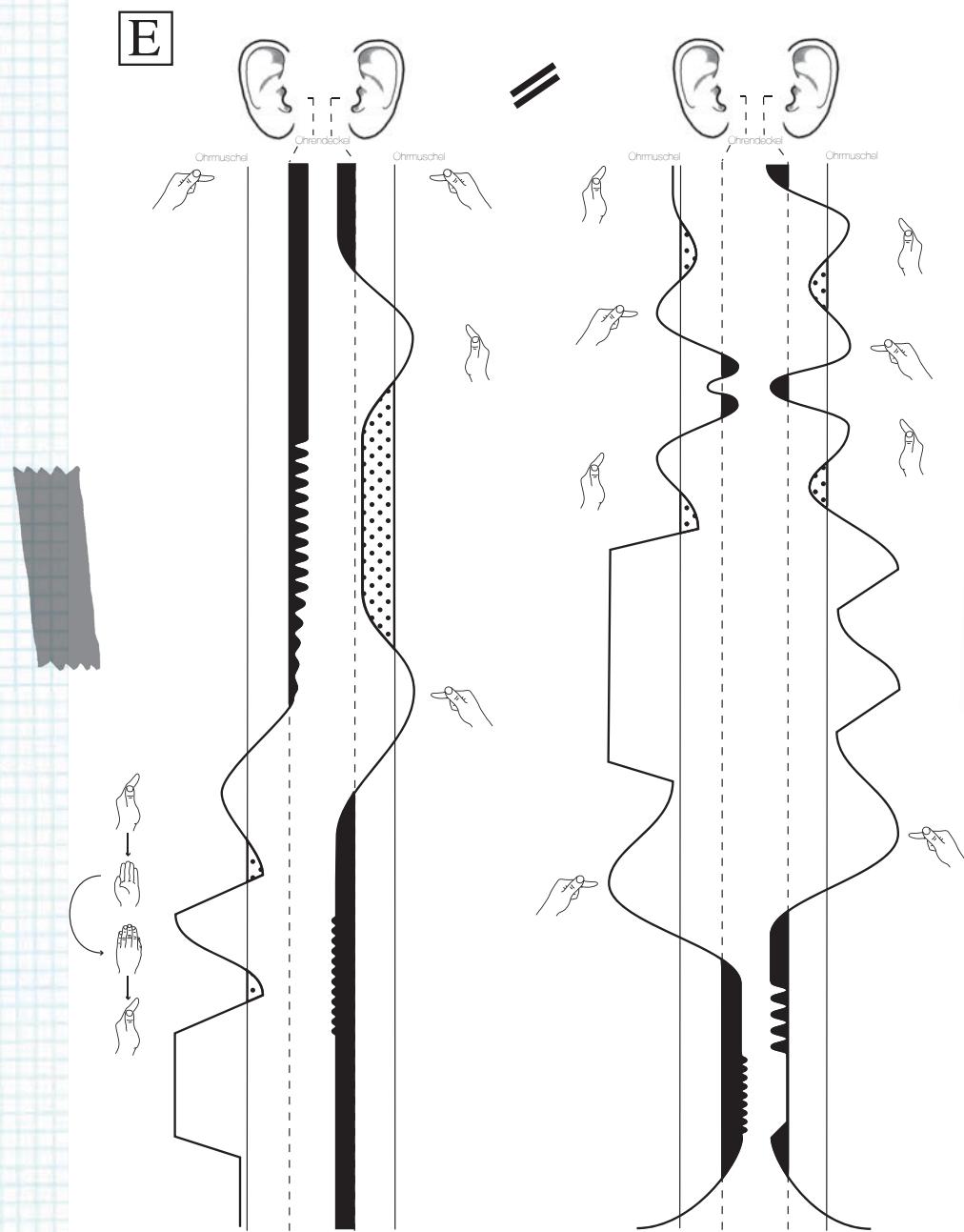
a strait-jacket for the diverse geometric figures. This is analogous to a city map whose information doesn't predispose or limit one's movements.

The representation of pitch structure is orientated in the vertical coordinate; the horizontal coordinate then represents the rhythmic parameter. Traditionally notated rhythms in this coordination system then show which part of the graphic should be played. If, for example, the same graphic is combined with different rhythms then the result will be a different succession of microtones and glissandi.

The score contains the graphical representation of pitch in time copied 3 times, each copy assigned to a pair of

instruments, each instrument with its own particular rhythmic articulation of the graphic (abbreviations: fgt = bassoon, hrn = French horn, kb = double bass, pos = trombone, bk = bass clarinet, ts = tenor saxophone).

In this piece, the precisely structured score—determined in many ways simply by the visual appeal of the graphic itself—collides with the rather diffuse and organic result of any performance by musicians.



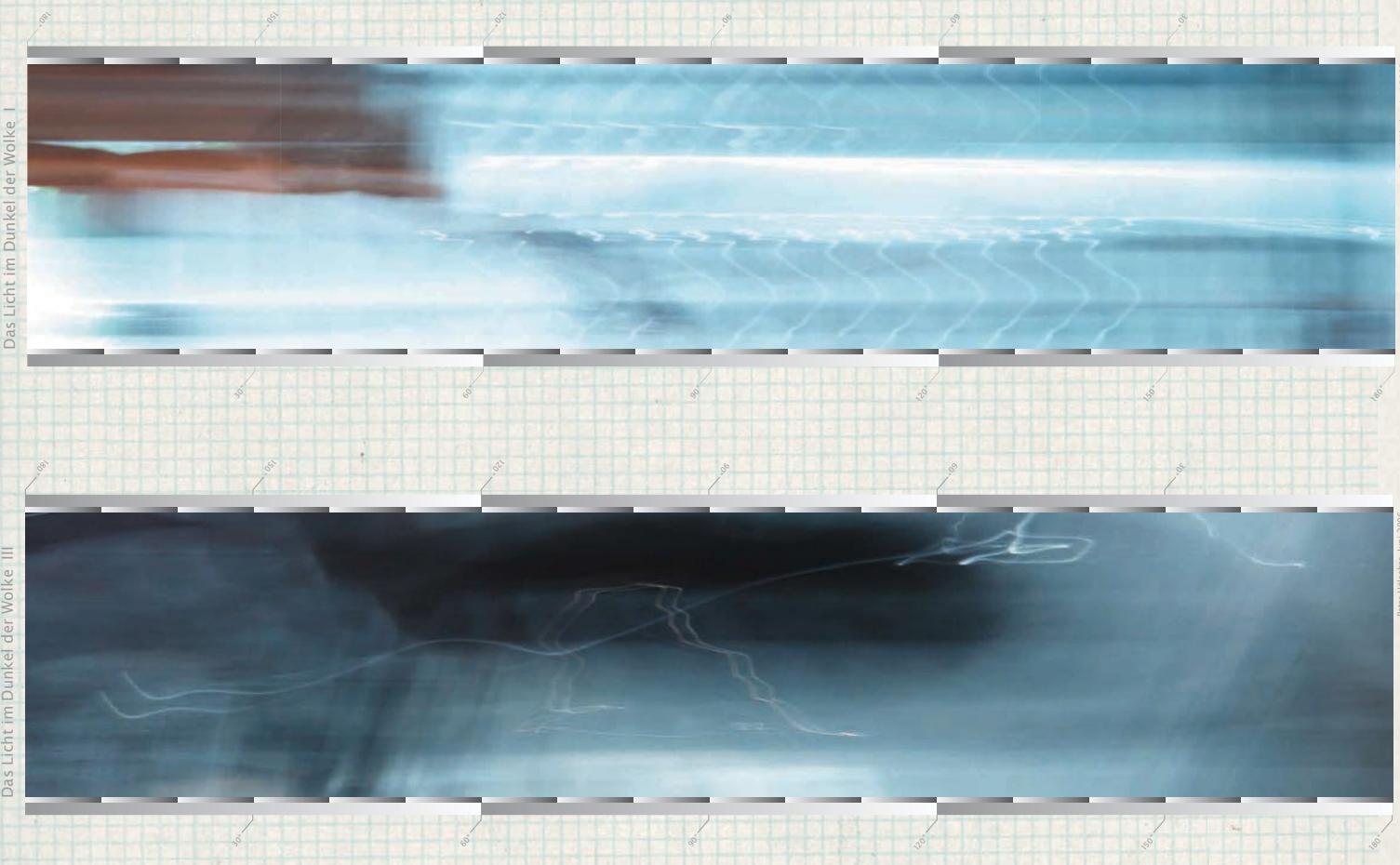
Robin Hoffmann: *oeर für Hören solo*. For listening solo. Used by permission of Frankfurt Main, 6 VIII, © 2007.

**oeर für Hören solo** is a piece of music which remains, for the audience, silent. It does not impart itself through external acoustic events, but rather orients its attention toward the individual listening situation of the performer or musician. An audience that merely passively listens is excluded. A listening situation is composed instead of singular sounds. The piece probes the threshold through which sound must pass in order to reach the body.

The temporal evolution is displayed in the score vertically—from top to bottom. The movements of both hands at and on the auricle (outer ear) are noted chronologically.

The hands drawn into the score specify further details with regards to the position of the hands. They are to be interpreted from the perspective of the performer, and should have the following results:

- Hand to the side—with a cupped hand in front of the auricle of the ear
- Back of the hand—cupped hand behind the ears
- Palm of the hand—cupped hand in front of the ears
- Index finger—seals the ear with variable pressure upon the ear

**Blazing Dawn**

Tsai-yun Huang April 2006

*a sudden burst* (♩ = 80)

Piano

accel. ♩ = 60

pp

8<sup>th</sup> U.C. ♩ = 100

like wood chimes ca. 9" continuo play

8<sup>th</sup> pp subito sf pp subito pp subito ppp

8<sup>th</sup> rit. ♩ = 60

ppp p f pp

\* play any notes with uneven rhythm(number of notes can be varied) between C6-C8, square noteheads indicate clusters: the relative size of a cluster is indicated by the length of the notehead.

2

6

accel. ♩ = 100

p f p subito 5 6 >

8<sup>th</sup> \* 5 6 5 6 5 6 5 6 p

7

8<sup>th</sup> 6 6 6 6 5 5 5 5 pp

8<sup>th</sup> 6 6 6 6 5 5 5 5 pp

8<sup>th</sup> 6 6 6 6 5 5 5 5 pp

8<sup>th</sup> 6 6 6 6 5 5 5 5 pp

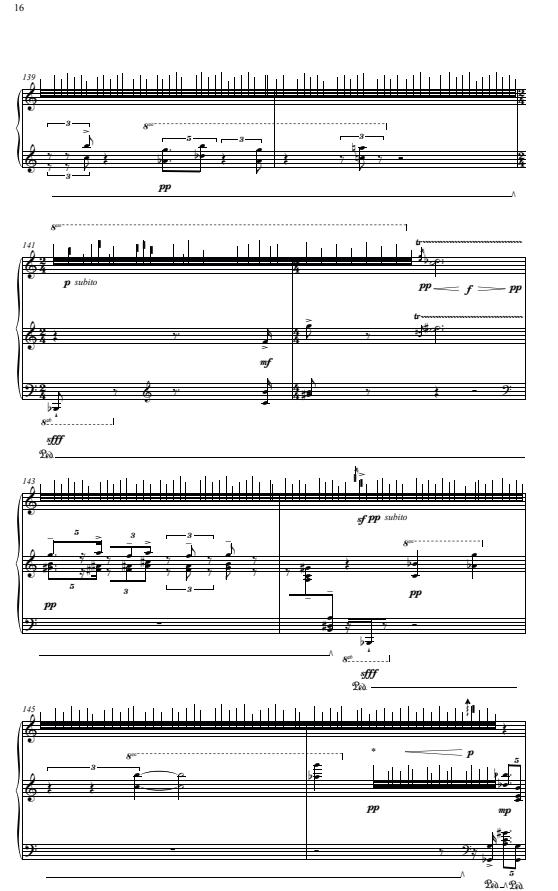
8<sup>th</sup> 6 6 6 6 5 5 5 5 pp

rit. ♩ = 60

f sf

Tsai-yun Huang; *Blazing Dawn*. For piano solo. Used by permission of Tsai-yun Huang, © 2006.

**Blazing Dawn:** I composed the piece from an orchestral point of view. The features of different instruments are not only for the resources of sounds, but also for the integration of different gestures. In addition, the decay and resonance are important issues in this piece; the application of pedals and the different articulations give the music a variety of colors.



Christoph Illing

Felt and folded – *ineinandergeschachtelt* (a book-object-score)  
By Holger Schulze

Again and again I open the pages of this delicate book. As I open it the softness of the fringy margins strikes me. The pages are ripped in a thoughtful, delicate way, thus as I flick through..., no: as I unfold this book I sense velvet in these fluffy margins. Thin hand-made paper and a dense typography, called Microgram.

Here are editions of this partitura, all hand-crafted by its Berlin-based and techno-experienced composer Christoph Illing, that bear a tender drawing on all the pages. The same drawing of an androgynous, young human being, naked and cuddled up before me—his or her shy observer. But not all editions show this drawing. Flickering through the pages those cracks bear—eventually, eventually not—ever and ever new insights and throughsights on this drawing: Never do I see the whole picture of him or her, so keenly desired according to pornographically inclined aesthetics of dominating broadcasting corporate media. Eventually do I see nothing more than the bare, fine, hand-made paper. Void.

This book is called *ineinandergeschachtelt* (meaning approximately: nested, boxes in boxes) and it shows on each page another word. *Rau, leise, voll, flehend, vulgär, schrill, zornig, jovial, wohlklingend, gebliebenisch, markierschüttend, verführerisch, explosiv*—hoarse, low, full, pleading, vulgar, sharp, angry, jovial, melodious, commanding, heartrending, seductive, explosive. Consecutively numbered from 1 to 62, these words are taken from a paragraph of Michel Serres's famous (yet still rarely acknowledged) plea for a renewed anthropology of the senses, *Les Cinq Sens* (1985). These words cue my imagination, my vocal sensorium, my imagination about how my voice could sound: *egalitär oder komplizenhaft, arrogant, ermutigend, destruktiv, oder liebkosend, ironisch, aggressiv, zynisch*—egalitarian, or matey, impertinent, encouraging, destructive or tender, ironic, aggressive, cynical.

How would I feel my voice? How could I sense myself speaking?

The partitura starts with the general vocal instruction "(Sprich nach jedem nummerierten Papier: ineinandergeschachtelt)" "(After every numbered paper speak: ineinandergeschachtelt)." Performers of this piece are expected to speak or sing or articulate or simply perform the German title of the piece, "ineinandergeschachtelt" 62 times (respectively 124 times when performing both complementary partituras of book I and II; the second consisting of the torn out halves of all pages).

After the first 57 instructions, taken directly from Serres, the pages change, the book and partitura transform. The pages are no longer torn. The fringy, velvet, folding and unfolding look and feeling disappears abruptly. The pages are now integral again. And if they showed one before, they bear no drawing anymore now. Simply words. Firstly: "Felt Sense." And then: "(Richte Deine Aufmerksamkeit auf Deine Körpermitte und darauf wie sich Dein Inneres anfühlt...)"—"(Point your concentration to the center of your body and sense how your inside feels right now...)"

The performer is left with him- or herself. And the last five vocal instructions present phrases that leave space for the interpretation of the performer: to state how she or he feels and senses the words, the drawing, the paper, his/her own situation right now—or even something else. "58. Alle diese ausgesprochenen Worte sind ..... 59. Die Zeichnung ist ..... 60. All dies Papier ist ..... 61. Meine Situation ist ..... 62. ...."—"58. All of these spoken words are ..... 59. The drawing is ..... 60. All this paper is ..... 61. My situation is ..... 62. ...."

The performer is drawn back to her or his felt sense of the actual situation and its effects on him or her. The term "Felt Sense," Illing refers to, is central to the philosophy and phenomenology of language, developed by American thinker Eugene T. Gendlin. Gendlin, who is also the father of the Focusing-therapy, worked on this theory since the 1960s. At the core of his writings and practices lies the realization—in a field between Wittgenstein and Husserl—that there is a bodily sense of meaning, a proprioceptive cognition that bears the ground for any individual making

use of words and speech acts. According to Gendlin, language does not end when we are grasping for words as dominant theories of language typically say. Speaking begins right there and then, when we do not rely on patterns any longer, on clichés and routines; when we give ourselves the space and time of letting newly, bodily grounded constellations emerge, a felt sense out of feelings, sensations, sounds, smells, images, metaphors, phrases, words that come up. Meaning emerges out of proprioceptive cognition. Meaning thus is bodily anchored.

In the work of Gendlin this openness to new generations of meaning is often represented by „.....“. And so it is in Illing's work here. The performance of *ineinandergeschachtelt* can thus not be reduced to a manifestation of vocal instructions. Performing *ineinandergeschachtelt* means to take the book, the drawing eventually, the cracks, the paper, the words, the instructions as groundwork out of which a felt sense of ourselves might emerge. My body, as a performer, becomes the stage. *ineinandergeschachtelt* happens in my felt sense.

As the singer Ulrike Sowodniok, performer of the world premiere, says:

"The structure of the material itself—the torn paper—moves into the foreground and shows a multitude of perspectives. The body reflects and reacts to the quality of the given words. The voice is not used for deliberate interpretation of affection—in this case it shows through its own structure through the behaviour of the larynx itself the quality and the meaning of the given words. Interpretation becomes reflection."



Lynn Job; Anchored in Perath: an apocalypse. For solo organ. Used by permission of Lynn Job & Buckthorn Press, © 2006.

**Anchored in Perath: an apocalypse** is a 6-minute piece for solo organ inspired by a 4-stanza apocalyptic poem: *Sacred Stream IV: Meditations by the River Euphrates* (1999). This poem is the last in a 4-poem set about the past, present and future of the 4 rivers of Eden—written by me while residing a short walk from the Cliffs of Moher, County Clare, Ireland (the Atlantic coast north of Liscannor Bay). Per-ath' is the Hebrew name for Euphrates, and the individuals who are "anchored" are the 4 angels bound there, loosed for great destruction only at the 6th Trumpet (Rev. 9:13-21, violent war). Relating to this vision are also the visions of the 6th Bowl (Rev. 16:12-16, where the Euphrates dries up), and, the 6th Seal (Rev. 6:12-17, a great earthquake). The numbers 6 and 4 become embedded in many levels throughout this layered work of blended poetry, music, and visual collage—hand-pastelled, glued, and torn.

Stepping back from this complex canvas, the musical elements are oppositely calm and reflective, abstractly evocative, bold, at once clear and impressionistic—leaving space for the consideration of a past and prophetic drama so enormous, musical gestures fail to compete for foreground.

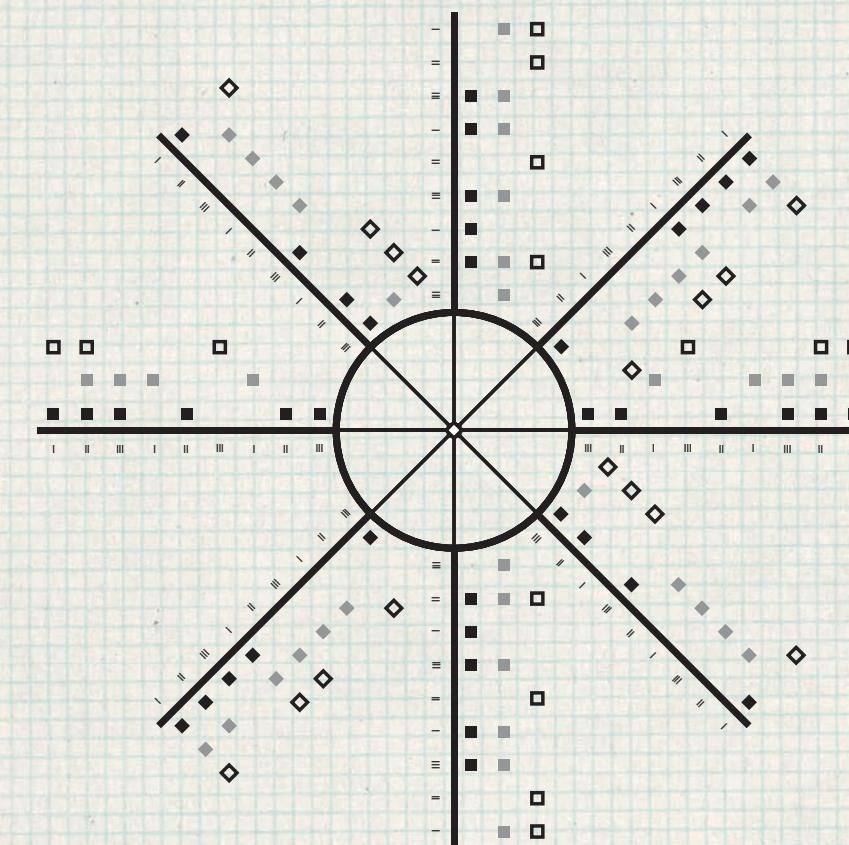
This unique poster art piece developed from commissioning organist Carson Cooman's request (2005) for a graphic notation score (a rare, 20th-century illustrated print genre from which a musician must extrapolate sonic material). He wished for a subtext with something of an archaeological patina.

I chose to make this a very personal work drawing on my Judean desert expedition experiences in Qumran, Israel (1989), years of spiritual studies, and my penchant for symbolist design.

The performer plays from a single, large folded color poster and is supplied with

helps and keys to decipher various directions for: cuneiform clefs, Sanskrit tempi, mixed alphabets, 1200 BC oil lamps, Qumran scroll jars, and more. A few sections of improvisation/indeterminacy exist. Real cuneiform music was researched, real artifacts photographed—even down to a silver cartouche "Lynn" made at the Egyptian Pyramids, followed by "Job" faux-embossed onto a clay seal (brought out from the destruction layer of Jerusalem, the time of Baruch the Scribe) shown on the back cover credits. In the center of the poster's top half is a reproduction of a mystic angel by George Frederick Watts "The Dweller in the Innermost" (1886)—completely unknown to me until the last stage of this project and perfectly suited to the vision.

David Evan Jones; *In Honor of Sung Jae Lee*. For solo piano. Used by permission of David Evan Jones, © 2004.



**Landscape 1: Vanishing Point** is a graphic score for musical performance composed in January, 2004.

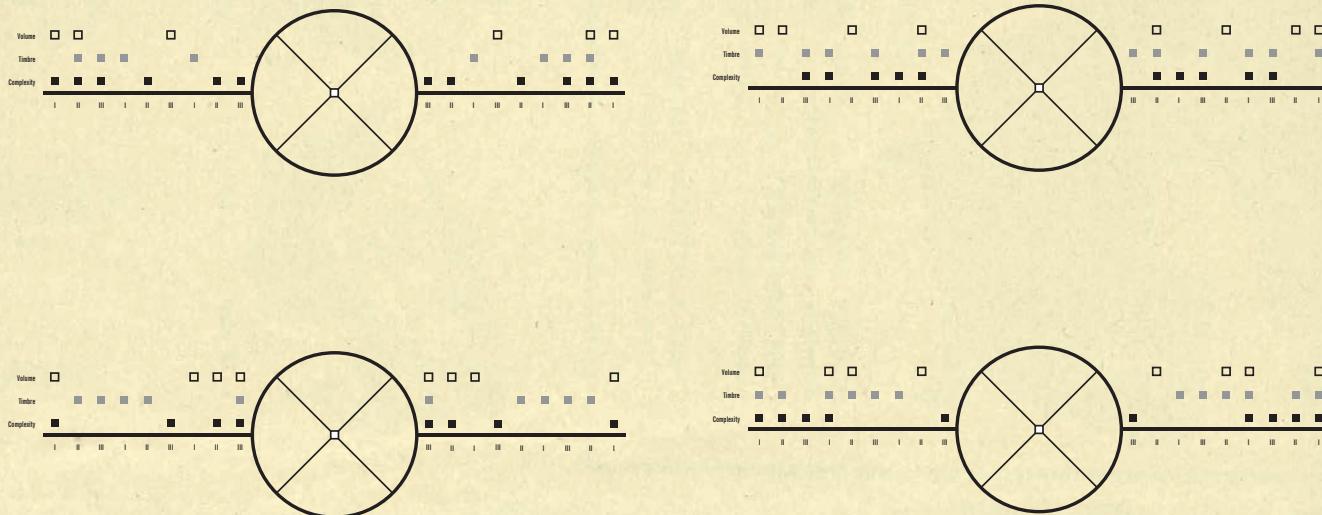
The score is based on a drawing and field recording I made of the shore of Lake Michigan in October of 2003. It consists of four individual "staves," or parts, that rotate around a central, common vanishing point. The score can be performed by four or more musicians. While the score is meant to help guide the musicians through a decision-making process, the music performed is meant to be improvisational in nature.

Using two pencil markings from the drawing and two waveforms from the field recording as foundations, I overlaid a grid onto these images and determined the positions of the different colored squares you

' see in the score where the original images intersected the grid. The colors of the squares represent types of musical decisions: white = volume, grey = timbre, black = complexity. Each vertical column of squares indicates 1 minute of time; the hash marks (I-III) beneath each column correspond to an audible cue, which the performers use to gauge their position in the score—for example, during the piece's premiere performance in March of 2004 at Deadtech Art + Technology Center in Chicago, I kept time by lightly tapping a cymbal one, two, or three times to indicate to the group of performers the start of each new minute.

The four parts intersect at a central circle with a white square in the middle; this indicates that the players are to slowly fade

their sound to a second of silence in the very middle of the piece, then fade their sound back up after the momentary pause. The process then repeats in reverse, with the piece ending after a 19-minute duration.

**About the Score**

**Landscape I : Vanishing Point** is a graphic score for a musical performance with a duration of nineteen minutes. The score consists of four individual parts that can be performed by four or more musicians. While the score is meant to help guide the musicians through a decision-making process, the music performed is meant to be improvisational in nature.

The score began to take form when I made a field recording on the shore of Lake Michigan in October of 2003. While recording the sound of the landscape, I also made a sketch of the landscape which is reproduced in **Figure 1**. The field recording also captured the sound of my drawing, and both the sketch and the field recording have been used to construct the final score.

Two sets of lines from the sketch and two visualizations of waveforms from the field recording were used as the template for the score parts included here. After constructing a grid for the score, I used the sketch lines and waveforms as guides, placing them within the score's grid and placing a square in each area the lines/waveforms intersected the grid.

Each row of squares in the composition grid represents a type of musical decision to be made during the performance: the top row (white squares) represents **Volume**, the middle row (grey squares) represents **Timbre**, and the bottom row (black squares) represents **Complexity**. Each column represents one minute of the complete composition, while the large central circle is a detail of the central minute of the piece. This minute represents the central vanishing point of the composition: white spaces created by descending black lines indicate the gradual shifts both down and up in volume, while the central white square indicates a single silent second.

The roman numerals beneath each column are meant to aid the performers in keeping track of the composition's time. One of the performers is designated as the official Timekeeper; at the piece's premiere, I will serve as Timekeeper and will indicate the minutes to the other performers by tapping a cymbal's bell the corresponding number of times (e.g., one cymbal bell tap for minutes marked as I, two taps for II, etc.).

The performance consists of two halves, each working towards and away from the central vanishing point. Each part's score is an arch form, with the second half a mirror image of the first.

**Notes for the Performers**

1. Any instrumentation is acceptable. At least one performer must use the accompanying field recording of the landscape as source material for their performance. At least four performers should participate. Any performer may use any part of the score; however, all four parts must be used and there should only be one part per performer. If more than four performers are present, duplicates of the four parts of the score may be used.

2. Structural and melodic aspects of the performance are at the disposal of the performers; however, the overall volume should be quiet in relationship to the performance space.

3. One performer should be designated as Timekeeper and use their instrument to indicate the passage of time to the other performers. A hand signal or other silent gesture (to be decided by the performers) should be used to coordinate the tenth minute and its central vanishing point second.

4. The squares on the composition grid indicate three types of musical decisions: Volume, Timbre and Complexity. During each minute, each performer should concentrate their musical decisions based on the indicated type of decision. Decisions of Volume may include raising or lowering the volume. Decisions of Timbre may include changing the quality of the sound being produced (adding reverb, distortion or otherwise changing the tonal quality of the sound). Decisions of Complexity may include adding notes or chords, changing or adding rhythms, or adding or subtracting sounds.

5. In minutes where there are more than one type of decision indicated, performers should attempt to divide their attention between the decision types equally.

6. In minutes where the only musical decision indicated is Volume, performers may choose to either change their volume or simply not play at all.

7. Beginning with the eleventh minute, each portion of the score presents a mirror image of minutes one through nine. Performers are not required to attempt to play their initial performance backwards; rather, the decision process should be reversed as the piece is finished.

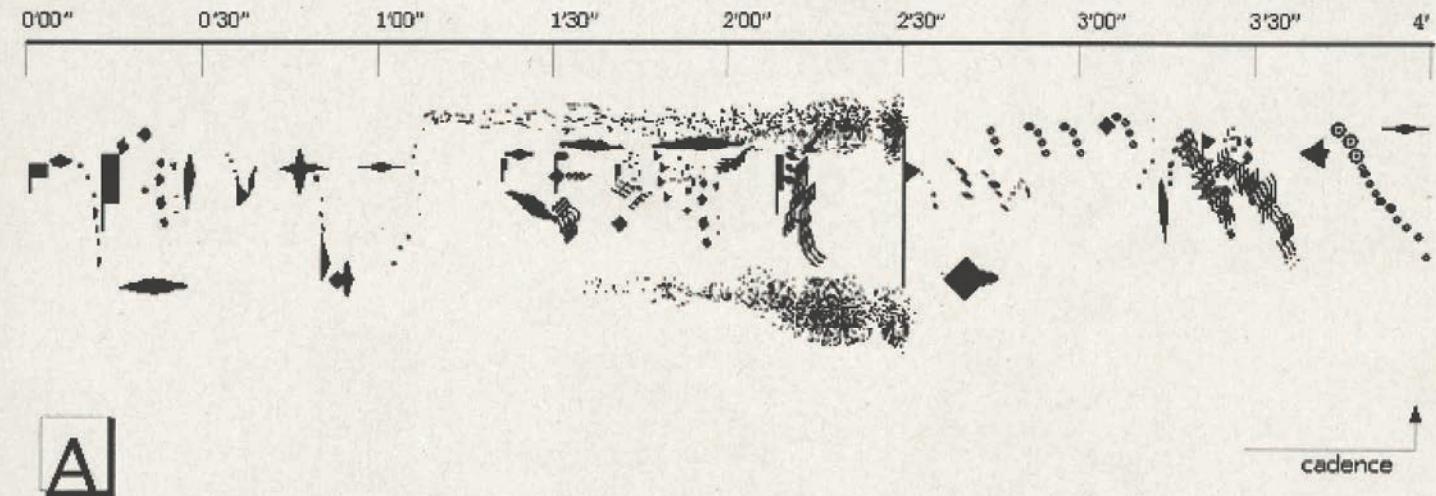
8. At the end of the nineteenth minute, the Timekeeper should indicate to the performers that they should stop.



Figure 1. Original source sketch, Lake Michigan shore, October 2003.

Score, images and text ©2004 john kannenberg.

John Kannenberg; *Landscape 1: Vanishing Point*. For four or more musicians of any instrumentation, but one must use the accompanying field recording of the landscape as source material for their performance. Used by permission of John Kannenberg, © 2004.



**primary pitch centre : F#**

**starts with C**

**primary gestural phrase:  
0'00" ~ 0'30"**

Suk-Jun Kim; *Mi-Dong*. Graphic score for structural analysis. Used by permission of Suk-Jun Kim, © 1999. Image quality best available from composer.

**C - F# - G - F#**

**G - F#**

with  
\* the clearly moving sound object  
\* reassuring the primary gestural phrase

"Cultivate in yourself a good similarity with the chaos of the surrounding ether. Unloose your mind and set your spirit free. Be still as if you had no soul."

by John Cage, who quoted Kwang-tse.

Panayiotis Kokoras; *Paranormal*. For three amplified snare drums. Used by permission of Panayiotis Kokoras, © 2007.

**Paranormal** was composed during the winter of 2003. This is the first piece I completed after returning back to Greece after a long stay in England. It was quite a challenge for me to see how my new environment could affect my compositional output.

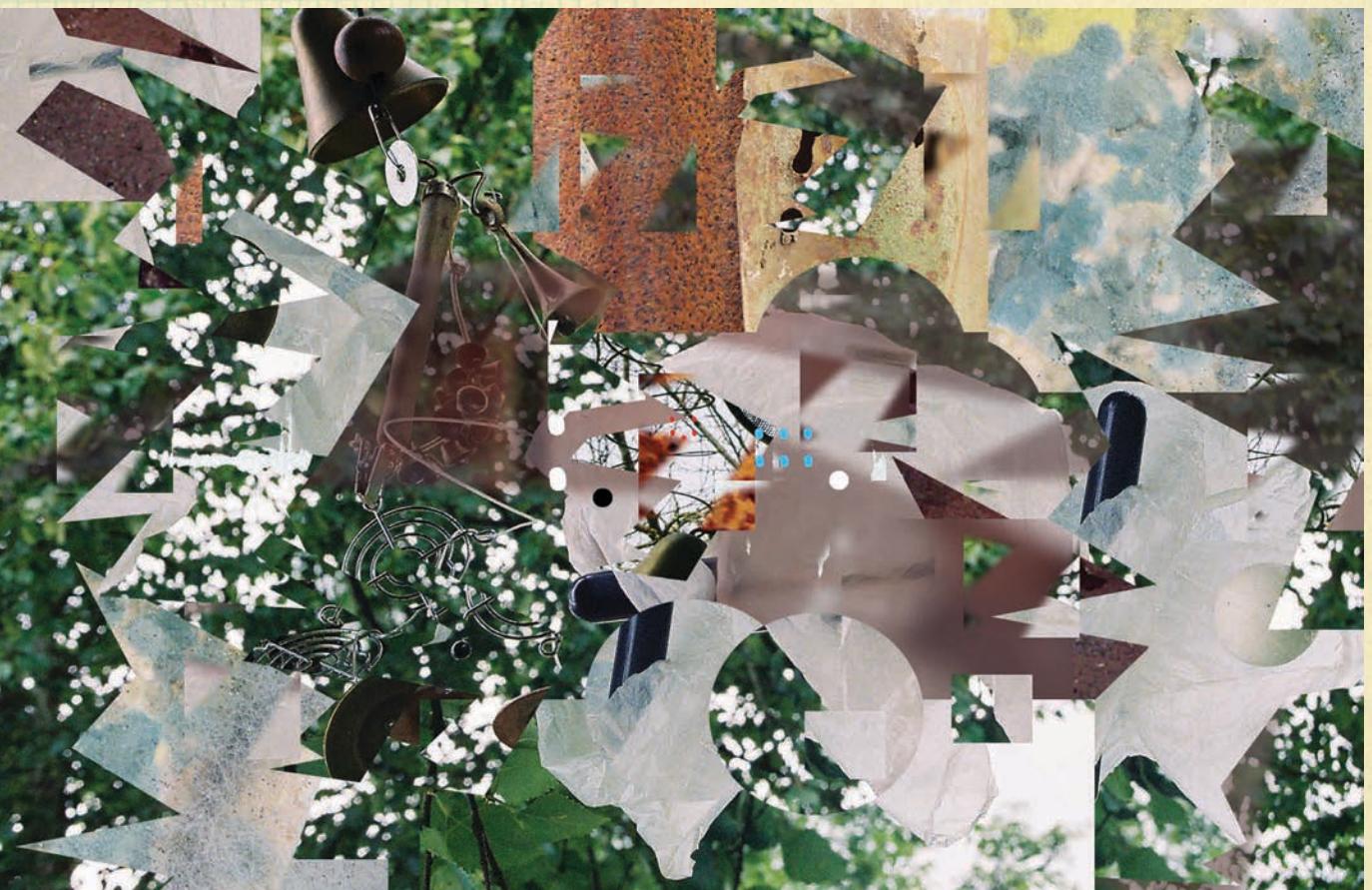
The first thought I had when I started to work on the piece was to avoid a composition based mostly on pointillistic rhythmical ideas. I tried to create a sort of a sound palette that I was going to use for the piece later. Having a snare drum in front of me I experimented a number of possible locations above and around the drum head using several different kinds of mallets, brushes, sticks, even fingers. I made a classification of the sound database I created with respect to their morphological criteria such as mass, harmonic timbre,

grain, dynamics, melodic profile, production context, based on my perceptual and/or cognitive criteria.

*Paranormal* opens with the three snare drums to create a holophonic texture that carries with it a variety of possibilities for further development and morphopoiesis in the course of the piece. The intrinsic properties of the holophonic texture become perceptible as they fused to single abstract sound entities with temporal focal points and variable peripheral shapes. Listening to the piece one could hear from metallic harmonic shifting to crackly, granular textures and trembling, sweeping gestures, and even more complex sound structures. Occasionally, there are moments that are reminiscent of the sounds of rain, or fire, or air, or even machinery. Amplification is what makes it possible to hear a whole

world of sound possibilities, which would otherwise be easily masked by a "bang."

The percussionists' virtuosity is expressed through delicate sound manipulations they control throughout the work. The performers create a variety of sounds by utilizing different points, locations and ways to trigger in the instrument.



Slavek Kwi; *Drawing The Air* (Phase 1) and *Drawing The Air* (Phase 2). Both used by permission of Slavek Kwi, © 2007.

Statement :

My main interest lies in the phenomena of Perception as the fundamental determinant of relations with Re\_ality.\_\_\_\_---

[the reality is of such bizarrrre nature,  
that's hard to believe]

IT '  
ACTUALLY  
exists ... /

I have been fascinated with sound-environments for the last 25 years, focusing on electroacoustic "sound-paintings". These complex audio-situations are created mainly from site specific recordings, resulting in subjective reports for radio, "cinema for ears" performed on multiple speakers, and sound-installations integrated into the environment. I am interested also in free-music research as part of social investigation. My work oscillates between purely sound based and multidisciplinary projects.

Slavek Kwi = artificialmemorytrace

No Cognition\_only PERCEPTION



Slavek Kwi; ASYMFON (post-score in reality particles) detail. Used by permission of Slavek Kwi, © 2007.



Joan La Barbara; *in the shadow and act of the haunting place*. For voice and chamber ensemble. Used by permission of Joan La Barbara, © 1995.

Joan La Barbara

### Visualizing Sound

I see sound. It's as simple as that. When I hear a sonic gesture in my mind, I see a corresponding shape that informs its energy, dynamic, and pitch trajectory.

All musical notation is an approximation; it is an attempt to translate one's ideas into written form to allow musicians to replicate those ideas with some degree of accuracy and flair.

When I create scores, especially those intended for performance by others, I often use the 5-line staff for pitch and rhythmic designations, with graphics above to help indicate how I would like the sound to flow. Often a graceful graphic can help change a straightforward glissando into a sound event having more lyrical movement and elegance.

In the case of extended vocal techniques (i.e., those that go beyond "traditionally" notatable material), graphic scoring is an essential element in helping the interpreter understand the parameters and characteristics of the sound as well as certain details of nuance. Most composers working in this area create their own notational system or vocabulary because many have discovered or invented the sounds they use, or have their own stylistic delivery. The interpreting musician then needs to learn that system or vocabulary, which can be challenging, daunting or inspiring depending on the composer's skill at transmitting the sonic gestures of the mind into something that is discernable and translatable into a form that can be mastered and performed. In general, something that is visually simple, intuitive, and uncomplicated is best, and sending a recorded example of the sound in question, along with the score, is often advisable. There are some conventions that have been adopted, and using symbols that have already entered the scoring (body of literature) allows the interpreter to learn new material more quickly.

John Cage's classic graphic score, *Aria* (see page 44) directs the singer to choose 10 different vocal

styles, indicating when each style is to be used by assigning numbers to all or part of a graphic shape. He assists the singer's memory of those decisions by using colors to correspond to each numbered shape, with the graphic itself suggesting the pitch terrain. Time is relative to horizontal space on the page, with empty space indicating silence, and pitch is relative to vertical positioning of the graphic. One could, in theory, decide to notate the work on the 5-line staff, with beats and measures of rest, if one wanted to be able to replicate a performance precisely. It is my feeling, based on many years of working with Cage, that he wanted each performance to be a unique event. He was passionate about experiencing live music in the performance space and his music gives the performer controlled freedom within the boundaries of specific form.

In creating my score for *Circular Song*, I designed a circular mirror-image graphic that displays pitch directionality and breath changes with curved lines, indicating a progression of descending and ascending glissando patterns. Inspired by the circular breathing technique used by wind players and adapted for singing by vocalizing both the inhale as well as the exhale, the work progresses through the series of repeating patterns, broken at specified points in the chosen vocal range, designating when to change from exhaled to inhaled sound. At the midpoint is a figure depicting an ascending set of inhaled and exhaled multiphonics, or double-stops for the voice, followed by a return to the beginning, with the repeating glissando patterns in reverse order until the opening figure is reached again. Transitional figures, non-repeating figures which move the singer from one repeating pattern to the next, are indicated by a small "t."

Conceived in 1974 and premiered in 1975, it is one of my earliest solo compositions, an étude exploring particular extended vocal techniques that I had discovered while exploring the expanded sonic potential of the voice. It is also a very clear "process piece," reflecting my (and a number of other like-minded composers') theoretical concerns during the early 70s.<sup>1</sup>

*in the shadow and act of the haunting place*,<sup>2</sup> composed in 1994-1995, twenty years after *Circu-*

*lar Song*, demonstrates the formalization of some of my graphic notation. In translating some of my signature extended vocal techniques for other instruments, I have used a direct correlation of visual symbol to the sound. Jagged, wavy lines indicate ululation (rapid fluctuation of pitch, sometimes used culturally for wails of grief or jubilation, or calls to prayer) for the voice and similar fluttering gestures in other instruments. I often ask my musicians to reflect or mirror the vocal gesture, not imitating that sound, but using an indigenous sound or technique on their own instrument to reflect the energy and shape of the vocal gesture.

I want the instrumental sound to reflect the energy and shape of the vocal gesture, not to imitate it, preferring that the musician choose a technique that explores the sonic gesture in a similar fashion, utilizing the technical range of his or her own instrument. Some of the graphics have become standardized to a degree: blocks for sound clusters; horizontal arrows pointing to the left (above a note) indicate an inhaled sound, to the right, an exhaled sound; vertical arrows pointing up indicate "as high as possible" while arrows pointing down indicate "as low as possible." I indicate specific pitches and rhythms with "traditional" Western notation, using words and graphics to indicate energies, gestural flow, or unusual fragmentation. For instance, inhaled glottal clicks are indicated by a series of dots and small "x" marks, and a fingernail or guitar pick drawn slowly over low wound strings of the piano is indicated with a connected series of "xxxxxxxxxxxxxx," and verbal description of how to produce the desired sounds.

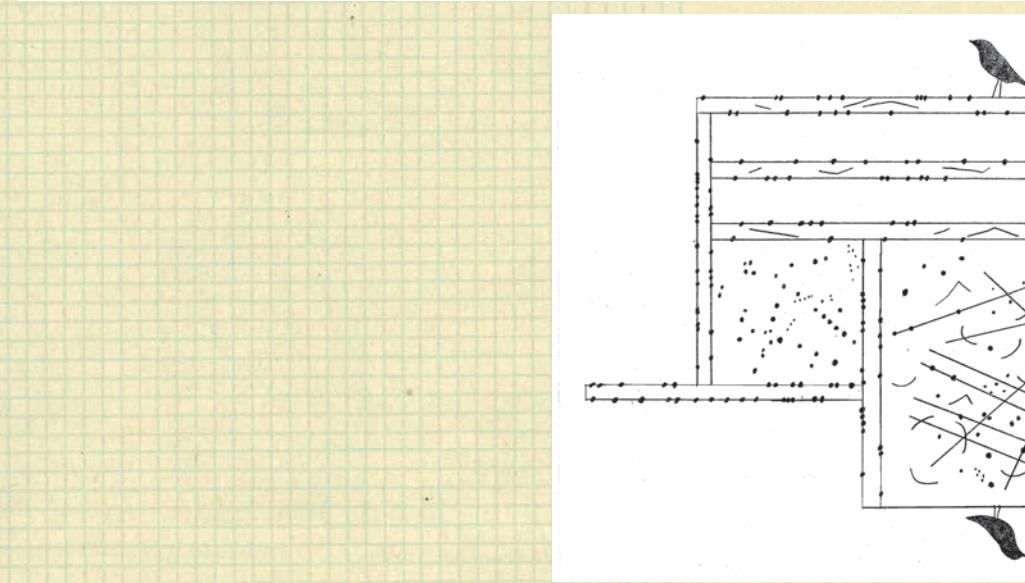
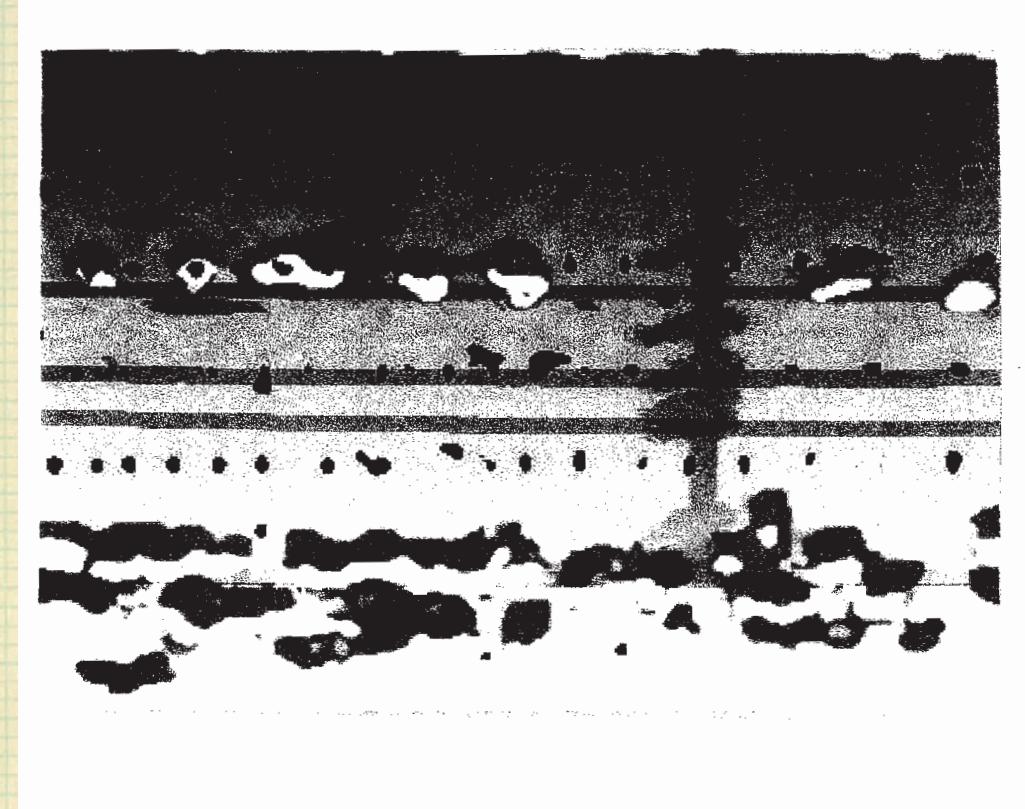
The language I use in my scores is very straightforward. I try to explain what I would like the sound to reflect, whether it is energy, fluctuation in speed, or a specific emotion. I occasionally relate the sound to something occurring in nature ("like a wounded animal," or "like the cries of the last beings on earth"), which may carry emotional content as well, feeling that the musician may relate to this poetic image and may contribute an additional nuance, or a personal facet/aspect/nuance.

When I sing and when I hear sound in my mind, I often see or sense a visual shape. In my graphic notation, I try to notate the way the sound "appears" to me. I feel that Western notation is only a representation of the sound, a system, agreed upon by a large number of musicians, which approximates what the composer hears in his or her mind. By using graphics in addition to pitch notation, I feel I am approaching a system that allows my internally experienced sound to be better expressed and potentially reproduced with as much accuracy and originality of spirit as possible, allowing for the creative interpretation of the performer.

Morton Feldman once expressed that his music was most perfect in his mind ... nevertheless he put pen to paper and notated some exquisite ideas, in the fervent hope, which we all share, that a musician would breathe life into it.

1 *Circular Song* is one of three compositions on *Voice is the Original Instrument*, the 1976 concert recording released on my self-produced label, Wizard Music (RVW 2266). My photograph, surrounded by the graphic score for "Circular Song," appears as the cover artwork of the LP. The work is also included on the double cd-set *Voice is the Original Instrument/Joan La Barbara: Early Works (Lovely Music LCD 3003)*.

2 *in the shadow and act of the haunting place* was premiered January 17, 1995, by the San Francisco Contemporary Music Players at the Veterans' Building Green Room in San Francisco, CA.

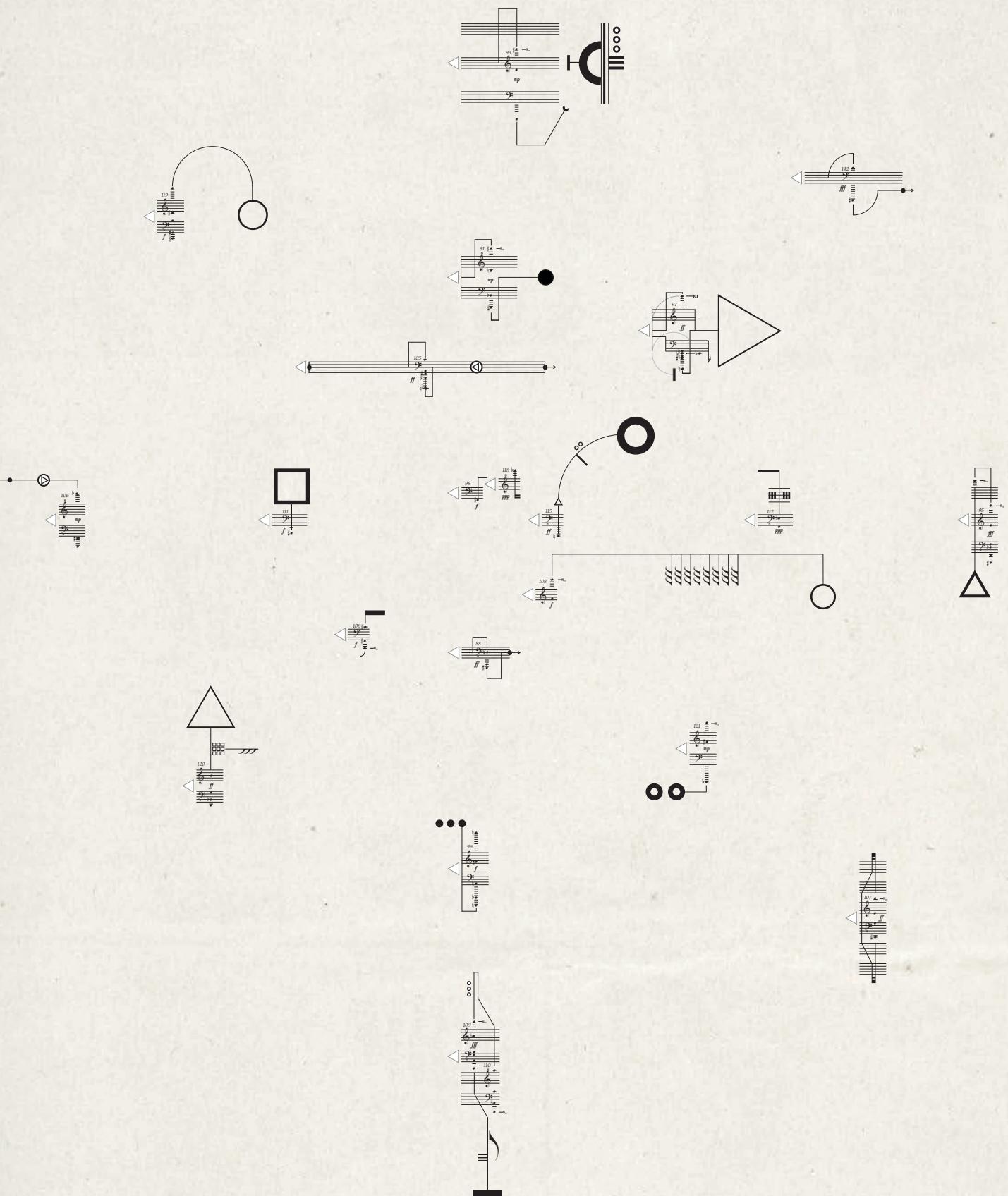


John Lane; *Sparrow Song*. For percussion and narration. Used by permission of John Lane, © 2006.

it is not music  
only suggestion  
a sign of joy  
a herald of spring

the lone sparrow  
sitting amid stark, silent trees  
above the wet, cool earth  
the spell of winter is broken  
he, the firstling of spring

erasure poem(s) by John Lane from the writings  
of John Burroughs



Mark Langford; "Graphic Score Number 9" from 21 Graphic Scores.

For tape and computer. Used by permission of Mark Langford, © 21 May 2001.

**General Notes for Graphic Scores**

How did these scores come into being?

It all started when I was at school where I was attempting a class in technical drawing. I wasn't very good at it. The point of my compass gouged out huge holes in the paper and the lead pencil was either breaking or smudging the paper. While studying Music at Victoria University in Wellington, I started doodling again with the compass. But this time I had my prized rotring set of pens. Circular staves were dead easy. It was at this point, I was accused by some, of being obsessed with "Fibonacci numbers" and the "Golden Section." What? Me obsessed? While studying at the Insituut voor sonologie in Utrecht, Jack Body sent over an analogue tape of New Zealand bird song and I commenced work on a computer piece with the aid of the two Institute computers Aagje and Betje. They "realized" two works, with the aid of Gottfried Koenig's PR1 programme.

"Composing section 1"

"Composing section 2"

"Composing section 3" etc.

God, I didn't know composing could be so simple. Then came the laborious bit. While the Dutch ice skaters were depressed again, because their winter was so mild, I set about to translate the data that was spewed out so obliging by the two computers. Hours were spent scratching off unwanted staves with a razor blade and many more spent calculating the "entry delays" into millimeters. I ended up with a couple of scores, which were really quite useless.

**The conversion.**

While back in New Zealand I got the itch again to do something with the two scores. And the music slowly metamorphosed from notes on staves in perfect space-time notation, to graphic design. With the odd fibonacci influence here and there.

**From go to whoa.**

Scores 1 to 5 are a transition from straight scores to rather pointillistic note events. Scores 6, 7, and 8 start a pattern of the circle, triangle and the square. Score 9 is a beautiful Fibonacci spiral. From scores 10 to 21, there is the pattern of the square, the circle followed by the triangle. The final scores are fully digital and have little of the original PRI score present.

**In a nut shell.**

So, a tape of birds singing their little lungs out became an unfinished digital and analogue work for children called *Vexations for A Dried Out Liverwort*. The written-out scores became the raw materials for my 21 Graphic Scores. Who said Composers aren't into recycling?

**The finale.**

I just thought I would end with a comment I wrote while I was a student in The Netherlands. I must have just dropped my rotring pen in the FORTRAN class for the last time.

```
IF(PEN.EQ.FALLEN DOWN)
  RESET PEN
  IF(NOT RESETTABLE)
    GO TO BIN.
```

**Tangram:** As a "cross-cultural explorer," Hope Lee's work often reflects interdisciplinary interests and a view of creativity as an endless adventure of exploration, research, and experimentation.

"Tangram" is a Chinese geometrical puzzle consisting of a square dissected into five triangles, a square, and a rhomboid, which can be combined to form several hundred figures. In this work, music material is like the seven magic pieces found in Tangram. The tape part was realized at the electroacoustic studio at the University of Calgary.

*Tangram* was commissioned by Dutch musicians Annelie de Man and Harry Sparnaay with the support of a Canada Council for the Arts grant.

Hope Lee; *Tangram*. For bass clarinet, harpsichord, and sound files. Used by permission of Hope Lee, © 1992 (Euro Verlag 1996).

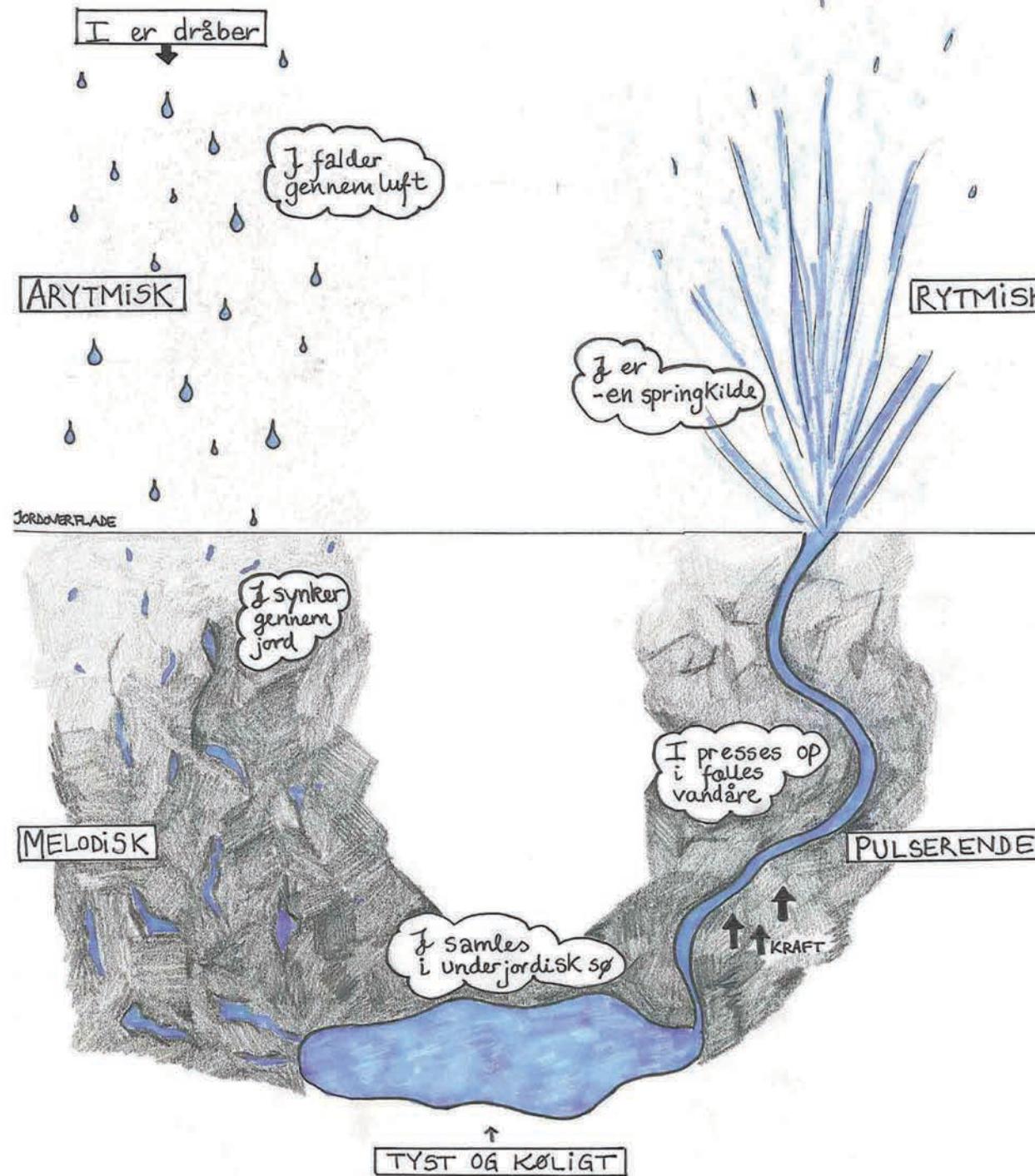
Cheryl E. Leonard; *Music for Rocks & Water*. For three performers playing water and various types of rocks. Used by permission of Cheryl E. Leonard, © 2007.

**Music for Rocks & Water** is a series of compositions based on motions and gestures from the natural world. Three performers play unique water instruments and a spectrum of types and sizes of rocks: from sandstone to granite, 10-pounders to sand. Rocks are rolled, rocked, brushed, rubbed, stacked, and even tickled. Water is dripped, drizzled, and poured; air bubbles are blown in it at varying depths and stones are played under its surface. The quiet and subtly intricate voices of these natural objects and instruments are amplified via contact, condenser, and underwater microphones. Pieces are conceived especially for real-time performance, with all

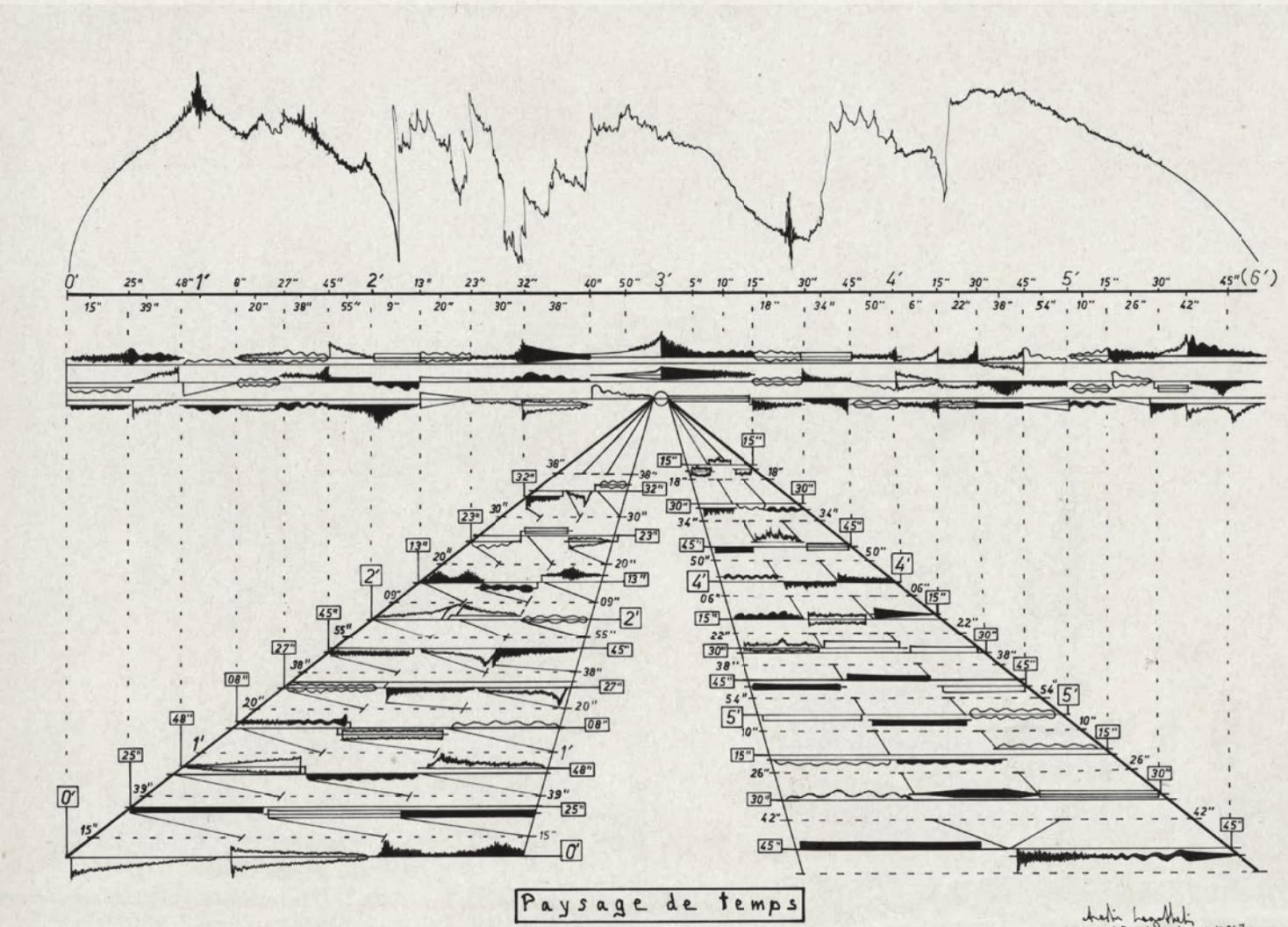
sounds generated live on stage. Both compositions, and the instruments themselves, are designed to create a visual, as well as aural experience for audiences. Individual works are inspired by ocean waves, the mysterious racing rocks of Death Valley, mountain rockfall, wobbling boulders, whirlpools and vortices, patterns of wind on grass, water flow through falls and rapids, and the shifting of tectonic plates. *Music for Rocks and Water* is comprised of eight short pieces: "Umi," "Jiku," "Himo," "Ashimame," "Shindou," "Uzumaki," "Tenchi," "Hibaku."

# VAND-MUSIK

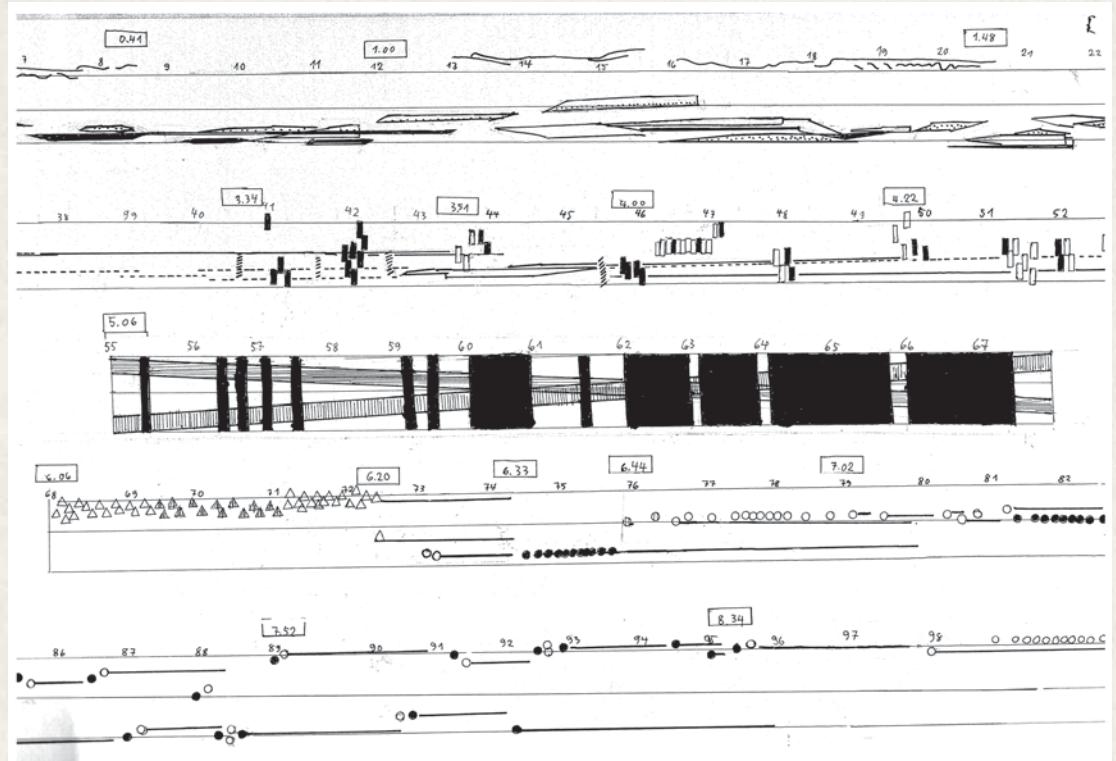
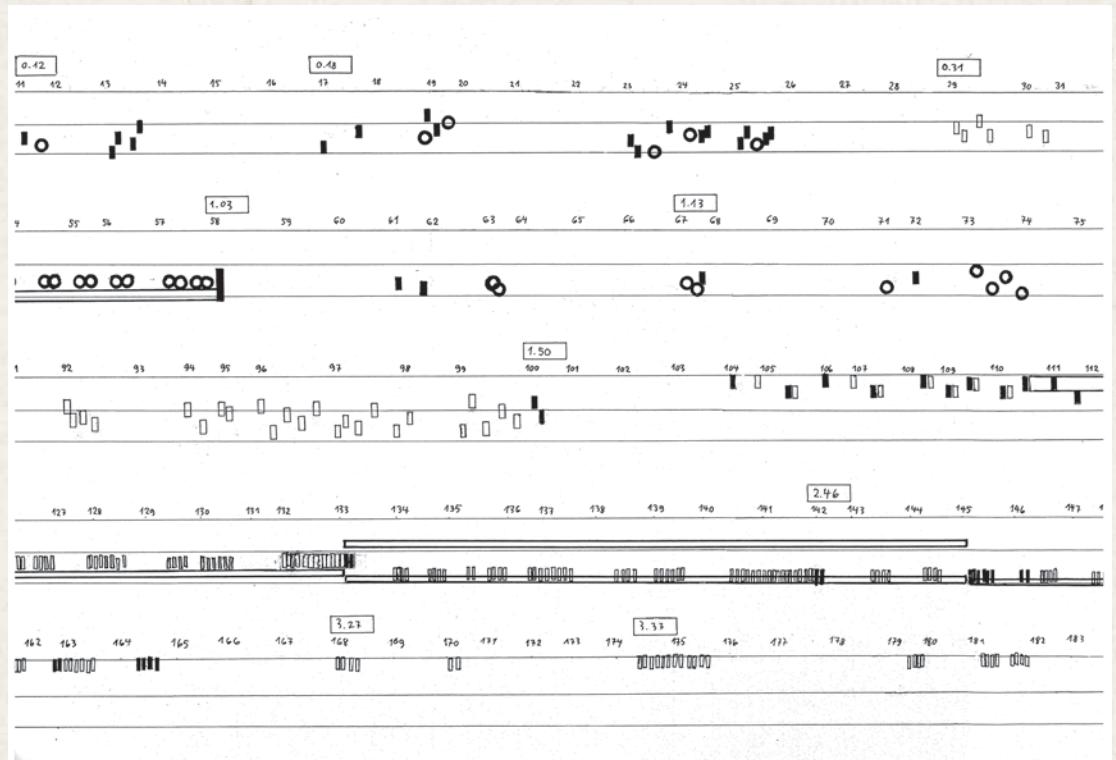
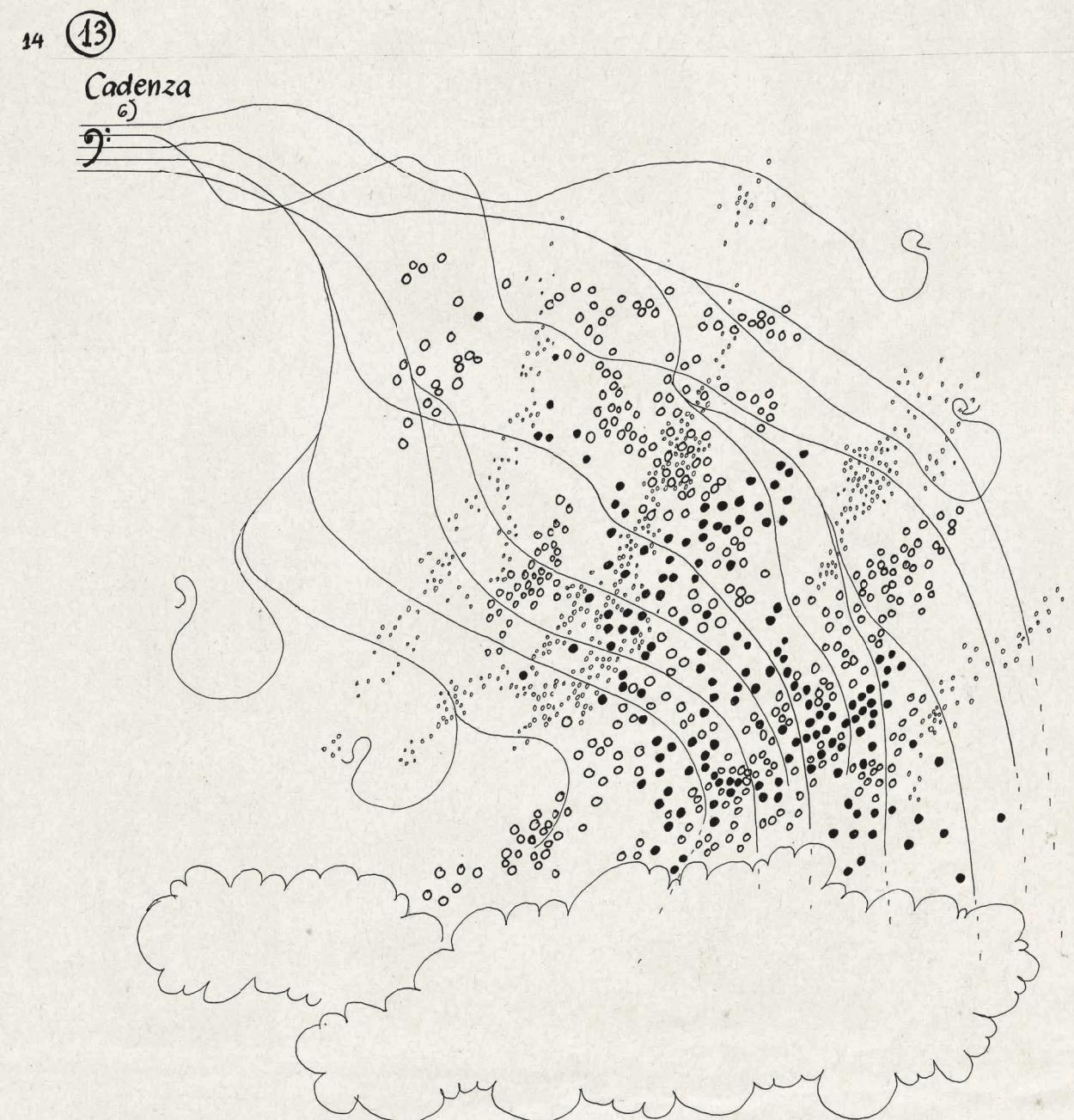
ca. 2 min. til hver af de 5 afsnit.



Charlotte Lindvang: Vandmusik (Watermusic). For improvisation. Used by permission of Charlotte Lindvang, © 2007.



Anestis Logothetis; *Paysage de temps*. Used by permission of Julia Spitzer-Logothetis, © 1984-1986.

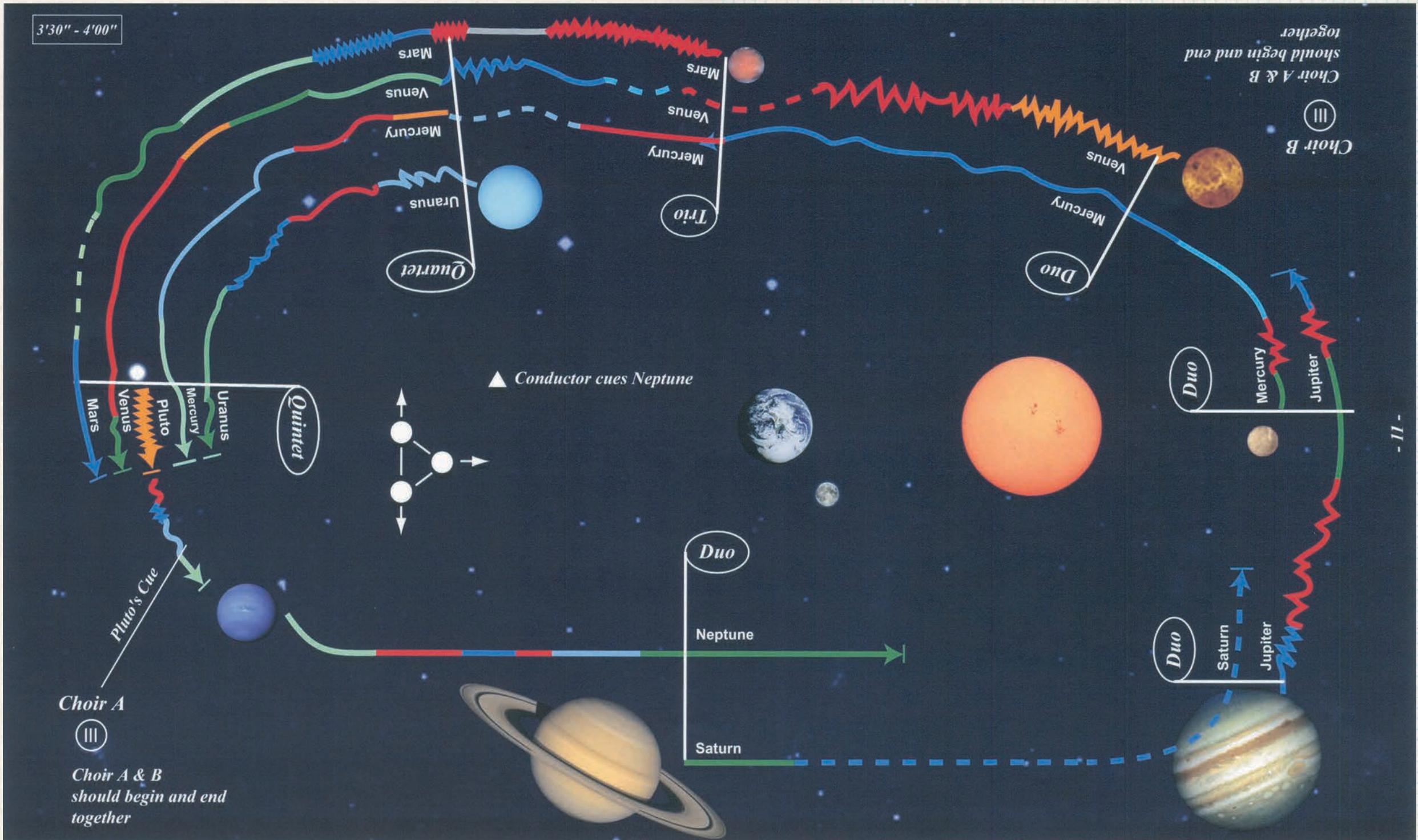
Bent Lorentzen; *Intersection for Organ*. Used by permission of Bent Lorentzen, © 2003.Bent Lorentzen; *Punti for Organ*. Used by permission of Bent Lorentzen, © 2004.**6) Ideal performance**

Following is with great effect drained off from the biggest possible height:  
F.ex: 25 ping-pong balls, 500 plastic-globes and peas, 10 spiral Springs, 10 tins, 5 old watch-springs. It is important, that the sound is as long as possible. At ⑬ the smoke is on the highest, and from now decreasing. Put down the cello, cover the instrument with a white cloth, and decorate it with tasteless red paper-roses. Go to the bell.

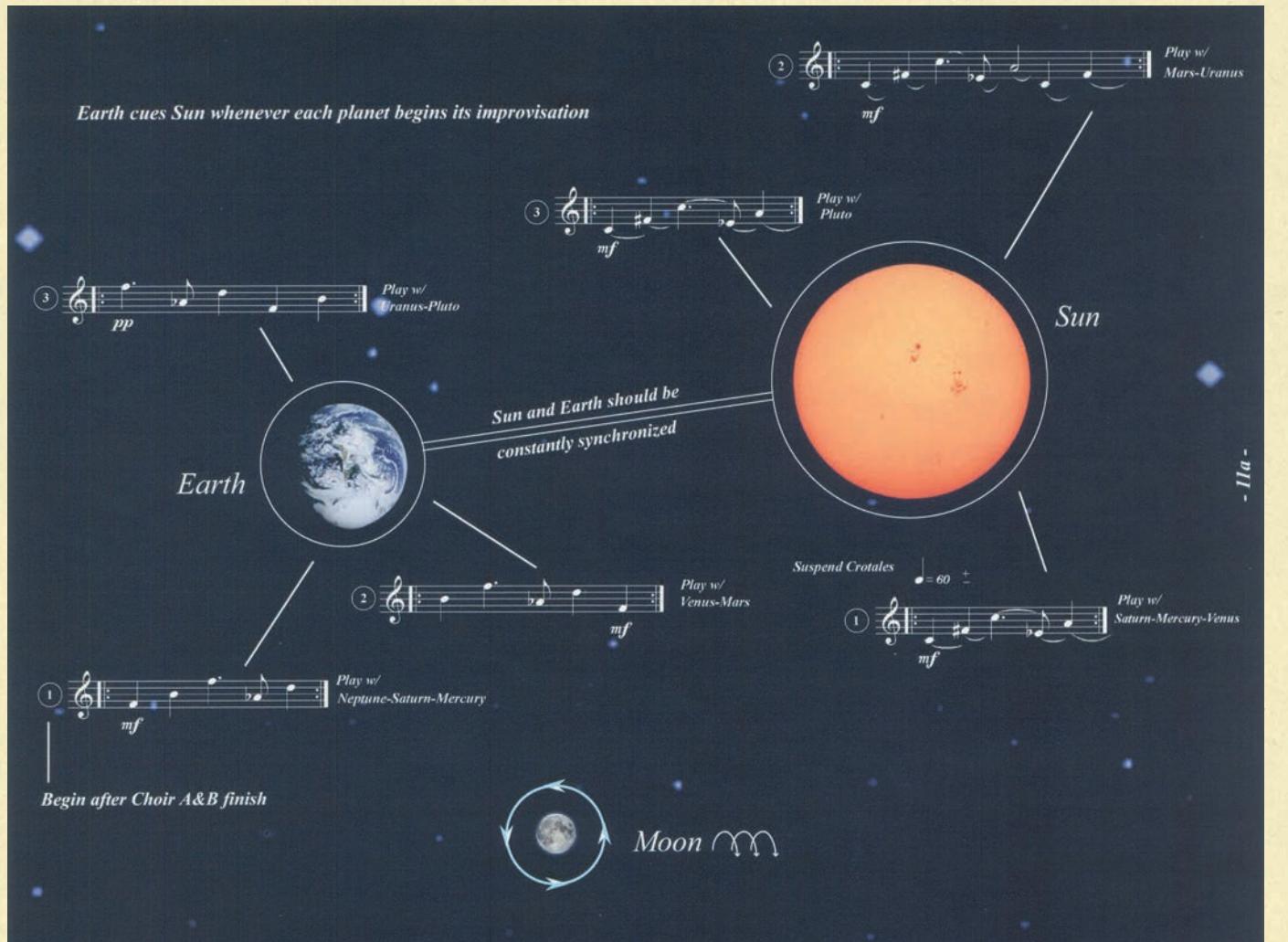
**Alternative Performance**

Push the chair and music stand brutally. Put down the cello. Use the bow as a knife and stab the cello. Scream loud and desperate as a person being murdered. Go to the bell.

Bent Lorentzen; *The End*. For solo cello. Used by permission of Edition Wilhelm Hansen AS, Copenhagen, © 1969.



Martin Sebastian Loyato; *Celestial Spheres Fantasy for Improvisers*. For 40 musicians. Used by permission of Martin Loyato, © 2005.

Martin Sebastian Loyato; *Celestial Spheres Fantasy for Improvisers*. For 40 musicians. Used by permission of Martin Loyato, © 2005.

*Celestial Spheres* is an invitation to a spiritual journey, representing the universe as a metaphor for personal experience. The music is based on an original poem that revolves around the interconnectedness of all living beings. The message of the piece is encapsulated in the final stanza of the poem:

IF WE WERE BEYOND THE MIND AND BODY,  
OF ONE RACE,  
TRANSPARENT,  
MORE THAN HUMAN.  
IF LANGUAGE WERE WISDOM,  
THEN,  
OUR WORLD WOULD BE THE SEED OF COMPASSION:  
THE LAST REVELATION.

I take a step forward from the Western Classical tradition to create a musical language delving into the mythic realm of the symbolic as a source of inspiration and a call to one's primal wellspring of creativity. Freed from the confines of traditional notation, the performers are responsible for articulating the composer's vision based on a complex system of symbols and instructions. The responsibility carried by each performer within the tapestry of the piece mirrors the responsibility each individual carries in life, as all beings produce a ripple effect on their surroundings. As such, the performer embarks on a journey of personal and collective creation, reflecting the dynamism of singularity and unity at play in our lives and in our universe.

The piece contains approximately 50 symbols and 11 pages of instructions for the performers. For example, I use different arrows to indicate tempo and lines of color to indicate dynamics. Pictures and maps of the solar system constitute another aspect of graphic notation, and reflect the metaphorical conception of the piece. The solar system is symbolized in the instrumentation: mellophone—Venus; horn—Mercury; piccolo trumpet—Pluto; trumpet—Uranus; flugelhorn—Mars; trombone—Jupiter; euphonium—Saturn; tuba—Neptune; percussion—Sun; midi-trumpet—Earth; lap-

top (electronic)—Moon.

Metaphor motivates the assignment of Sun to percussion, establishing the beating center of the music. The laptop, which represents the Moon, processes signals from Earth, represented by the midi-trumpet, as well as sounds from other surrounding sources. The piece opens with the computer-processed and electronically generated sounds of human activity, some of which are taken from the live audience prior to the start of the performance. These sounds disintegrate and reassemble, rotated through six speakers, to provide background material throughout. Instrumentalists are positioned in the performance space as their assigned planets are positioned in the Solar System.

The singers, including a child's voice, articulate text in the mother languages of many currently influential cultures (Latin, Greek, Arabic, Hebrew, and Chinese). In this way the singing represents the godly aspect of human belief, the roots and causes of thoughts and feeling.

The sound of the gamelan, tuned to scales unfamiliar to Euro-American cultures, reflects the human ability to be at once flawed and infinitely beautiful. At the end of the piece, I use a traditional Belenganjur—a ceremonial genre of Balinese gamelan music accompanying ritual procession—as a celebratory backdrop to the emergence of "the last Revelation," which is symbolized in the cry of a newborn baby heard in the electronic part, circling through six speakers.

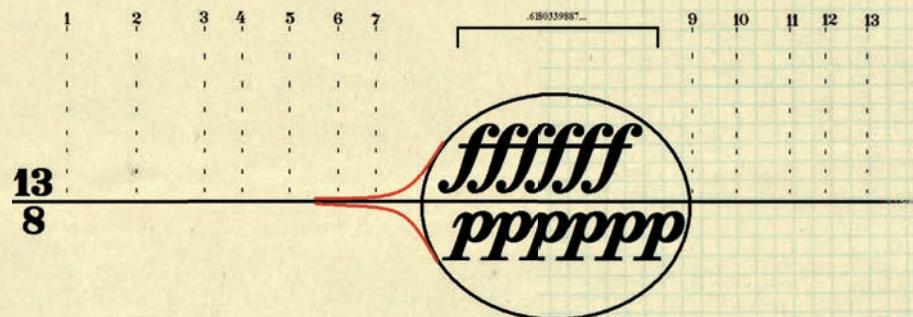
My hope is that the demands of following an unconventional score, of using recurring extended techniques, of improvising together according to pre-existing patterns, and of having to listen closely to fellow musicians in the interconnected play of this music, may all reflect the labor and the joy of human life in the cosmos, for both listeners and players alike.

-1-

Michael Maierhof; *splitting 15.* For viola. Used by permission of Michael Maierhof, © 2006.

-2-

Michael Maierhof; *shopping 4.* Used by permission of Michael Maierhof, © 2006.



Tyler Mains; *Fib Either Way*. For bowed stringed instruments as long as the total number of instruments is equal to a number in the Fibonacci sequence. (1,2,3,5,8,13,21,34,55,89, etc.)

Used by permission of Tyler Mains. © June 2007.



Tyler Mains; *Meditation*. For solo baritone and amplified piano in a large chapel. This is also a golden ratio composition.

The soloist and pianist read the score in opposite directions but both have the full score. Used by permission of Tyler Mains. © 2006.

Written for Brian Sacawa  
**Voice Within Voice**  
for solo baritone saxophone

Keeril Makan  
(2005)

Duration: 8'

***p*** = 60  
*ad. lib. sempre*  
[u] ↑  
***p*** Finger lowest note on instrument  
[α] poco

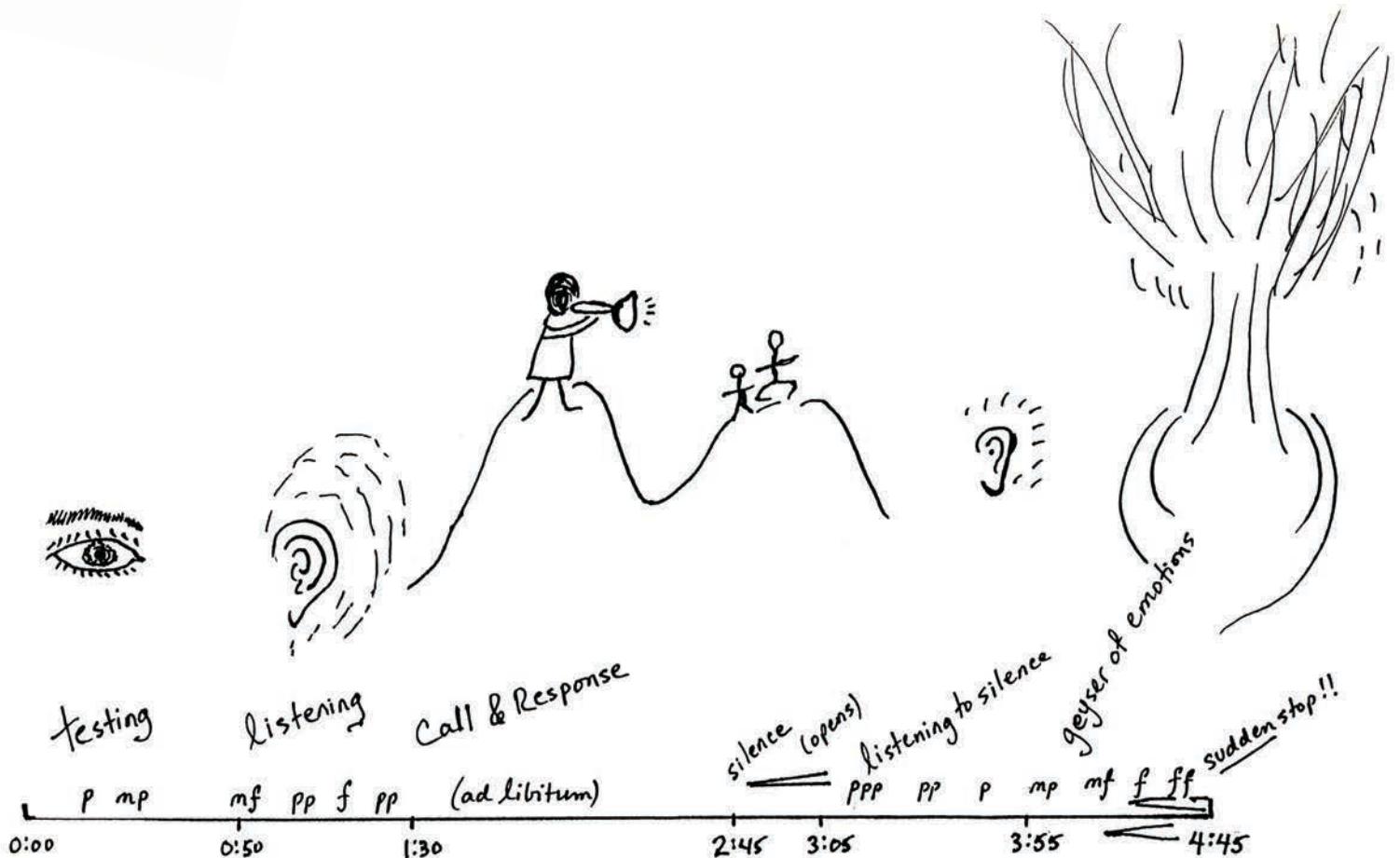
vowel alternation  
*ad. lib.* v.a. fast

[u] [u\α] slow [u\ε] med. [u\α] med.  
***mfp*** v.a. med. v.a. slow  
***mf*** v.a. med. non dim.

falsetto  
[i] ↑ [u] ↓ [a] ↑ [u] ↓  
***mf*** [mfp] f

© 2005 Keeril Makan

Keeril Makan; *Voice Within Voice*. For solo baritone saxophone. Used by permission of Keeril Makan, © 2005.



Dan Marmorstein; "Structured Improvisation #5—Landscapes" from *5 Structured Improvisations*. For variable instrumentation. Used by permission of Edition Samfundet, © 1999.

My rather straightforward time-code-based graphic score, *Landscapes*, is one of five Structured Improvisations that I sketched out in 1999.

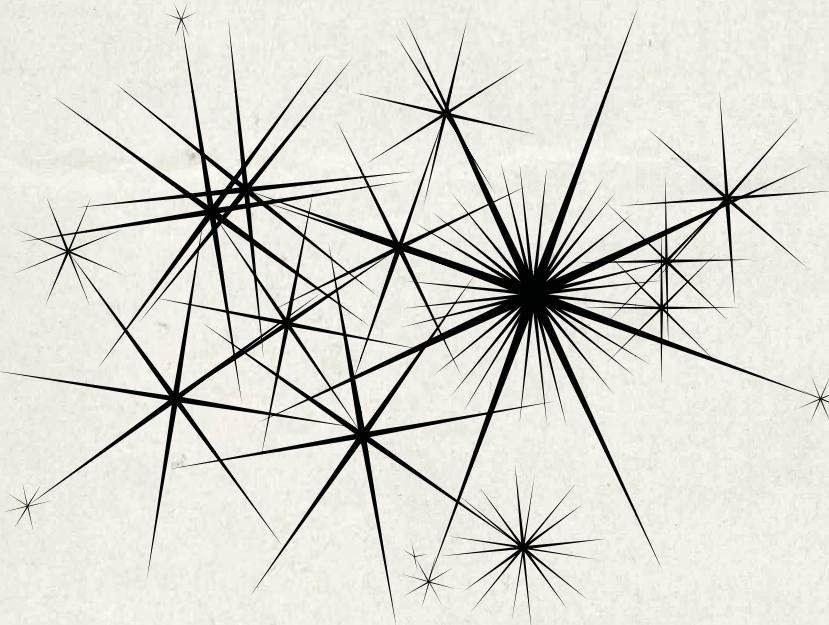
Some of the music we listen to—and much of the music we play—contains elements that are planned out in advance. When the melody, harmony, rhythm, and dynamic articulation of the music (and the constitution of the ensemble) are charted out with precise stipulations prescribed by an author, we have before us a composition. These stipulations convey a formative intention on the part of the composer. When (one or more) musicians perform the composition, the sounds the composer has envisioned and notated are brought into being, with the result that the intention comes to life. In other situations, people improvise ... and play nothing other than what they choose to play at the ongoing instant of the performance, eschewing the notion of following any directives prescribed by a plan; there is no wish whatsoever to carry a preconceived intention into manifestation. The motivation here is rather a desire to bring forth something that has not been envisioned/imagined beforehand, with the hope of discovering (and contributing) something new and different. In its most radical rendition, free improvisation leaves all the luggage of acquired information by the wayside and heads relentlessly toward the horizon of uncharted territory.

However, in both its genesis and its manifestation, the character of much of what we hear—and play—is situated somewhere in between the poles of thoroughly composed music and absolutely free improvisation. Generally speaking, in folk music, the words of the song and its melody, or in many cases the contour of the melody, are (composed) givens. But the individual player or the collective, as the case might be, breathes his/her own poetry into the interpretation and improvises with respect to articulation, rhythmical organization, and degree of harmonic complexity. In jazz music, it is often the harmonic framework of the (composed) song that is retained, albeit with eventual alterations, while new melodies and syncopations are spun forth against this fixed backdrop, after the initial appearance of the song's "head." In rock and in pop music, generally speak-

ing, performers manage to press their own personal fingerprints on the composition through the deliberately singularized manner of articulating the material and through diverse sequences of repeating, extension, and fragmentation, which frequently leave pockets of time for the singer and the instrumentalists to improvise melodic and rhythmic variations on the given theme.

Structured Improvisation thematically addresses itself to the vast potential for vitality and flexibility situated in the expanse between the aforementioned poles. Placing a question mark beside the constraint on music to crystallize itself in the form of a "piece" and aimed at a reckoning/showdown with this notion, the activity of concocting structures as a basis for improvisation, has its roots in a will to generate activity and play (simultaneously in the sense of "playing music" and in the sense of "play" as a game) that surpasses any compulsion to create finished pieces/works. Paradoxically enough, in the manner of packaging the suggestions in some kind of form that is to be communicated to others, there is indeed an aspect of "opus" which is retained, albeit in the form of an open work.

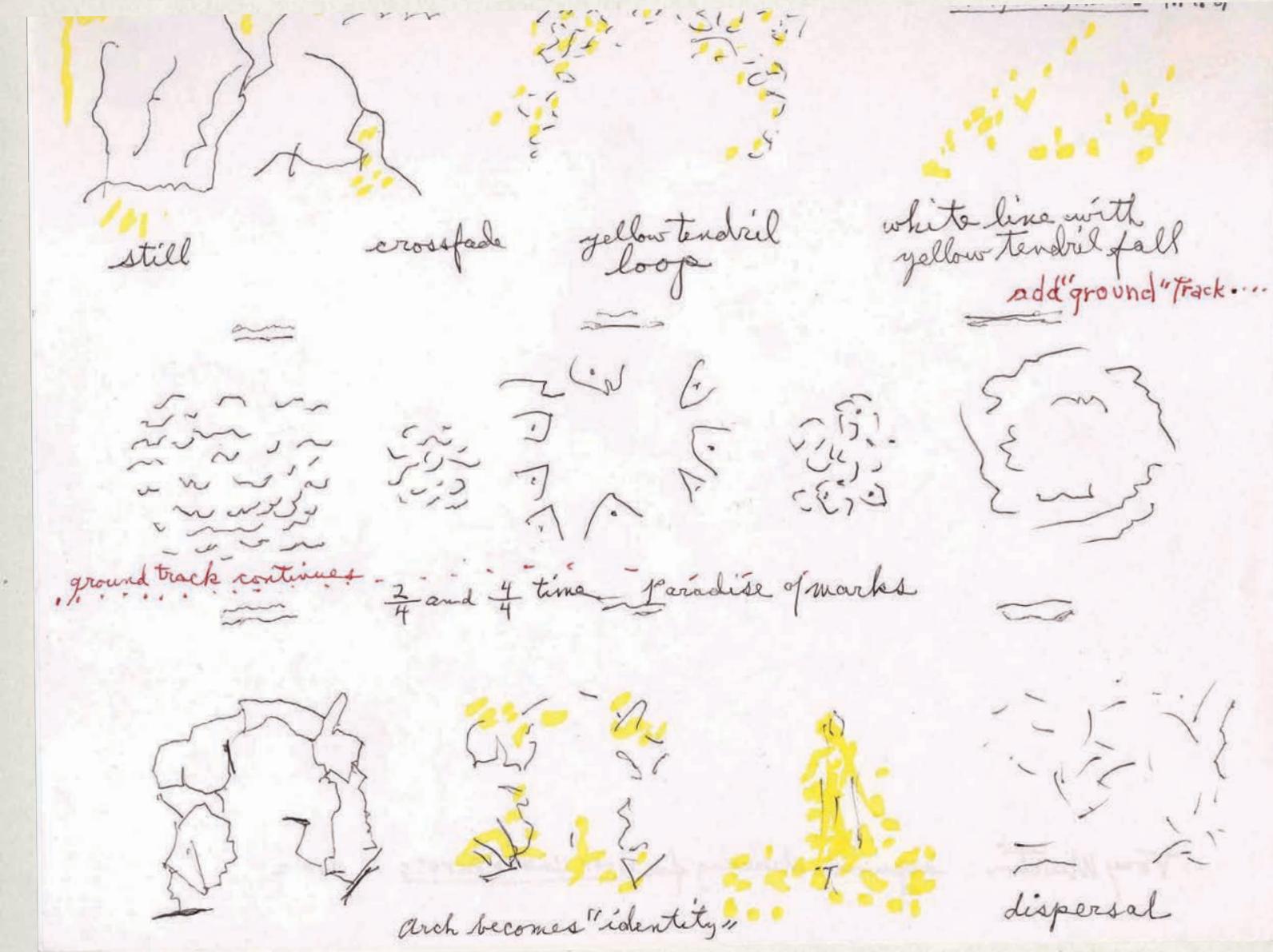
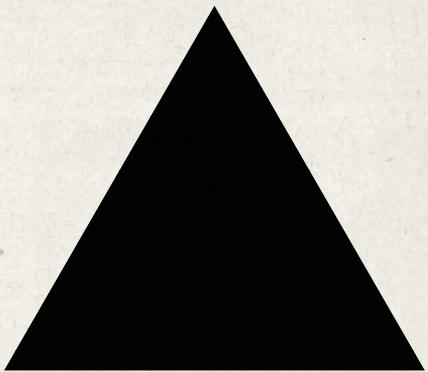
Copenhagen, August 2007



**Instrumentation** 3 Ottavini, 3 Oboi, Tromba in D, Arpa, Celesta, Piano, Campanelli, 3 Piatti Sospesi  
**Durata ca. 5'**

**Explanations :** The conductor has also the role of the composer of this piece. He defines the density, the intensity and also the spatial movement of the overall sound. Each musician improvises on a single free motif according to the conductor signals. The orchestra is the musical instrument and the conductor is in some way the performer. Many rehearsals may be required before the concert as for the orchestra and the conductor to establish a mutual and fast communication. All improvised phrases should return in an F#. At the end of the piece, a full range C major Chord sounds in a  $\text{ff}$  possible dynamic that slowly fades out. The duration of that last chord should be exactly 20". When the sound dies out completely, the orchestra stays still for approximately 15". The score is supposed to have an psychological effect on musicians. The first section of the piece should resemble a crystalline sonic world with spectral development, while the second part (major chord) should sound as a solid sound mass denoting the end of the piece.

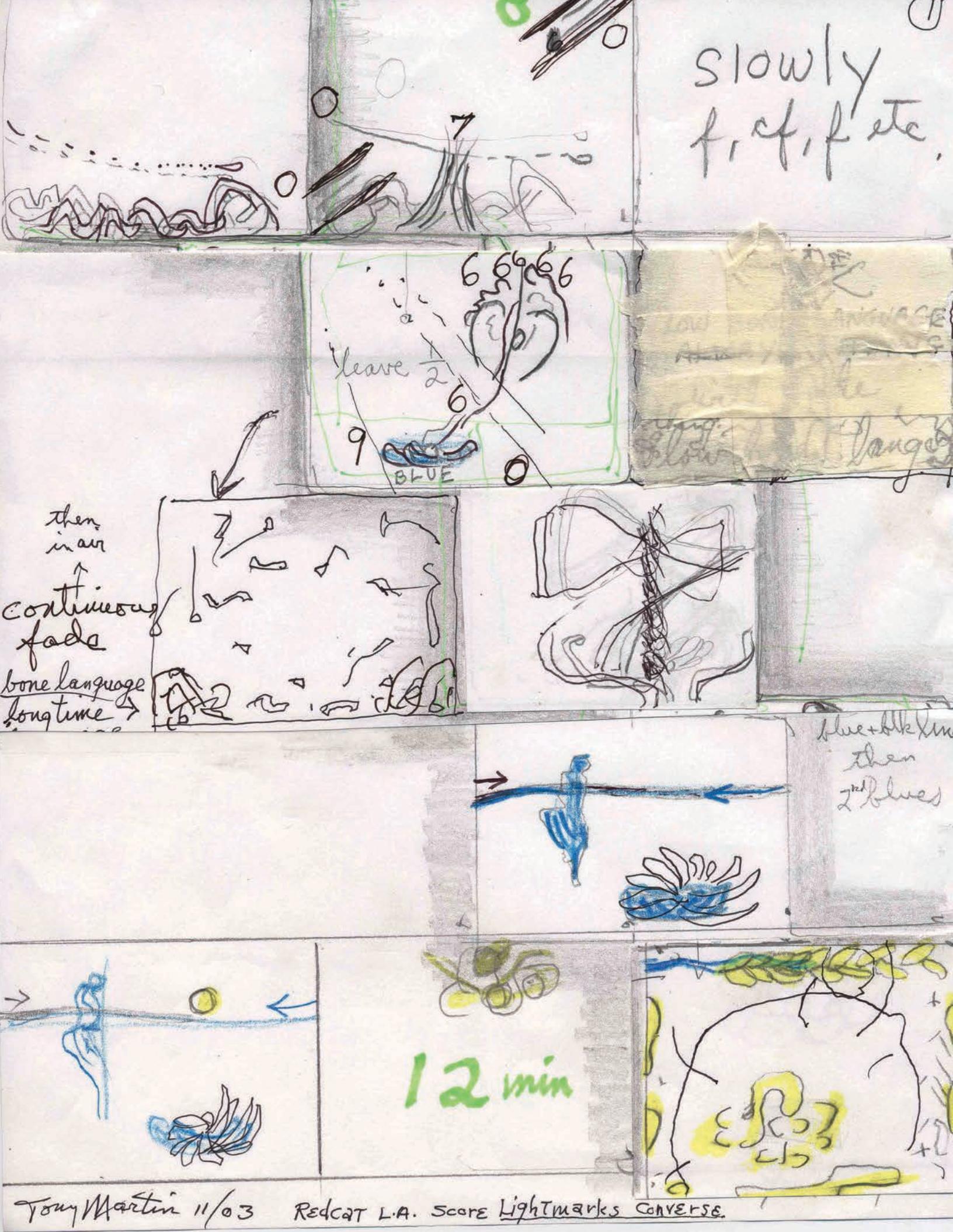
Dimitris Maronidis; *Constellation*. For 3 ottavini, 3 oboe, trumpet in D, harp, celesta, piano, bell, and 3 suspended plates. Used by permission of Dimitris Maronidis, © 2002.



Tony Martin; *Over, Under, Across*. Visual composition for combined figural and abstract video and computer-generated imagery. Used by permission of Tony Martin, © 2007.  
 Following page: Tony Martin; *Light Marks Converse*. Visual composition for computer-generated drawing-with-light-in-time video. Used by permission of Tony Martin, © 2007.

**Over, Under, Across** is a seven-minute visual composition for combined figural and abstract video and computer-generated imagery. First exhibited at Eyebeam, NYC, in 2002.

**Light Marks Converse** is a twelve-minute visual composition for computer-generated drawing-with-light-in-time, video projected, using software created by me with programmer Hunter Ochs. First performed at Redcat Theater, Performing Art Center, Los Angeles, in 2003 and for "Interpretations" Merkin Hall, NYC, in 2004.

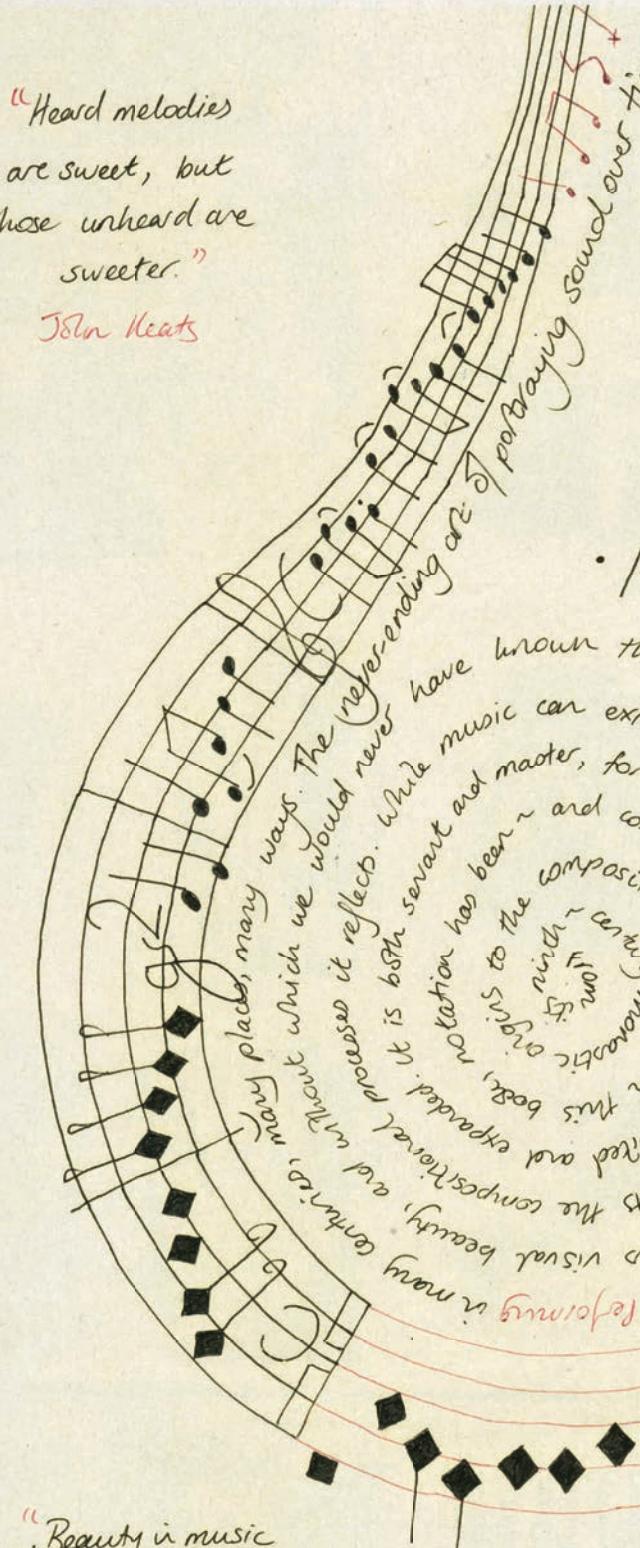


"Heard melodies  
are sweet, but  
those unheard are  
sweeter."

John Keats

"The first question  
I ask myself  
when something doesn't  
seem to be beautiful, is:  
why do I think it's not  
beautiful?  
And very shortly you  
discover that there is  
no reason."

John Cage



"Beauty in music  
is too often confused  
with something that  
lets the ears lie back  
in an easy chair."

Charles Ives

Kate Maxwell 2007

Kate Maxwell; Performing Notation, Notation Performing. Used by permission of Kate Maxwell, © 2007.

"Music  
in its most  
general sense  
encompasses in reality  
practically everything."

Jacques de Liège

# Picnic

i

ii

iii

iv

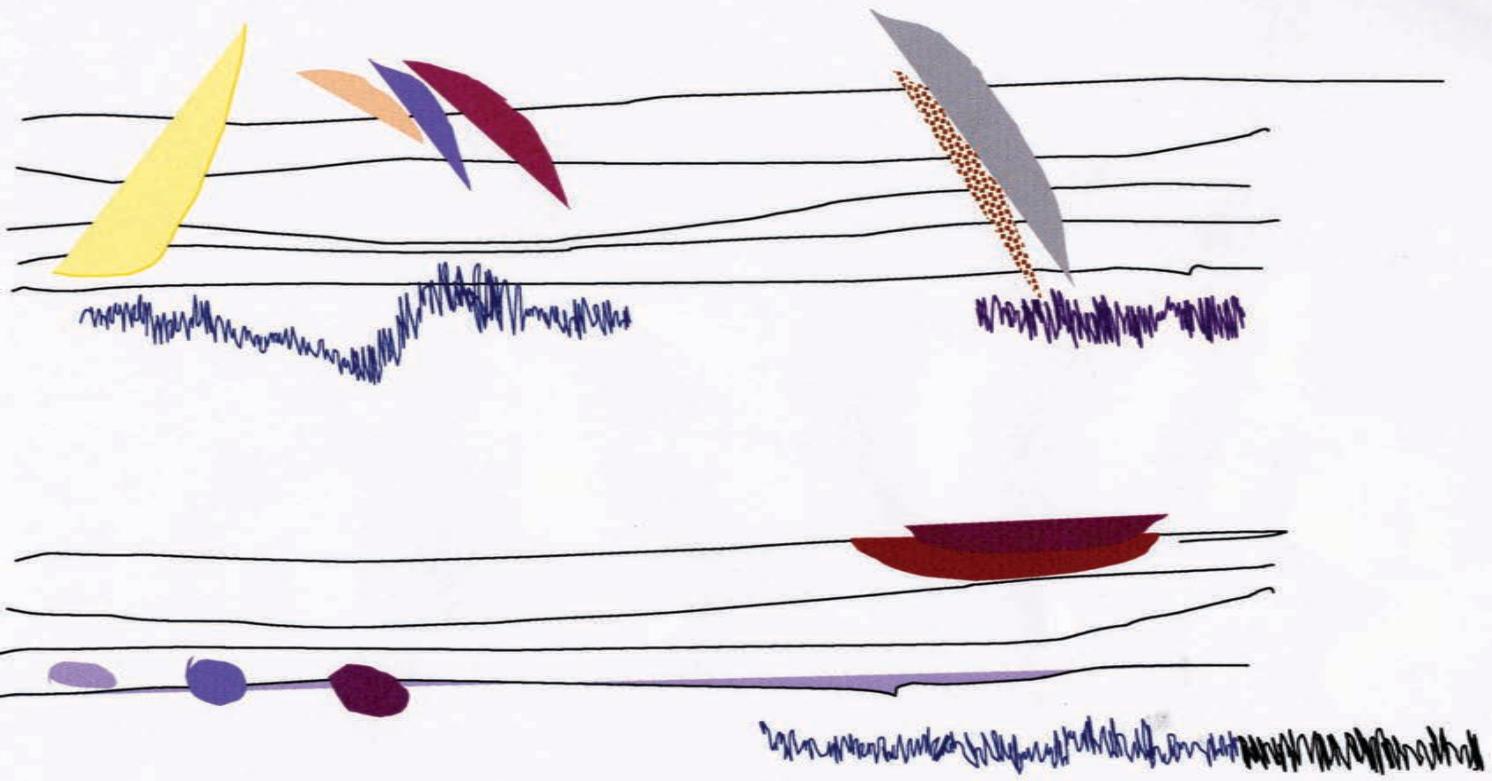
for violins, oboe, bass guitar

Copyright Cilla McQueen 2006

Cilla McQueen; *Picnic*. For violins, oboe, and bass guitar. Used by permission of Cilla McQueen, © 2006.**Picnic:**

Two violins, the first smelling of roses, the second holding a sword.  
The setting sun glints on the edge of the blade.  
Both violins describe an arc: the first like lips, the second like a slice.  
An enquiring sound upwardly inflected.  
Two shades of meaning.  
Three waves arrive on a shore.  
Light limns the shapes of surging dolphins.  
A fused pair with a degree of yellow; a smaller, finer leap above  
the surface; a combination of splash and plunge with a comet's  
tail of foam deep below as if it spun on rising.  
Increasingly emphatic blends.  
Blue overlays the rose of evening in a double descent over time to  
a firm halt followed by a period of silent inactivity.  
The oboe warbles rich brown for the duration of three waves.  
Its blue eye sheds a yellow and a red tear.  
The sound develops a twist in the middle and unfolds in reverse  
similitude to its beginning on a distorted scale.  
A yellow frond in a violet moon thrown like a ball.  
A small brown island topped with green.  
The bass guitar played in the manner of a double bass bowed.

Distortions modulated and augmented to background feedback  
thundersheet distantly.  
The volume not great but elastic and contained.  
One triangular crimson statement low in pitch and high in volume.  
A purplish stroll for the oboe following a miniature elaboration  
echoing the umber.  
A small reflection of the rose violin also in miniature, of short  
duration, nestling in the shoulder of the tune.  
Several sharp violin calls of cerulean blue.  
At first a single scoop, shortly followed by a traveling razor in the  
same flavor.  
A brief warning from the blade, then a full sound ascending from  
four identical orange violins.  
The violins are taken so high they partake in the section above.  
For some time there is silence and closed eyes.  
In this place there is no oboe and no wind, merely a vertical chord  
of trees, blue through violet underlined by indigo.  
Red strings come and go in the center of the triple sound which at  
the blue extremity concedes a predominance of black.

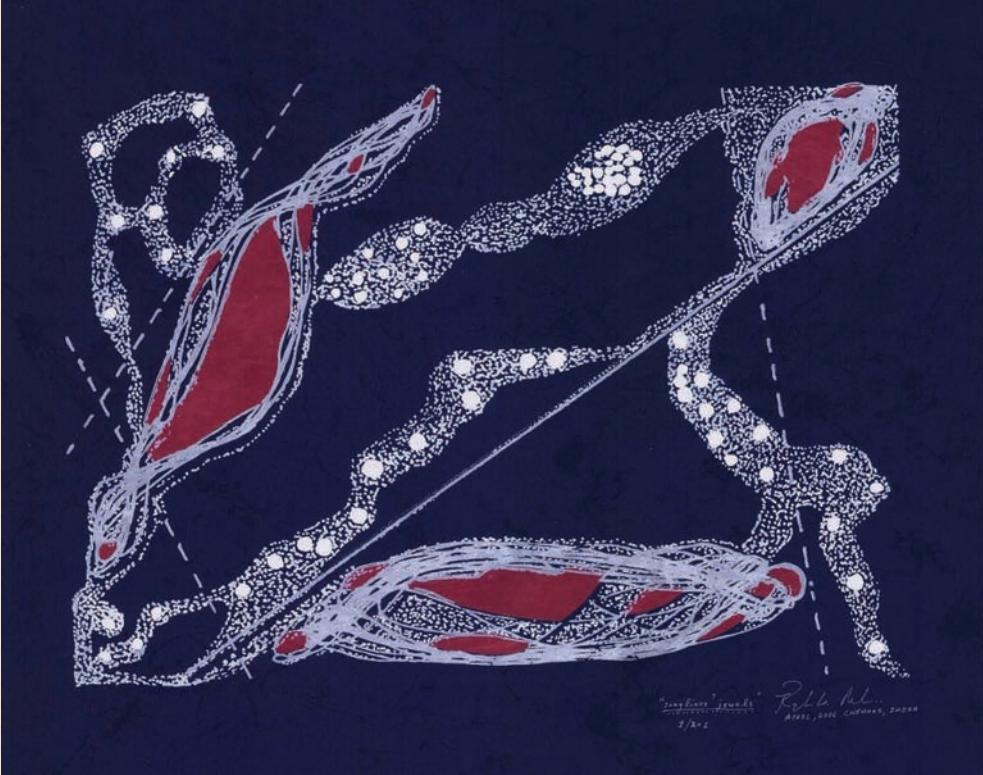


## Score for Moths

Cilla McQueen; *Score for Moths*. For chamber ensemble. Used by permission of Cilla McQueen, © 2004.

**Score For Moths and Picnic:** The graphic notations *Score for Moths* and *Picnic* are of the nature of thought experiments. The viewer is invited to hear the music they portray, with or without the mediation of actual musical instruments. If the scores are to be performed live, the musicians may find the accompanying written notes useful guides for improvisation.

I wrote the poem *Thank You John Cage* on first encountering his work in 1980. He taught me the importance of space and silence as active components in both poetry and music.



Rajesh Mehta; *Songlines Jewels*. For voice and cello. Used by permission of Rajesh Mehta, © 2006.

**Songlines Jewels** was made in 2006, while I was a Senior Performing and Creative Arts Fellow of the American Institute of Indian Studies residing in Chennai, India, for my project "Innovative Music Meetings: Creative Collaborations with Carnatic Music." This intensive research phase with musicians from this highly devotional and song-based compositional tradition had a decisive impact on my work, which became visually evident in these paintings. Although my relationship to Carnatic Music exceeds sixteen years, I realized that I was entering a new phase of visual representation of music that I could hear emerging from this narrative-rich tradition with its inexhaustible treasure chest of musical "jewels." However, the paintings also evoked other cultural associations that I was not consciously aware of while painting, especially the affinity to the unique culture of the Australian aborigines, their dot paintings, and song cycles: "Songlines," with their built-in navigational tracking devices and an archetypal symbolic world through their concept of the "Dreamtime."

Through my own musical experiences, I have discovered that new notational approaches can act as bridges toward innovative music meetings—they are no longer confined to the Western contemporary New music communities but are tools for visually communicating important musical ideas from any world musical tradition to any other. Furthermore, given the diversity of cultural approaches to music making, symbolic representations of music through new notational forms can evoke archetypal images enlarging the platform for a broader musical-spiritual dialogue.

 A composite image showing the score for "House of Mirrors II: Saxophone" by Ann Millikan and various hand-drawn diagrams illustrating performance techniques. The score includes four staves for Tenor Saxophone, with dynamics like p, f, and ff, and markings like 'mult.' (multiple tones) and 'air' (air flow). The diagrams show a yellow sphere representing a sound source, with arrows indicating movement and interaction with objects like a speaker, a roll of paper, and a small figure. There are also small circles with musical symbols like 'ppp' and 'f'.
 

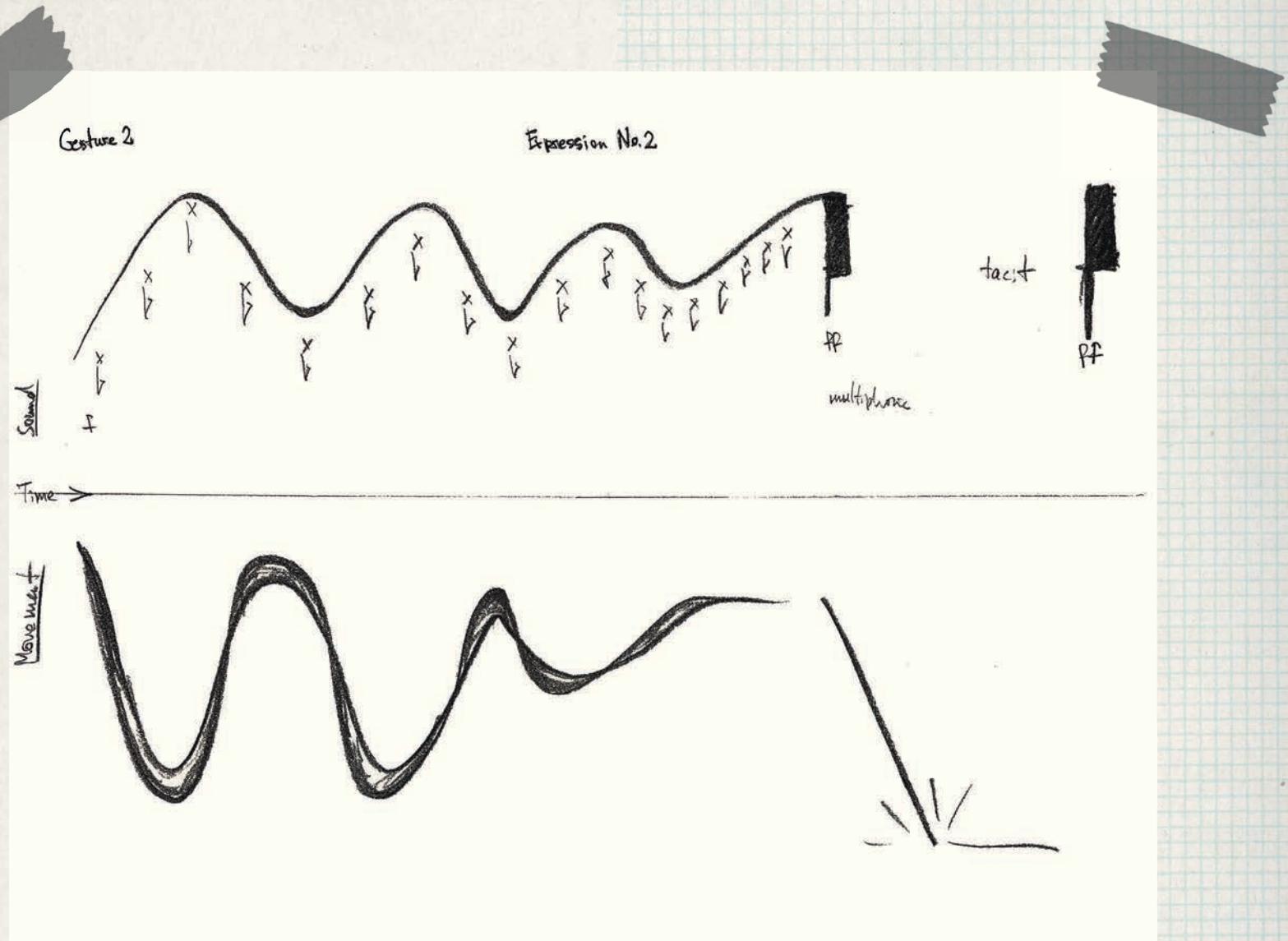
*for Eric Barber*  
**House of Mirrors II: Saxophone**  
Ann Millikan  
©2001

INTERNAL MELODIES  $\text{♩} = 50$

Tenor Saxophone  $p >>$   
Tenor Saxophone  $p >> \# >>$   
T. Sax.  $\# >> \# >> \# >>$   
T. Sax.  $\# >> \# >> \# >>$   
T. Sax.  $\# >> \# >> \# >>$

Ann Millikan; *House of Mirrors II: Saxophone*. For saxophone. Used by permission of Ann Millikan / Sword Dance Publishing Company, © 2001.

**House Of Mirrors II** focuses on the internal experience of the performer. Thought, kinesthetic awareness, and the inner ear all play an integral part in the development and performance of the piece. The object is to create a realm where the performer is surrounded by sound and stimulus both internally and externally. Various materials are given to stimulate improvisation: the score, resonant surfaces which are excited by using modified speakers, and "sound boxes" that are manipulated with the feet. House of Mirrors II opens up an exciting new form of theater, where the improviser can enter into another world and take on a character.



Rene Mogensen; Expressions No. 2. For woodwind or different instrument ad lib and a dancer. Used by permission of Edition Samfundet, © 1997.

**Expression No. 2:** Sound/movement—movement/sound counterpoint. Two gestures are given, one on each page. The top half of each page shows a representation of a sound gesture. The bottom half of each page shows a representation of a movement gesture. These two parts suggest a counterpoint in sounds and movements. Counterpoint here meaning the sense of an apparent causal relationship between the sound and movement. The interpretation should begin with Gesture 1, immediately followed by Gesture 2. The alternate view image is for both sound and movement, but does not represent a time line.

Four groups of performers playing  
wine glasses in four different ar-  
eas of a darkened, but candle  
lit space gradually change  
the chord by drinking  
or filling the wine  
glasses until  
a per  
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nd by all four  
choruses of wine glasses.

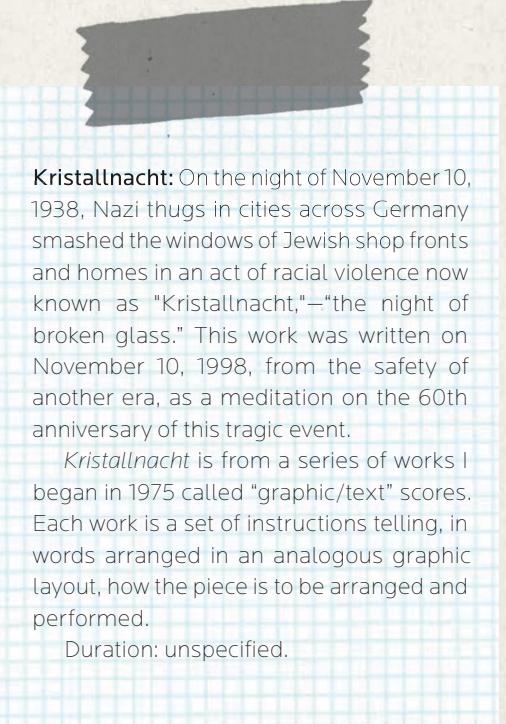
Four groups of performers playing  
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nd by all four  
choruses of wine glasses.

**Smash all the glasses at the same time at the end !**

Stephen Montague; *Kristallnacht*. For four antiphonal choruses of wine glasses. Used by permission of Stephen Montague, © 1998.



**Kristallnacht:** On the night of November 10, 1938, Nazi thugs in cities across Germany smashed the windows of Jewish shop fronts and homes in an act of racial violence now known as "Kristallnacht,"—the night of broken glass." This work was written on November 10, 1998, from the safety of another era, as a meditation on the 60th anniversary of this tragic event.

*Kristallnacht* is from a series of works I began in 1975 called "graphic/text" scores. Each work is a set of instructions telling, in words arranged in an analogous graphic layout, how the piece is to be arranged and performed.

Duration: unspecified.

**3. Sun (decreasing) 2:00-3:00**

**4. Lin (approaching) 3:00-4:00**

**19. Yi (increasing) 18:00-19:00**

**20. Guan (watching) 19:00-20:00**

Robert Morris; *Oracle*. For singers and instrumentalists, including percussion.

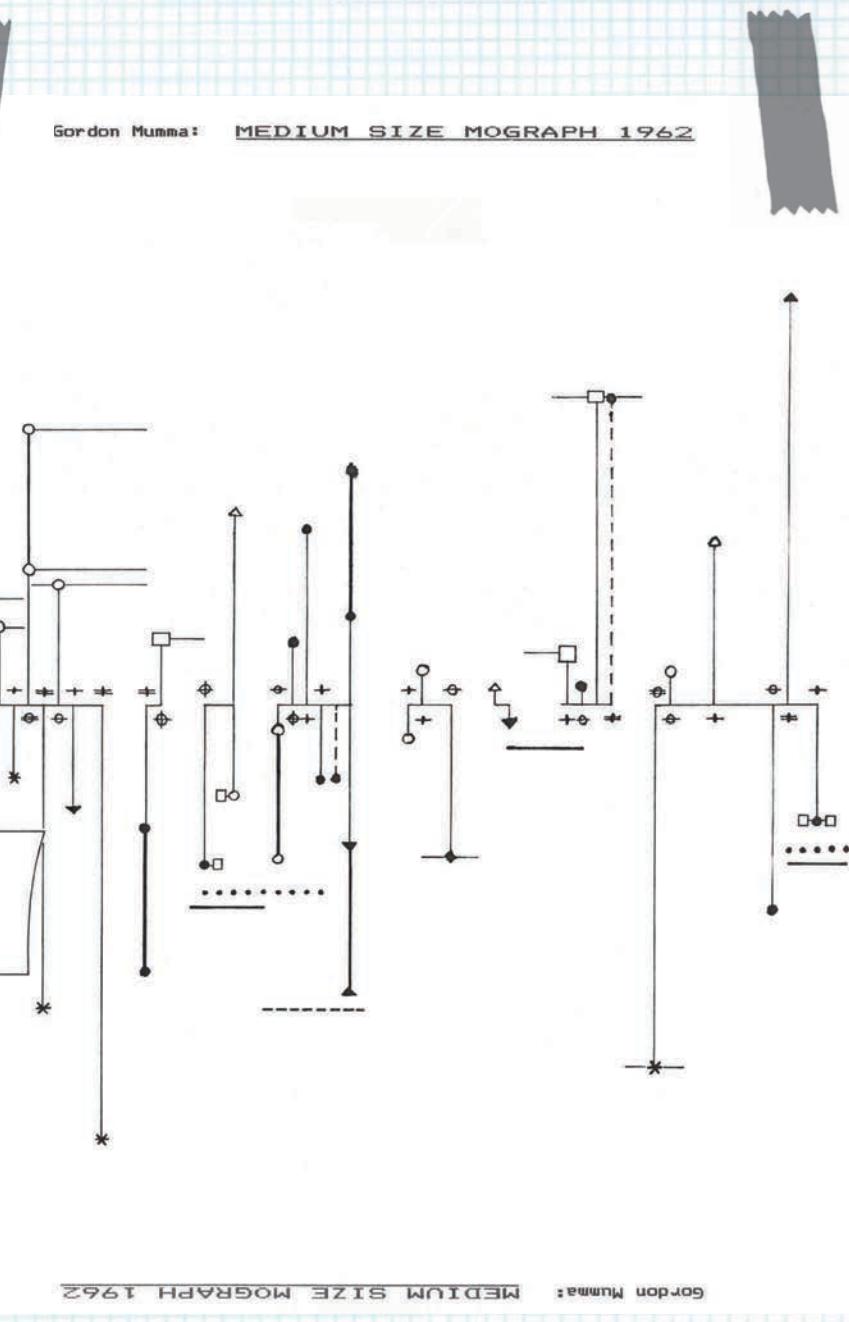
Used by permission of Robert Morris, © 2005.

**Oracle** is a sixty-four-minute composition for singers and instrumentalists including percussion. It is the third of my pieces designed to be played out of doors, in a park or in the country, woods, highlands, and the like.

While a performance of *Oracle* can be publicly announced, it can be performed by invitation only or without any announcement so the audience is simply the people who happen to be in and around the performance space.

*Oracle* uses a spatial notation similar to those used in other outdoor pieces, *Playing Outside*, *Coming Down to Earth*, and *SOUND/PATH/FIELD*. The piece is divided into 64 sections, each lasting one minute. Sections are either 1) undivided with the players using the spacing of events on the page to determine timing or 2) divided into divisions of time that are integer multiples of a five-second interval.

The structure of *Oracle* is based on the *I-Ching*, one of the Chinese classic texts (compiled c. 1150 B.C.) in which sixty-four hexagrams are used to suggest appropriate actions in response to questions posed by the reader. Each hexagram is a collection of six lines that are either broken (- -) or unbroken (D). Each section of the piece has a header that gives the hexagram and name of the section and its beginning and ending time in minutes. As in the other outdoor pieces, a section is associated with a basic pitch and chord. Thus there is a sequence of 64 notes and chords that guides the music's progress.



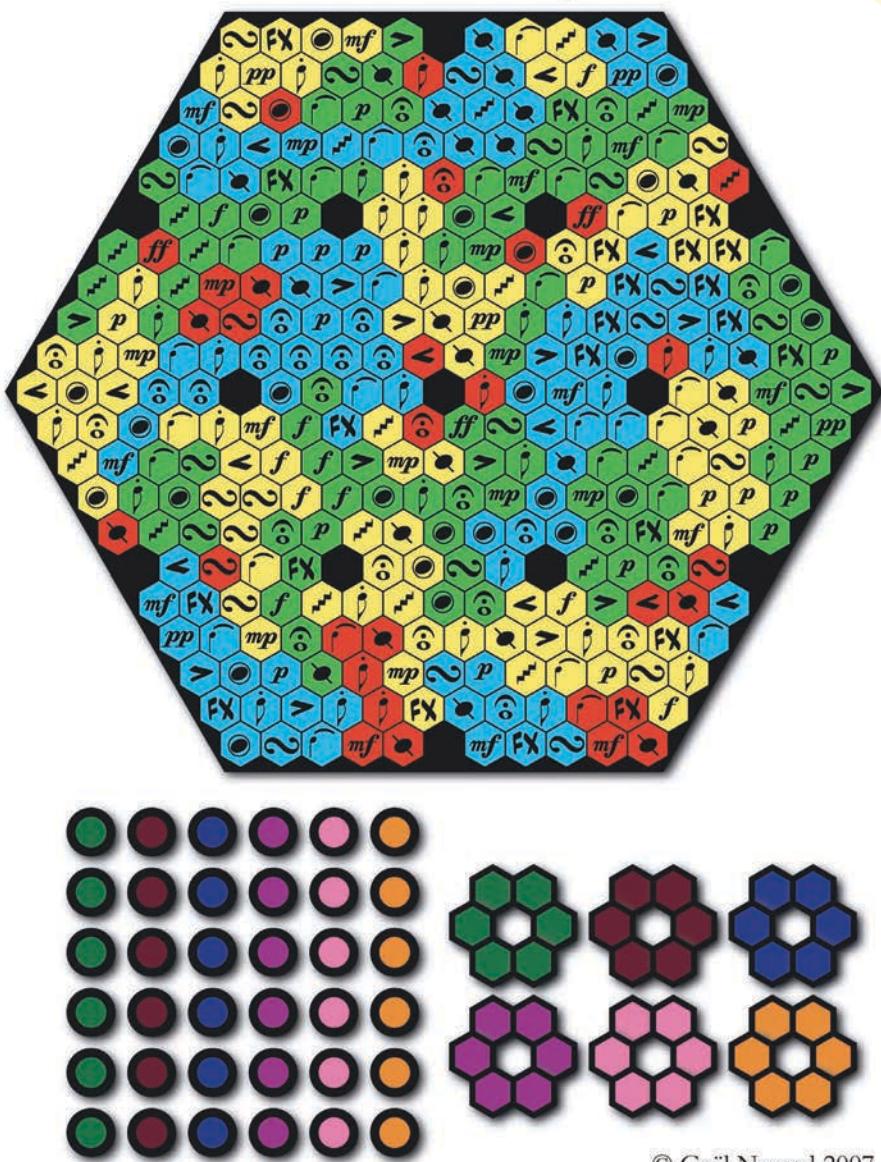
Gordon Mumma; MEDIUM SIZE MOGRAPH 1962. For two pianos. Used by permission of Gordon Mumma / BMI, © 1962.

**MEDIUM SIZE MOGRAPH 1962** is one of a series of MOGRAPHS—compositions for piano solo or various combinations of pianos. The first two words of each MOGRAPH title indicate the length or size of the composition. The title is a pun on the word "seismograph," and includes the year of the composition. The pun is relevant because the structure of each MOGRAPH was derived from the P-wave and S-wave patterns of earthquakes and underground nuclear explosions during the early 1960s.

For this **MEDIUM SIZE MOGRAPH 1962**, the notation is best described as a map of the choreography, and is read vertically. Unlike the traditional music notation that indicates specific pitch, register, duration, and dynamics, this choreographic notation is a map of the physical movement of the pianist's actions at the keyboard. Specific pitches are not indicated—only the general areas where the pianist articulates the keys of the piano keyboard. The central vertical line defines the left and right sides of the pianist's body.

Though the complete score of this **MEDIUM SIZE MOGRAPH 1962** is on four pages, the notation is also vertically symmetrical, so that the pages can also be performed upside down, thus resulting in eight pages of choreographic instructions. All of the notation details, such as the dynamic markings, read the same upside down.

## Game board and pieces



**Hexagonie** is an abstract place where there is a war of strategy without any apparent reason. The war is an abstraction for my generation. Although our Western countries are relentlessly involved in numerous conflicts around the world, we have contacts with the war only via stereotyped media representations and war games, which are far from the bloody reality of war.

But the aim of this composition is mostly a research of new kinds of interactions between the score and the musicians, as a development of the open-work research carried out these past fifty years. The score looks like a board game on which some pawns representing players move while creating a panel of musical situations in constant evolution.

The score in itself is therefore mobile because it evolves in real-time with the game. Finally, even though this composition can be played in a traditional concert, it is mainly composed for the private sphere, as a new kind of "chamber music."

Gaël Navard; Hexagonie. Musical game for 2, 3, 4, or 6 players. Used by permission of Gaël Navard, © 2007.

**2**

Filtres résonants et échos granulaires

Basse

Lent et hésitant

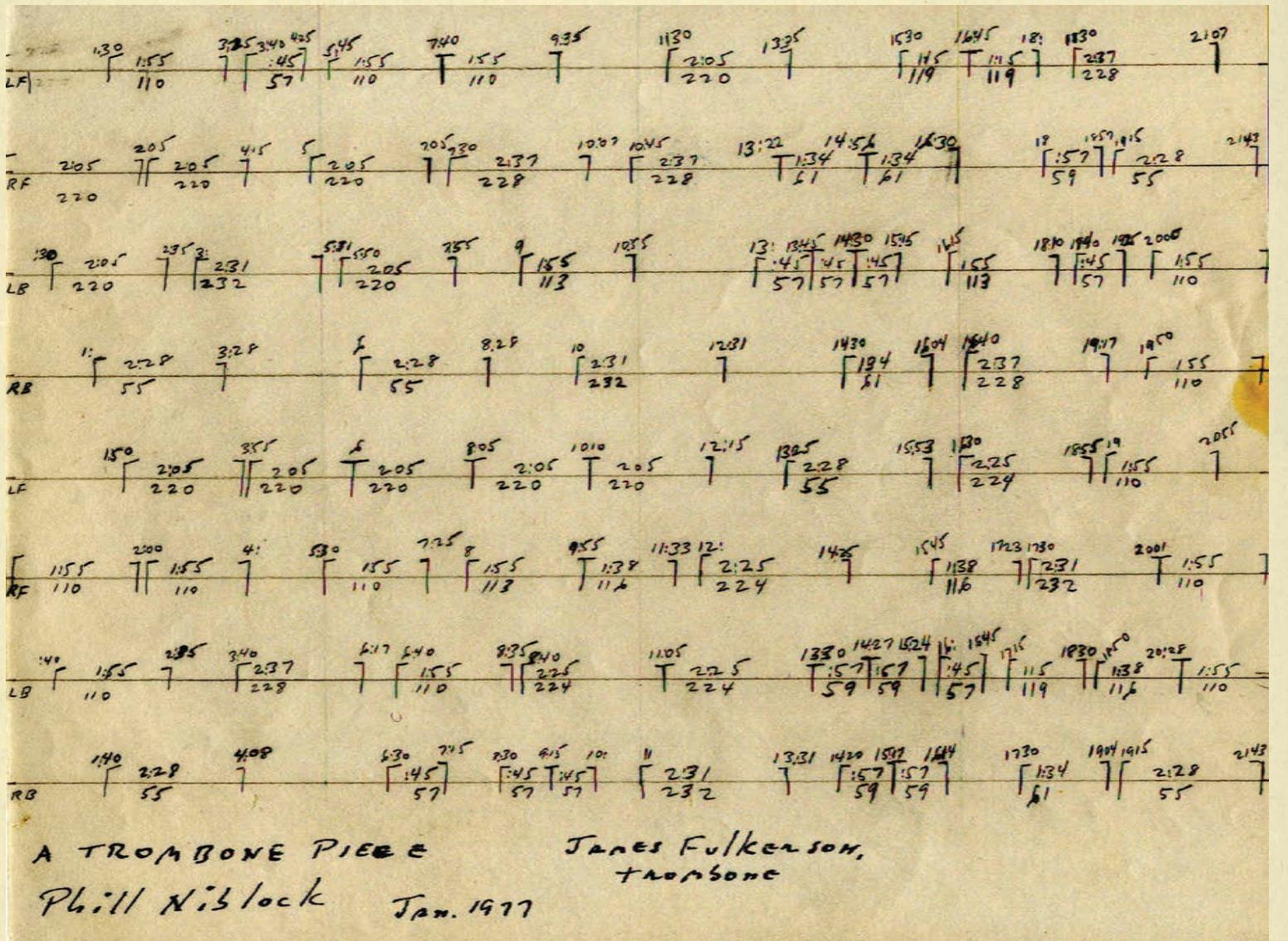
Tenor

attendre l'autre sur un SI  
et l'etreindre sur un LA

finir sur une grande inspiration...

Gaël Navard: *Asile*. A short transit piece in five stages for two recorders and live electronics. Used by permission of Gaël Navard. © 2006.

## PHILL NIBLOCK



Phill Niblock; *A Trombone Piece*. For trombone. Used by permission of Phil Niblock, © 1977.

**A Trombone Piece:** The score is my mix score, not that played by the musician, or by subsequent musicians playing with the recording of the piece. Each line represents a track of an 8-channel multitrack tape. The numbers below the line indicate the pitch in Hertz (i.e., 220 is the A below A 440). The numbers just above the line are the time of the event between the vertical lines. The numbers above the vertical lines are the cumulative time for that track.

*A Trombone Piece* was recorded at the Music Department, State University of New York at Albany, under the supervision of Joel Chadabe; Richard Lainhart and Richard Kelly, recording engineers, using Neumann microphones. Eight-channel dubbing at Experimental Intermedia Foundation. Mix from Teac 80 - 8 to Studer A80 with Stephen Cellum at Imago Sonorum.

Conversion to digital, editing, multitracking, and mixing in Sonic Solutions of the pieces Held Tones, Unmentionable Piece for Trombone and Sousaphone, A Trombone Piece and A Third Trombone, by Dan Evans Farkas at Sound One, New York.

### From the original notes by Phill Niblock, to "Nothing to Look at, just a record"

The pieces are instrumental works, made on tape, performed as tape only, or tape with live music. The scores are the composer's mix scores. In performance the live musician plays with the tape, moving around the space, either matching tones on the tape or playing adjacent tones, creating shifting pools of beats and changed harmonics as he moves through the space and a duration of time.

The pieces are made in stages. First, the tones are selected. The musician is tuned during the recording session by calibrated sine waves, watching oscilloscope patterns. Numerous examples of each tone are recorded.

These tapes are edited (breathing spaces removed) into blocks of repetitions of each tone and then timed. The timed blocks are assigned to tracks and time slots of the eight tracks. In the score, each horizontal line represents a separate track and a duration of time. Figures above the brackets represent minutes and seconds of elapsed time: within the brackets, above the line is the duration of the event; below the line, the frequency of the tone (the pitch in Hertz). After dubbing up the eight tracks, the top four lines (tracks) of the score are mixed down to one channel, and the bottom four to the second channel of the final stereo mix. The music is architectural—the intent is to fill the space. It is non-frontal music, non proscenium, anti-stage, not about the ensemble sitting in front of the audience, not about a single sound source. At least four speaker systems are desirable, arrayed around the periphery of the room, saturating the total space, engaging the air.

The structure of the music comes from the reproduction of the tape (or CD).

The live musician is not a soloist with tape background, but the converse.

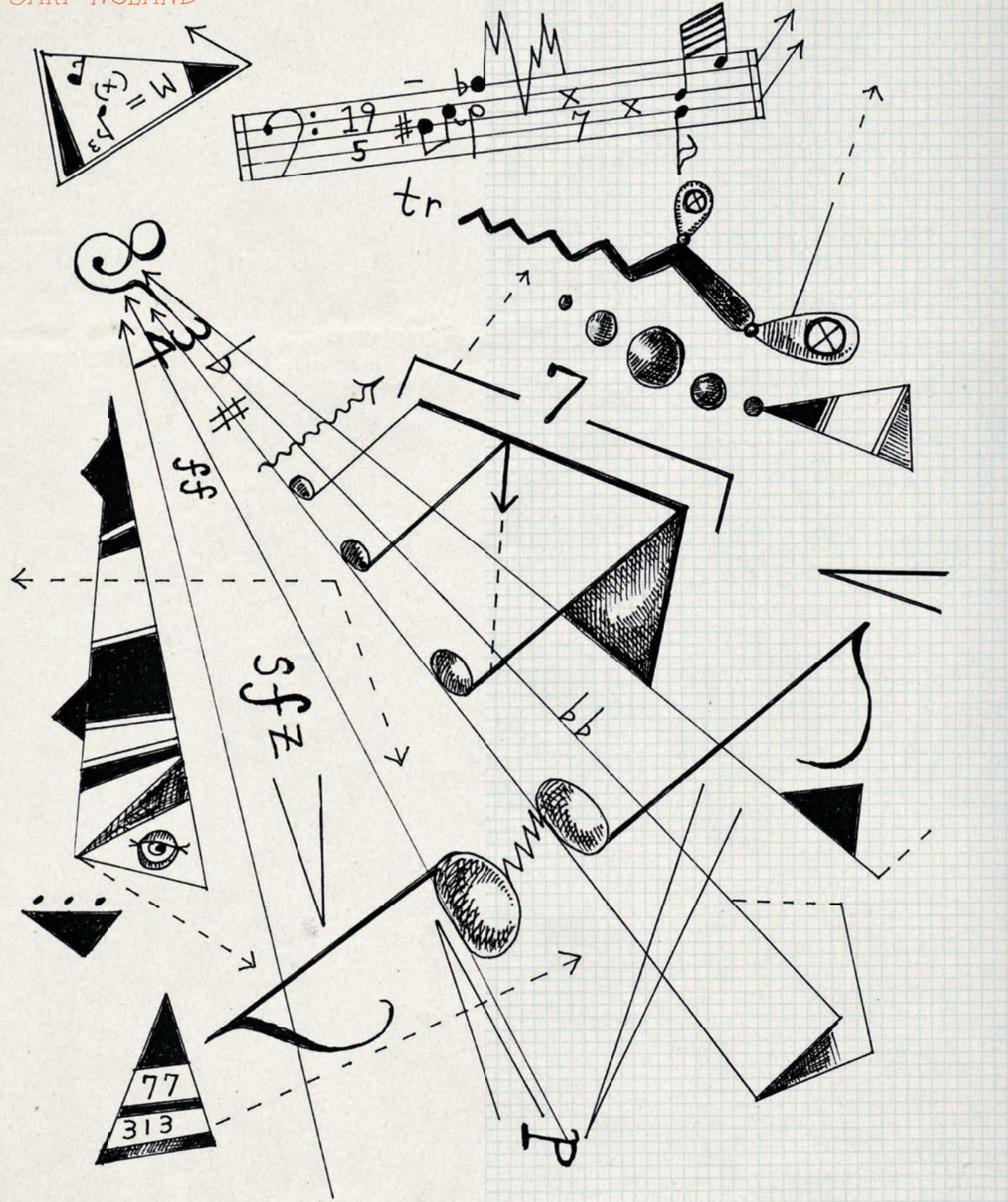
Excerpts from an article, "Phill Niblock, Composer's View," which appeared in the EMAS Newsletter, a publication of the Electroacoustic Music Association of Great Britain, July 1981.

For me, the film and music of Phill Niblock have always been remarkable for their clarity of intention, the quality of their realization and their performance, and their unrelenting insistence.

I like *A Trombone Piece*, but Phill's work for the contrabassoon and contrabass, once described as the sound of two Mack trucks mating, is on my list of pieces which I wished I had composed. The variety of sonic textures in Phill's sound world are such that one feels as though he/she is inhabiting a three dimensional sound sculpture—a sonic architecture. It comes at you from all sides.

*A Trombone Piece* is built upon a single pitch, A, played over three octaves, and yet as a theater technician in New Zealand said, "You know it seems like you are just playing the same note over and over again, but you're not. There are these rivers of sound which are quite high up—not the notes you are playing—which are fascinating." This is not a repetitive music, is not hypnotic music, because Phill is continually breaking up the sound field. It's impossible to become hypnotized by these rivers of sound.

*A Trombone Piece* is built upon an acoustic phenomenon known as "beats" or sum and difference tones. The combination of two notes produces two additional pitches that are the sum of the frequencies of both notes and the difference between them. The summation tone is often not perceivable because the original sounds are too loud but the difference tones can be felt as perceptible pulse or beats. Ordinarily difference tones are eliminated in the act of "tuning up." The deliberate production of these sum and difference tones is what creates the tactile quality in Phill's music.



Gary Noland; From Sixty Lurid Albumblatts. Used by permission of Gary Noland, © 1974.



### Notes for Sixty Lurid Albumblatts

The pieces contained in this volume are "pictographically" notated and may be interpreted by any number of players, with no limitations as to the types of instruments employed. Although the composer would prefer the interpreters of the score to be imaginative musicians with cultivated tastes and a penchant for free improvisation, no stylistic or aesthetic biases are indicated. The only "rule" set forth by the composer is that the players respond musically to the images. There are no durational restrictions, nor is there any requirement that all sixty pieces be played in one sitting. Any number of these albumblatts may be programmed in whatever order one chooses.

Due to the lurid, grotesque, and disturbing nature of many of the images in this score, it is strongly advised that children under seventeen years of age be accompanied by adult guardians while performing this piece. The composer feels obliged to proclaim this caveat, notwithstanding that many of the images contained herein were rendered by him previous to his own seventeenth birthday. In fact, the earliest pictures in this volume date back to 1970, when the composer was a strapping young buck of thirteen. Suffice it to say, then, that even though Mr. Noland was once a neurotic and pimple-faced adolescent with fierce hormones and axes to grind, he appears of late to be quite "normal" and well adjusted.

### Notes on composing

How to continue to fulfill the profession of being a composer? Henri Poincaré in his book *The Foundation of Science* (1908) wrote: "Everything appears to us in the form of figures." There is no question that the harmony of numbers and forms obtains a geometric elegance in the arts. We know that the arts in general manifest applied proportion of one sort or another and that there are connections amongst them. In music, time, space, structure are most preeminent. Guido d'Arezzo (c. 1030) in *Micrologus*, Chapter XV, "On Composing a Melody Properly," writes: "In music, first there

are tones, then one, or several of these form a musical syllable; then one or several syllables constitute a module, and a module part of a musical sentence. Finally one or several modules form a phrase ending at a convenient place at which to breathe. The modules must always mutually balance each other either by the number of sounds or by the proportion of their durations, agreeing with mathematical ratios. Indeed, music always favors the varying of sound-patterns while respecting mathematical proportions. The composer uses modules in due proportions." I use the same to plan the proportions of all the deployed events of my compositions. I organize the patterns within well applied symmetries and asymmetries.

Spinoza wrote that time is to be measured only by imagination, human thinking is timeless. In further definition, he writes: "We compare time with the duration of other things which have a certain and determinate motion and this comparison we call time. Thus time is the sense of perception, an intuitive knowledge." So it is with the composition of a symphony. In my composition we see time and space entirely relying on the very moment of seeing and hearing the music. We touch time deeply in its only possible timeless way, names, (im)permanences. Thus, the perspective of Giotto di Bondone (1276-1337) pertains to no time—it is of that age, but it has no time. Thus, when the next work comes along for the orchestra, the ensemble, the solo instrument, time bears no conclusion and repetition can delay its asserted and given time performance.

As a composer notating the ringing of the brain with the responsibilities of structuring a new composition, I ask now how to set it down. It is an engineering plan. However, once the plan is achieved, the original impetus can be dissolved and no answer given for how it all began. The sensibility of the creative dive pushing for the grandiose originality can often not have any relying on how it happened. I ask myself, *How?* Music is the most highly developed, most intricately organized, most subtly constructed creation of the human mind, the result of centuries of work carried on with utmost devotion. We need for this accomplishment a solid training, logical and abundant imagination and in-

vention, an atrocious sense for originality, an accumulated musical experience, a developed sense for contrast, a caring and learned apprehension for the past. We need to live the creative experience with genuine knowledge and vision.



Makoto Nomura; Oi Asitawa. Used by permission by Makoto Nomura, © 2000.

Oi Asitawa and Natural History Museum are co-composed with Kana Hayashi, Yoshio Yamabe, Yuki Kataoka, and Yusuke Kataoka.

Shogi Composition is the method of collaborative composition that I invented. Each player uses one color, composes his/her own part, and writes it down in his/her own way. It should be thought of as a recipe for collaborative composition among various people with different musical backgrounds.

At least 2 players are required, although you can do it with 10 or more players theoretically. Each player is supposed to bring his/her musical instruments, sound objects, etc.

You have to prepare paper to write music down. Of course, you don't have to use traditional staffed paper because each player is allowed to write music down in his/her own way. You can use drawing paper, useless calendars, useless posters, etc. You also need colored pens/pencils. When you complete the composition, the paper will be the artistic picture as well as the musical score.

The first player starts to compose a short musical phrase on his/her own instrument(s). When s/he completes his/her phrase, s/he writes it down on the paper in his/her own way with the colored pen/pencil. As soon as s/he writes it down, s/he hands the paper to the next player, starts to play it and keeps repeating it until his/her turn comes around again. Similarly the next player makes another musical phrase that goes well with the first phrase, writes it down in his/her own way next to the first phrase on the paper, hands the paper to his/her next player, and keeps repeating the phrase until his/her turn comes around again. Continue this process without any break until you can't find any space on the paper. When the paper is full, composition is finished. Don't stop the process until the paper is full.



Makoto Nomura; Natural History Museum (front). Used by permission by Makoto Nomura, © 1999.



Makoto Nomura; Natural History Museum (back). Used by permission by Makoto Nomura, © 1999.

**Shogi Composition** is the method of collaborative composition invented by Makoto Nomura. Each player uses one color, composes his/her own part, and writes it down in his/her own way.

When 'Theme', followed by a Roman numeral appears, player should improvise a melody for the suggested duration, using only the designated notes (at octave).  
When a single Roman numeral appears, player should try and imitate from memory the melody provided previously by a player with the same Roman numeral, for the same duration and using the same notes, unless otherwise suggested (e.g. the penultimate 2 bars).

slow, free tempo  
10 seconds

Woodwind 1	Woodwind 2	Woodwind 3	Woodwind 4	Woodwind 5	Woodwind 6
	I				
		I			
			I		
				I	
					I

Piano	slow, free tempo <i>mp</i>	<i>f</i>	112	8 beats

W.W. 1	Theme IV (C, D, E, F, G, A)	IV	IV	IV	IV	IV	12 beats
W.W. 2		IV	IV	IV	IV	IV	
W.W. 3			IV	IV	IV	IV	
W.W. 4				IV	IV	IV	
W.W. 5					IV	IV	
W.W. 6						IV	

Pno.	16 beats	Theme V (C, C, E, F, G, G, B)	16 beats

W.W. 1	Theme VI (D, E, F)	VII	VIII	VII	VII	VI (C, G, A)	VI (C, F, A)
W.W. 2		VI	VII	VIII	VII	VII (C, F, A)	VII (D, E, F)
W.W. 3	Theme VII (C, G, A)		VI	VIII	VII	VII (C, F, A)	VII (D, E, F)
W.W. 4			VII	VI	VIII	VIII (C, F, A)	VIII (D, E, F)
W.W. 5	Theme VIII (C, F, A)		VII	VII	VI	VIII (D, E, F)	VIII (C, F, A)
W.W. 6			VIII	VII	VI	VIII (D, E, F)	VIII (C, F, A)

Pno.	8 beats	Keep same intervals	16 beats

Eoin O'Keeffe; Pass it on... For six woodwind instruments and piano. Used by permission of Eoin O'Keeffe, © 2004.

Pass it on...  
Chinese Whispers for 6 woodwind instruments and piano

slow, free tempo  
10 seconds

Woodwind 1	Theme I (C, A, F)	II	III	III
Woodwind 2		II	III	III
Woodwind 3			II	III
Woodwind 4				III
Woodwind 5				II
Woodwind 6				II

Piano	slow, free tempo <i>mp</i>	<i>f</i>	112	8 beats

W.W. 1	Theme IV (C, D, E, F, G, A)	IV	IV	IV	IV	IV	12 beats
W.W. 2		IV	IV	IV	IV	IV	
W.W. 3			IV	IV	IV	IV	
W.W. 4				IV	IV	IV	
W.W. 5					IV	IV	
W.W. 6						IV	

Pno.	16 beats	Theme V (C, C, E, F, G, G, B)	16 beats

W.W. 1	Theme VI (D, E, F)	VII	VIII	VII	VII	VI (C, G, A)	VI (C, F, A)
W.W. 2		VI	VII	VIII	VII	VII (C, F, A)	VII (D, E, F)
W.W. 3	Theme VII (C, G, A)		VI	VIII	VII	VII (C, F, A)	VII (D, E, F)
W.W. 4			VII	VI	VIII	VIII (C, F, A)	VIII (D, E, F)
W.W. 5	Theme VIII (C, F, A)		VII	VII	VI	VIII (D, E, F)	VIII (C, F, A)
W.W. 6			VIII	VII	VI	VIII (D, E, F)	VIII (C, F, A)

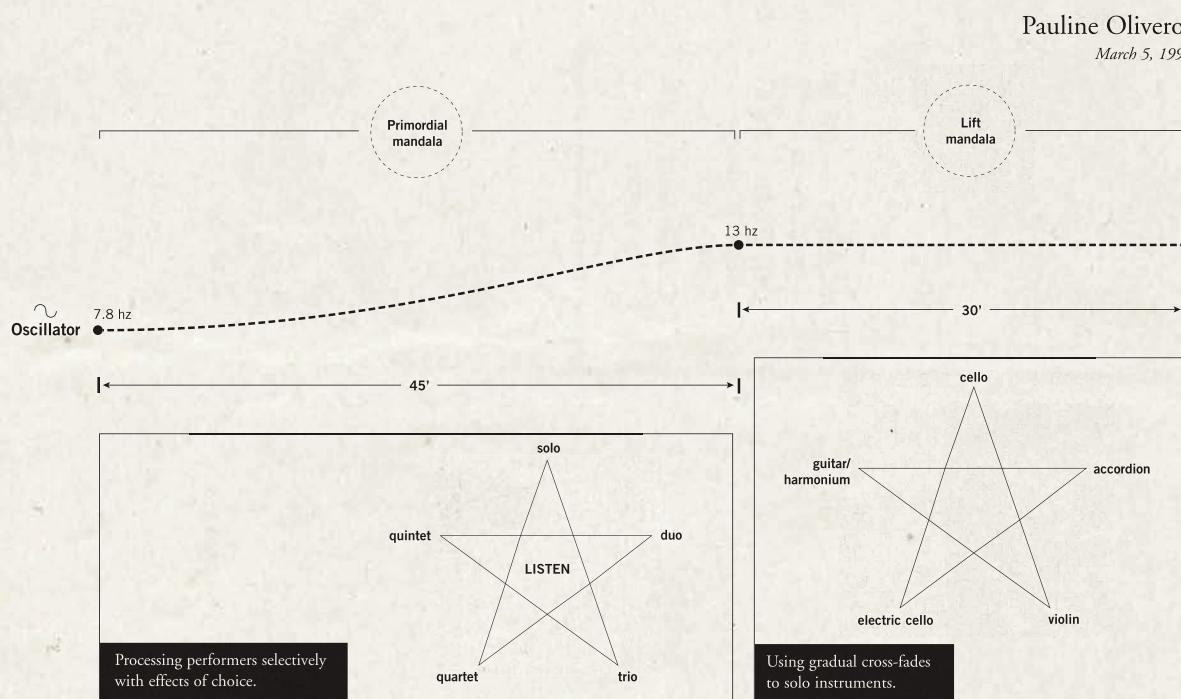
Pno.	8 beats	Keep same intervals	16 beats

Pass it on... was inspired by a combination of aleatoricism and the aural traditions of Irish music.

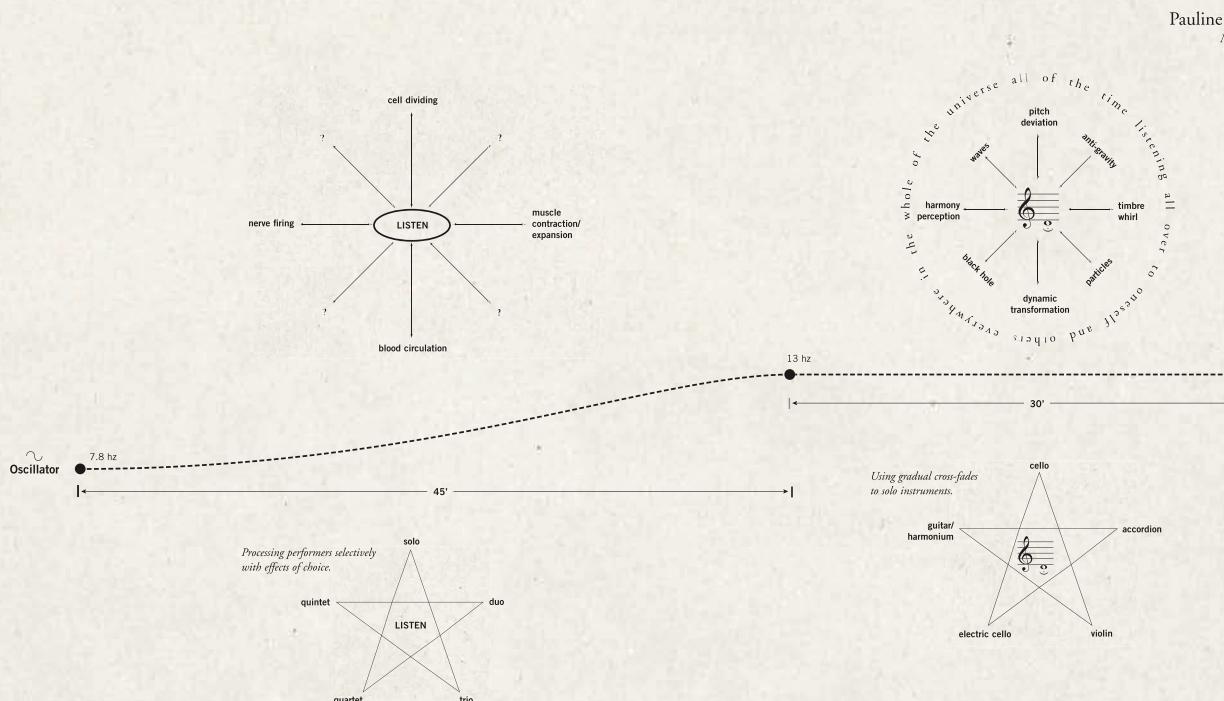
In Irish music, the tunes are learned aurally, and as a result they undoubtedly alter with time, and depending on the performer. This is a feature which I have used as the basis of the structure for *Pass it on...*, which can be played by any six woodwind instruments (although preferably similar ones), with a piano essentially keeping the pulse. Throughout the piece, players are asked to improvise a melody using designated notes only and

for a set duration of time. The other players need to pay particular attention to these, as they will need to repeat them back from memory throughout the piece, singing the same notes unless otherwise specified. It is expected that the repeated melodies will change throughout the piece, making each performance unique. For best results, the piece should not be rehearsed, other than for the musicians to spend a short amount of time looking at the score and familiarizing themselves with what is expected.

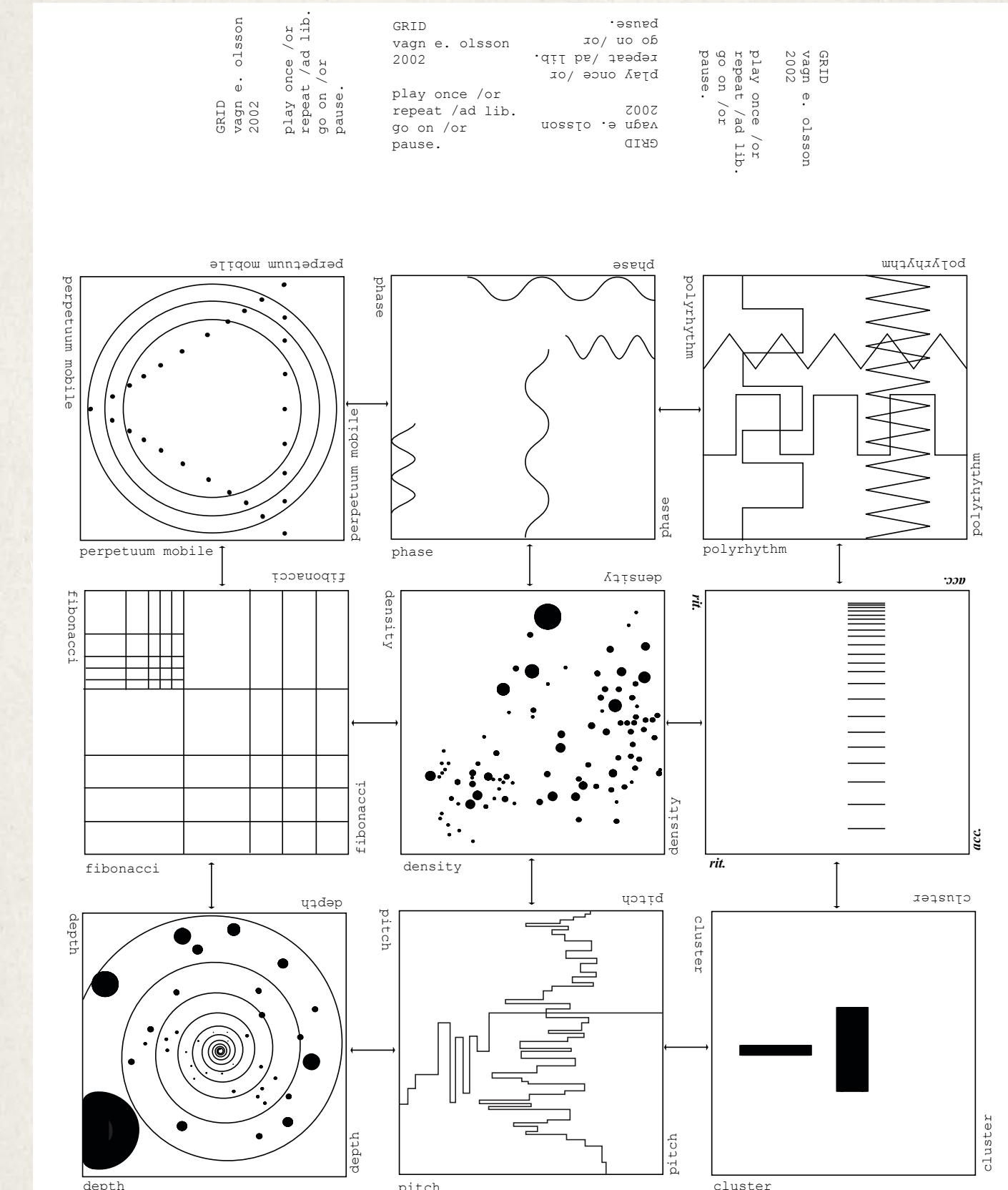
# Primordial/Lift



# Primordial/Lift



Pauline Oliveros; *Primordial / Lift*. For accordion, electric violin, cello, electric cello, toy piano, ring modulator, harmonium, low frequency oscillator, voices, and electronics. Used by permission of Deep Listening Publications, © 1998.



Vagn E. Olsson; *Grid*. For variable instrumentation. Used by permission of Vagn E. Olsson / Edition Samfundet, © 2002.

**Grid:** Every section/square in the compositions can be rearranged and played in any order whatsoever.

PAUL PACCIONE



Paul Paccione; Motet No. 1: *Arabesque*. For 4 prerecorded clarinets in B<sup>b</sup>. Used by permission of Paul Paccione, © 2000.

**Motet No. 1: Arabesque** is the first in a set of three works composed for clarinetist, Molly Paccione. I began the compositional process by recording the clarinetist playing individual solo melodic lines. After recording each of the individual lines, I combined and interwove them in the recording studio—resulting in three individual electro-acoustic compositions.

In true motet style, the musical texture of each individual motet is highly contra-

puntal. While composing each of the individual melodies I was particularly aware of both the clarinetist's capability to steadily sustain long melodic lines and the unique timbral characteristics of the clarinet as they relate to instrumental register. These contrapuntal lines weave their way through the arabesque-like contrapuntal texture in pervading imitation.

The score was copied, by hand, using a form of notation derived from Renaissance

musical manuscripts of the 16th century. This form of notation employs a ten-line staff (gamut D3–A5). In adapting this form of notation, I was impressed by the "newness" of the notation's appearance. In addition, I was struck by the way in which the notation visually evoked the arabesque-like character of the polyphony.

MARIANTHI PAPALEXANDRI-ALEXANDRI



Marianthi Papalexandri-Alexandri; *Still life*. For quartet of recorders. Used by permission of Marianthi Papalexandri-Alexandri, © 2003.

**Still life:** The development of my iconographic notation is the result of an exploration of the performer's behavior, bodily movement, and mental and physical effort while performing. This type of notation highlights the visual aspect of the performance while questioning the performer's techniques and habits. It aims to draw attention to the kinesthetic aspect of the performance while avoiding adopting any theatrical function. Instead, it focuses on alerting the habitual perceptions of the performer.

The idea behind *Still life* is to place performer and listener into a sonic world similar to the one that can be found in a

concentration camp. *Still life* stretches the conventional image of the recorder by deconstructing and distorting the use and the image of the instrument. This leads to the development of innovative and meaningful formal principles followed by the attempt to redesign the whole sound spectrum of the instrument.

*Still life* explores moments of visual presence and sonic absence. A physical gesture is repeated firstly by producing sound, and gradually the repetition of the same gesture without sound results to the replacement of silence with visual activity. In other words, the performers stay silent, but they are still active. The aim is

to replace sound with vision and to maintain the energy of the piece by keeping the performers in a state of constant physical movement.

# Brice Pauset

## Trois Canons

**calmo ♩=60**

1

1      3      3

1      2      3

1      2      5

1      4      5

1      2      4

1      2      4

2      1      3      2      5

19      3

© Éditions Henry Lemoine, Paris

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Tous droits réservésBrice Pauset; *Trois Canons*. For solo piano. Used by permission of Éditions Henry Lemoine, Paris, © 1989.

**Incastro di Mondi** was written in December 2006 to be performed at iXem Festival in Rome, Italy.

The piece was based on a set of 2 improvising rules over which an electronic part has been developed:

Very short and loud notes, and expressive couples of notes. To those were added a third figure that's the same as the first one, but with slow/fast crescendo/diminuendo around the short loud note.

The first ensembles to play it were saxophone, flute, and percussion, but then it changed to something that could be more harmonically oriented.

All the score has been developed accordingly to the special characteristics of the players and their ways to react to electronic transformations.

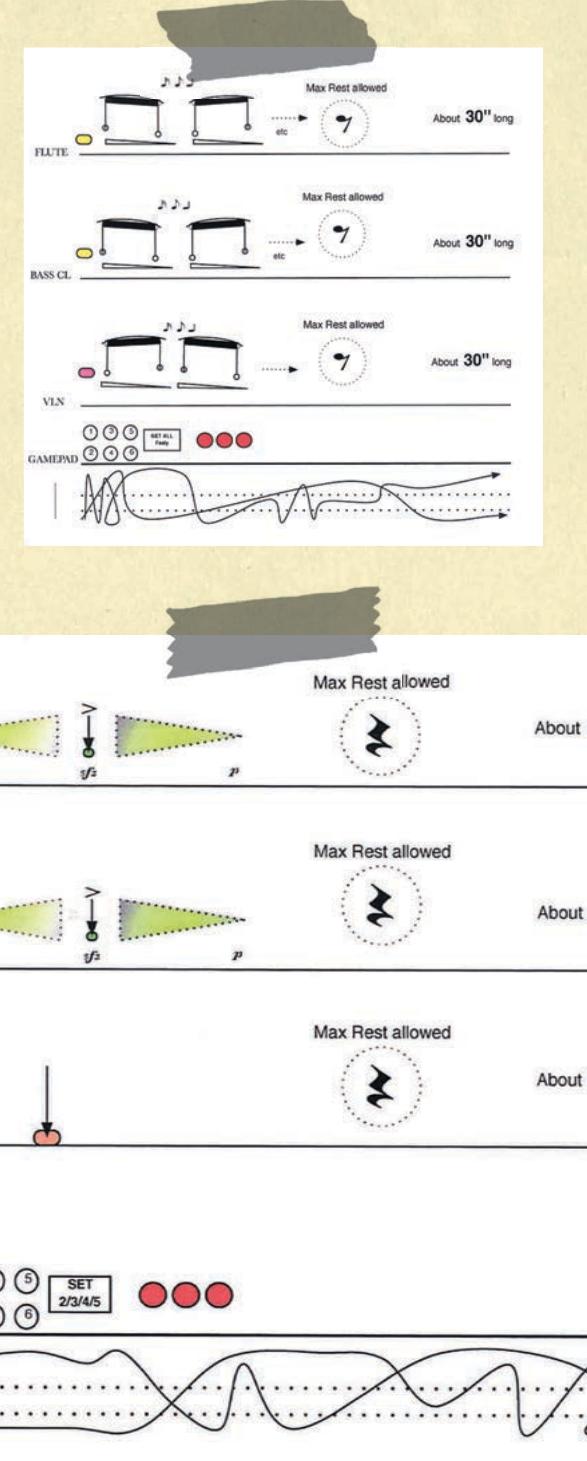
Many of the musical figures suggested come from direct experience with the improvising techniques of the players, but the score still maintains a generality, so it can be played by other performers.

The electronic part is related to my personal research on timbre and music, and in a few words, it has been created for morphing acoustic sound in a way that can respect its strength, adding something hard but funny to the ears. Imagine that the best environment to play the piece is a large hall with very high volumes on 4 loudspeakers.

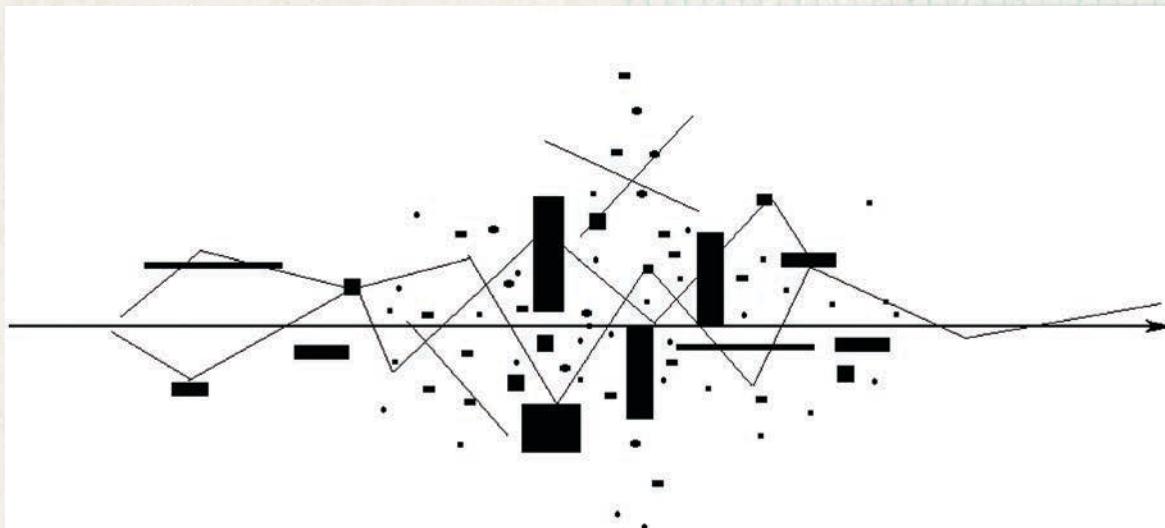
The interactive part is performed by a Gamepad player, which originally was invented for a dancer captured by a video. It can still be played in that way.

In concerts, I decided to perform on the Gamepad, as it was easier and faster to set up.

Additionally, this score is called *Incastro di Mondi* (*Wedges Worlds*) because the personal worlds of the 3 players are mixed with electronics and with the gamepad player mind, who is changing electronic reactions to players' sounds, making the mix and the game more dense. It's a mental game, in a very loud situation, and has something related to the human reality of the mixing of cultures, developing interaction, even in an extreme context.



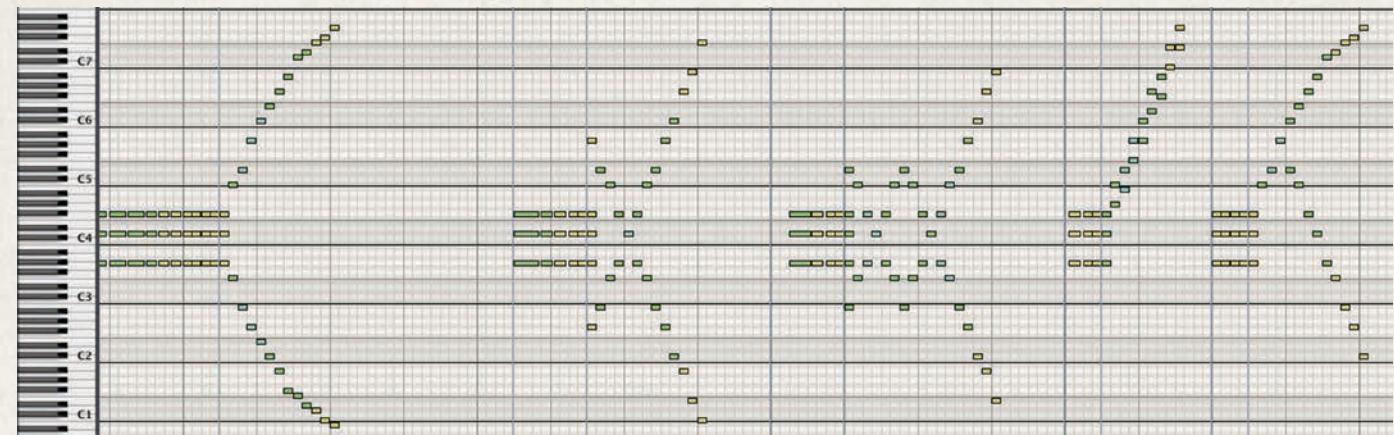
Tommaso Perego; *Incastro Di Mondi*. For flute, bass clarinet, violin, and wireless gamepad.  
Used by permission of Tommaso Perego, © 2007.



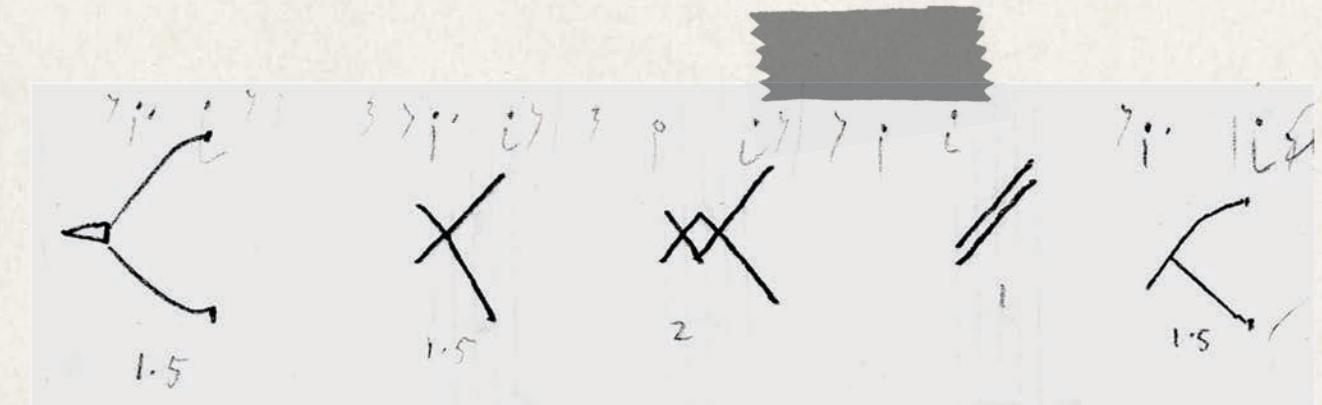
Joe Pignato; *Paprika King*. For any number of improvisers. Used by permission of J.M. Pignato / East 8<sup>th</sup> Street Music, © 1996.

**Paprika King:** A graphic structure for any number of improvisers. Overheard at the UN Promenade, NYC - May 5, 1997.

*He was the Paprika King of Hungary, really.  
Have you heard of Paprika?  
It's a seasoning,  
It's red.*



Jonathan Pitkin; *Con Spirito*. For piano and Yamaha Disklavier (a digitally controlled player piano). Used by permission of Jonathan Pitkin, © 2007.

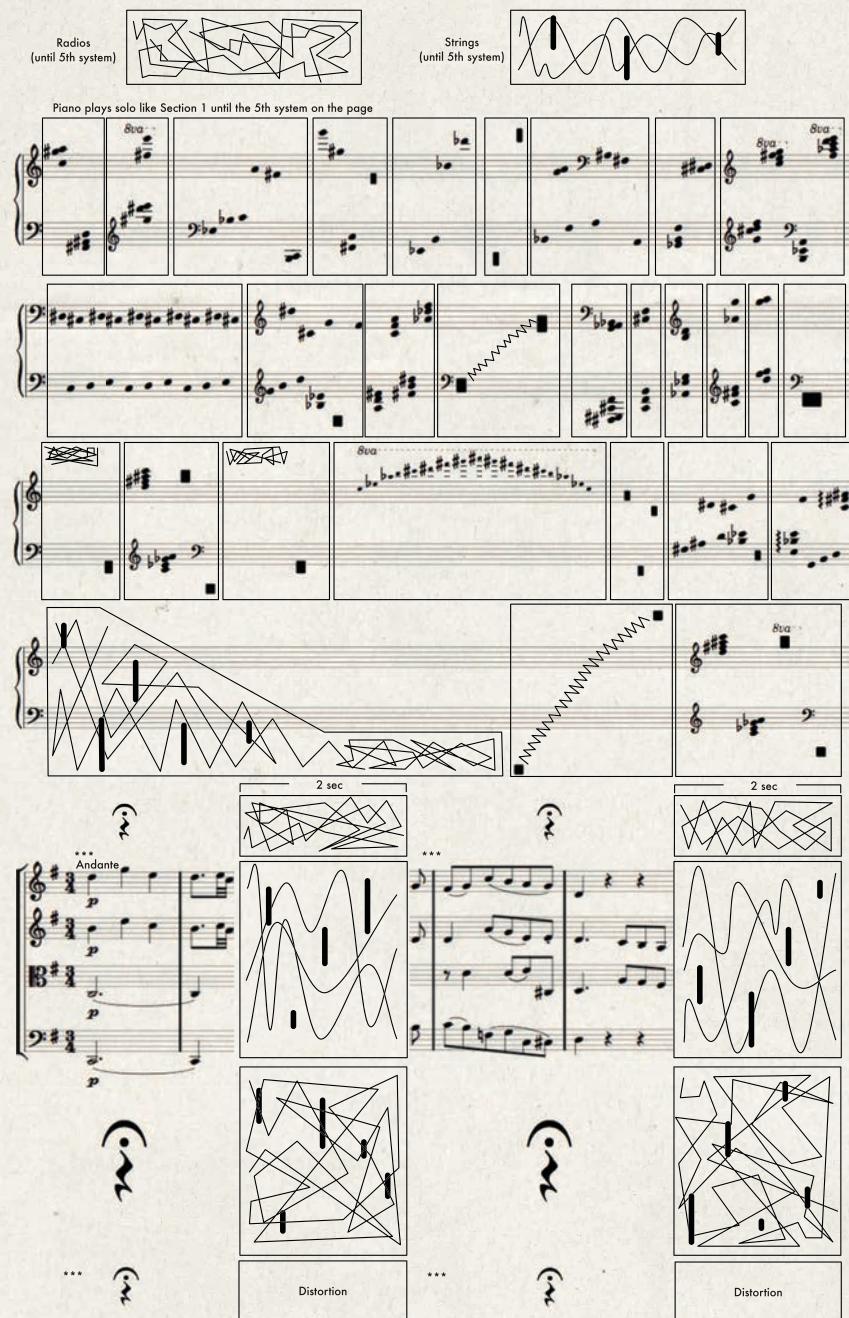


Jonathan Pitkin; Work sketch: the numbers underneath the shapes indicate the length, in beats, of each phrase.

**Con Spirito** is a piece of mine for piano and Yamaha Disklavier. The Disklavier is a digitally controlled player piano that is capable of playing music of amazing complexity at otherwise inconceivable speeds, pressing down its own keys as if by magic. Because of this, a "performance" of a piece for Disklavier is as much a visual as an aural spectacle.

I often found myself "composing" the shapes and patterns that I wanted to see played out on the Disklavier's keyboard, initially as freehand sketches (in the work sketch—the numbers underneath each shape indicate the length, in beats, of each

phrase), before deciding upon how many notes, and what pitches, each gesture should consist of. As a result, the "piano roll"-style display of the sequencing software which was used to program the Disklavier part (the different colors represent different dynamics) gives arguably a more faithful visual representation of the music than the finished score.



Samuel Pluta; *American Tokyo Daydream III (The Surprise)*. For string quartet, piano, and 4 AM radios.  
Used by permission of Samuel Pluta, © 2006.

**American Tokyo Daydream III (The Surprise):** Any system for visually displaying information has a hierarchy of importance to the different layers of data that it presents. Traditional musical notation displays a hierarchy where the notes and rhythms of sound are given priority. Other data, such as volume, speed, and tone color can be shown, but certainly take a back seat. By rearranging the hierarchy of musical information in graphic scores, elements such as tone color, playing technique, and shaping (to name a few) can come to the informational foreground, greatly altering the way a performer approaches the score, and allowing the communication of ideas that would be impossible with traditional notation. This is exactly what I have done with this piece.

when you play  
music with Christian  
sometimes you get questions  
before you answer.

When you play  
music with Christian  
sometimes you get answers  
before you ask.

Larry Polansky; *Christian Music*. For retuned basses playing only natural harmonics.  
Used by permission of Larry Polansky, © 2007.

**Christian Music** is a set of four rounds, on large color postcards, done in collaboration with designer Laura Grey. Movement for Lou Harrison (for just bass quartet).

This score exists in two versions: one graphic notation, one conventional music notation.

**Nostos Ou Topos II**

Alwynne Pritchard

Mostly agitated and brittle

Slowly: with plenty of space

mostly agitated and brittle

art. harm.

molto rall. a.

1

2

3

4

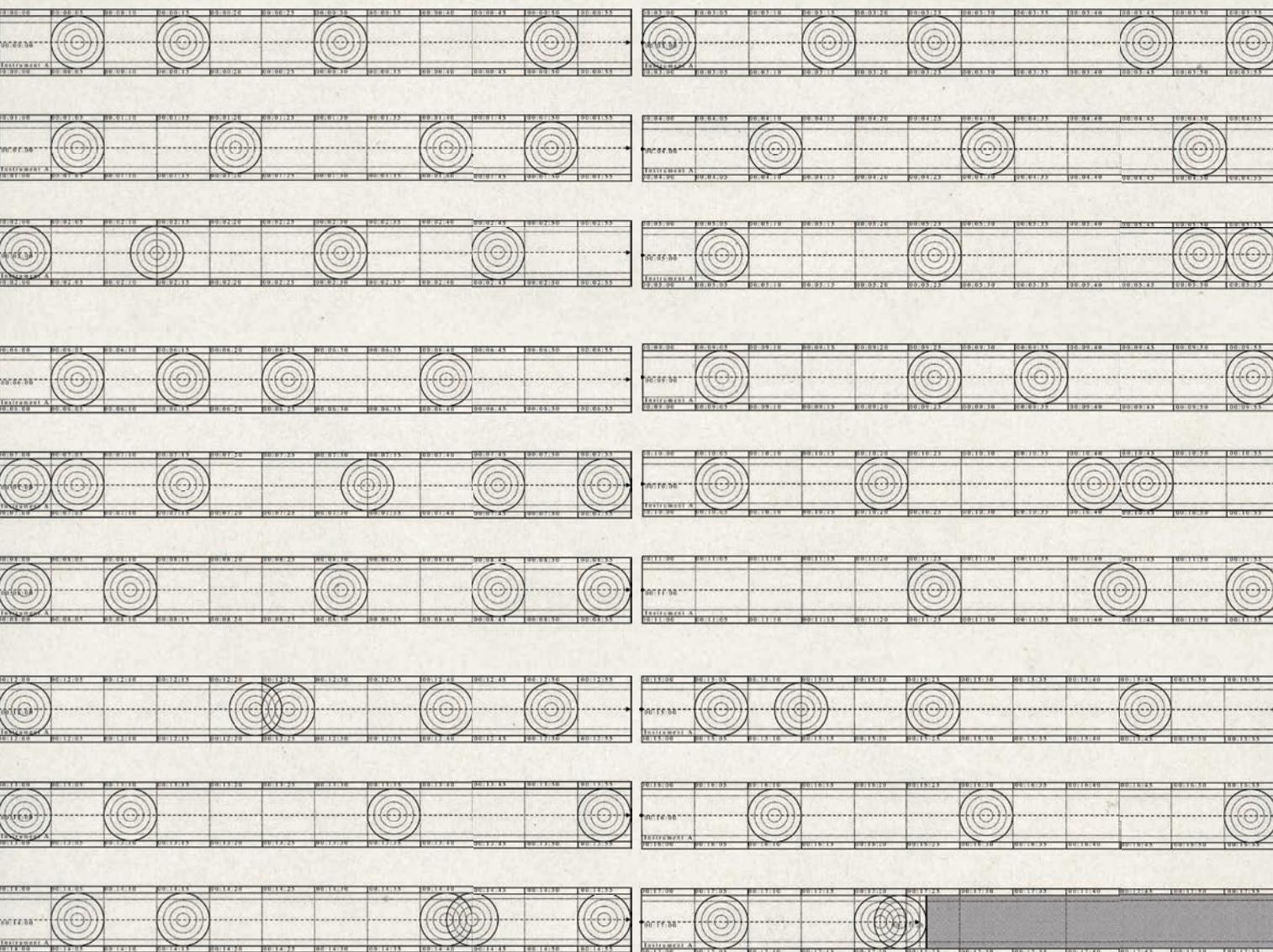
5

6

7

8

Alwynne Pritchard; *Nostos Ou Topos II*. For guitar. Used by permission of Alwynne Pritchard, © 2007.



Anthony J. Ptak; *Insistentia .05*. For any instrument, object, or action. Used by permission of Anthony J. Ptak, © 2005.

**Insistentia .05** is a composition. It reifies a way of thinking about the world. The scores are configured as a performance for any instrument, object, or action. Through the course of performance the performer is learning a language, and continuously creating a new one. Performers should not listen to, or respond to anything going on around them. Decisions should be forthright, made in spite of everything, including any interference or disruption. When an incident takes place, it is far more important than what takes place. Each incident is 5 seconds in duration; sometimes these durations overlap. The performer needs to

interpret these, finding her or his voice in what is the essence of the selected single instrument, object, or action. The performance is labor. If a performer becomes tired, this is part of the labor. Be on time. Pay attention or a tension may collect its debt. What does it mean to insist? To stay upon: to lean upon: to rest: stop or stand still: to pause as would speak no more: to persist: to continue: to enforce: to labor earnestly: to pursue diligently to abide fast and firmly: to endeavor: to provoke or solicit.

Cell\_D (1'45" ±30")  
at the beginning wait  
for more than 10 sec.  
function keys with damper pedal  
start now start after 1" start after 2" stop now stop after 1" stop after 2"  
it takes ca 20sec. to quit this  
to\_Cell E

*ff*  
dynamics tranquillo  
FC pedal : fractal random number control  
acell.  $(d \approx e b) \rightarrow (e \approx f) \rightarrow$   
 $\begin{matrix} \uparrow & \uparrow & \uparrow & \uparrow & \uparrow & \uparrow \end{matrix}$   
 $8$   
 $6$  (both 8va higher)  
acell.  $(g\# \approx a) \rightarrow (a \approx b\flat) \rightarrow$   
 $4$

Jan 1995

Takayuki Rai; *Kinetic Figuration*. For MIDI piano, synthesizer, and computer. Used by permission of Takayuki Rai, © 1994, 2000.

of  
Pine  
and  
Silk  
for  
violin  
or any other instrument  
Randy  
Raine-Reusch

04/12/94

Randy Raine-Reusch; *Of Pine and Silk*. For violin or any other instrument. Used by permission of Randy Raine-Reusch, © 2005-2007.



Jon Raskin; January 13, 2007; Qupe; Postcard 2. All for quartet (electronics, bass guitar, percussion, saxophone). All used by permission of Jon Raskin, © 2007.

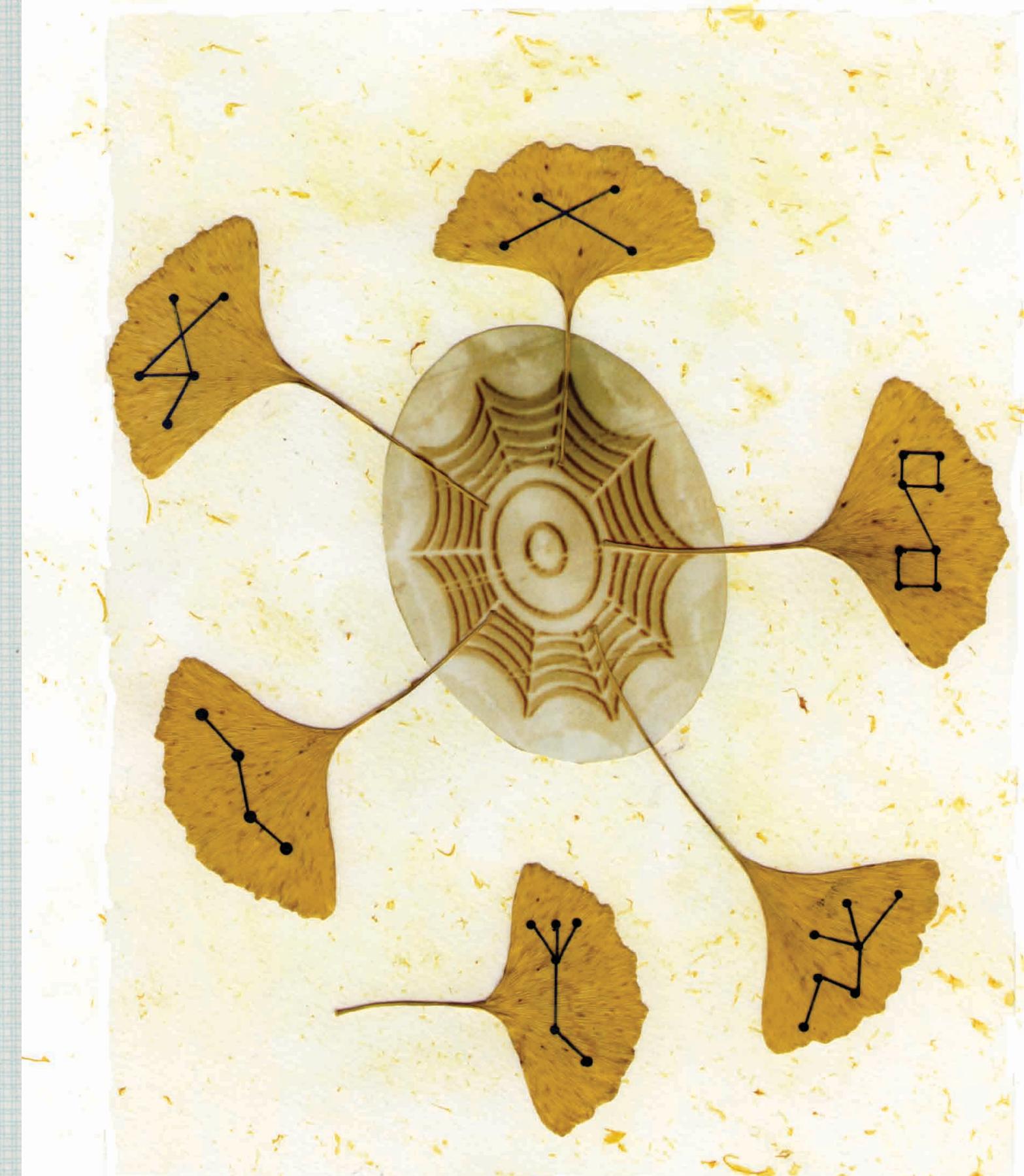
For the last several years I have been creating graphic scores, for lack of a better term, for improvising musicians. The scores can have a very open interpretation and/or decisions about material can be decided on before, depending on the players and situation. The change of visual and sonic meanings is part of the interplay that I am looking for with these works.

If the music takes you off the page you are free to go where it leads, but you need to come back to the page again.

**January 13, 2007:** The center melody can be played freely and slowly at any time during the piece. The last bars are a tone row to be used with the dots and lines. The circle with broken lines use the tone row notes so there is space between each note. The solid circles are continuous notes with no space between them. The notes can be octavated. The line and dots are the same as Gingko with no octavation. The 8 pictures of plant flowers are self-composing elements and the musical concept is decided on by each musician.

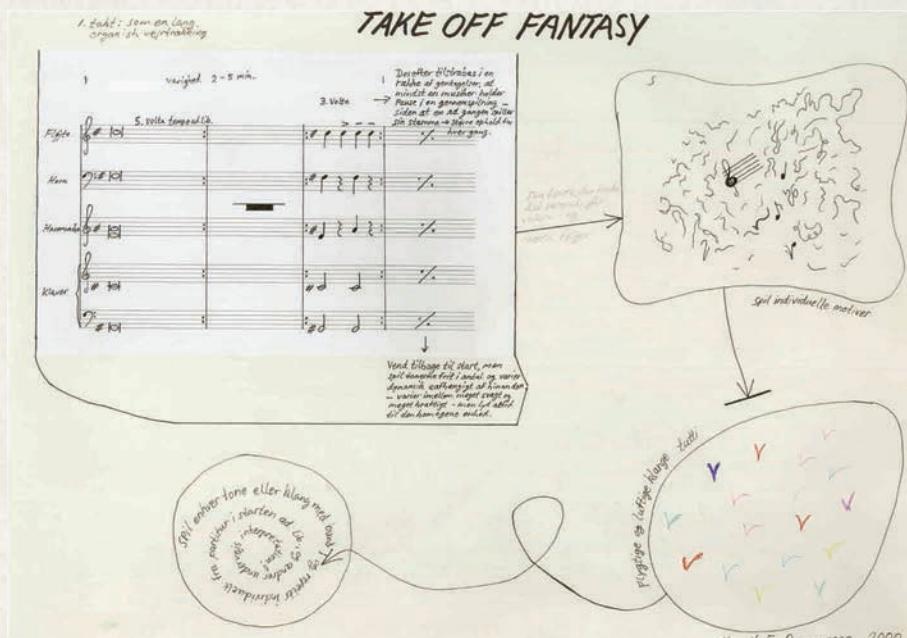
**Post Card Series 2 No. 5:** Each musician decides on what the graphic material means and develops the language and content through progressive performances.

**Gingko:** Instructions: The musicians assign a note or sound to each dot for each leaf. You can only play a note or sound that is connected by a line. Each leaf can be a different series of notes or sounds. The middle is a group improvisation.



Jon Raskin; Gingko (part 1 of 4). For variable instrumentation. Used by permission of Jon Raskin, © 2007.

Note: The musicians assign a note or sound to each dot for each leaf. You can only play a note or sound that is connected by a line. Each leaf can be a different series of notes or sounds. The middle is a group improvisation.

Henrik E. Rasmussen; *Take Off Fantasy*. For piano, French horn, accordion, and transverse flute.

Used by permission of Edition Samfundet, © 2000.

May the intuitive musical thinking help us to show the way to balance. Promoting an extension of awareness of the surroundings.

How to train for musical thinking: challenge yourself by being occupied by many different music styles to sharpen your sensitivity to what the world consists of, by your own goal and intention, and by being a part of a life that has potential for being beautiful in a beautiful world. Develop your ability to listen to yourself and your environments, with your purpose being to gradually enhance your skills for distinguishing and navigating the best music in the world.

Musical thinking has, for me, a deeper meaning than just making music. I think music might help us to discover and recognize our real responsibility toward the essential elements in nature—to open our eyes toward the beauty in life itself, as being much more important than how much money one can earn (regardless of the consequences).

The importance of musical thinking should not be underestimated, because this way of thinking helps us to deal with aspects of our views of life; it helps us to deal with living with each other. I would like to state some kind of a definition in regards to this way of looking at the world. For example, implemented meaning would be the ability to pay caring attention to important

questions, to responsibility in mind, and to love the multiplicity of life. Any and all people who practice intuitive musical thinking would logically have enhanced abilities to create visionary ideas that would normally get lost because of a) the lack of communicative channels; b) the various types of "noise" in the traditional human interaction disturbing the communication of an idea, or an even bigger obstacle; c) the deaf ears among powerful organizations or leaders.

For me, music should not only have an "empty," entertaining function that confirms the audience in their own taste of aesthetics, and, implicitly, keep them in status quo as to what the world looks like. Music must guide you to new experiences and surprises. This challenging exercise—and this is very important for me—is to create a better world, with room for visionary decisions and caring activities, before it is too late. The exercise examines how we can collectively enhance ourselves to stop and change our activities in, on every level, a suffering world.

Creating music in an intuitive form is a very important way to give people the opportunity to learn more about themselves, and, hopefully, pose questions about what role in the world each person should play—to listen carefully in their lives. In my opinion, intuitive music as a phenomenon in concert life, or other forms, provides pure, free

1.

*Infinite detours through a flower*

2<sup>o</sup>

Soprano: *f* *p*  
Flute: *f* *p*  
Recorder: *p*  
Vcl: *p*  
Piano: *p*

With energy

20"

Soprano: *f* *mf* - *i - a - u - - i - -*  
Flute: *f* *mf*  
Recorder: *p*  
Vcl: *p* *mf*  
Piano: *p* *mf* *vibrato*

→ Spacious stillness  
- Listen for spontaneous ideas

Very high intensity

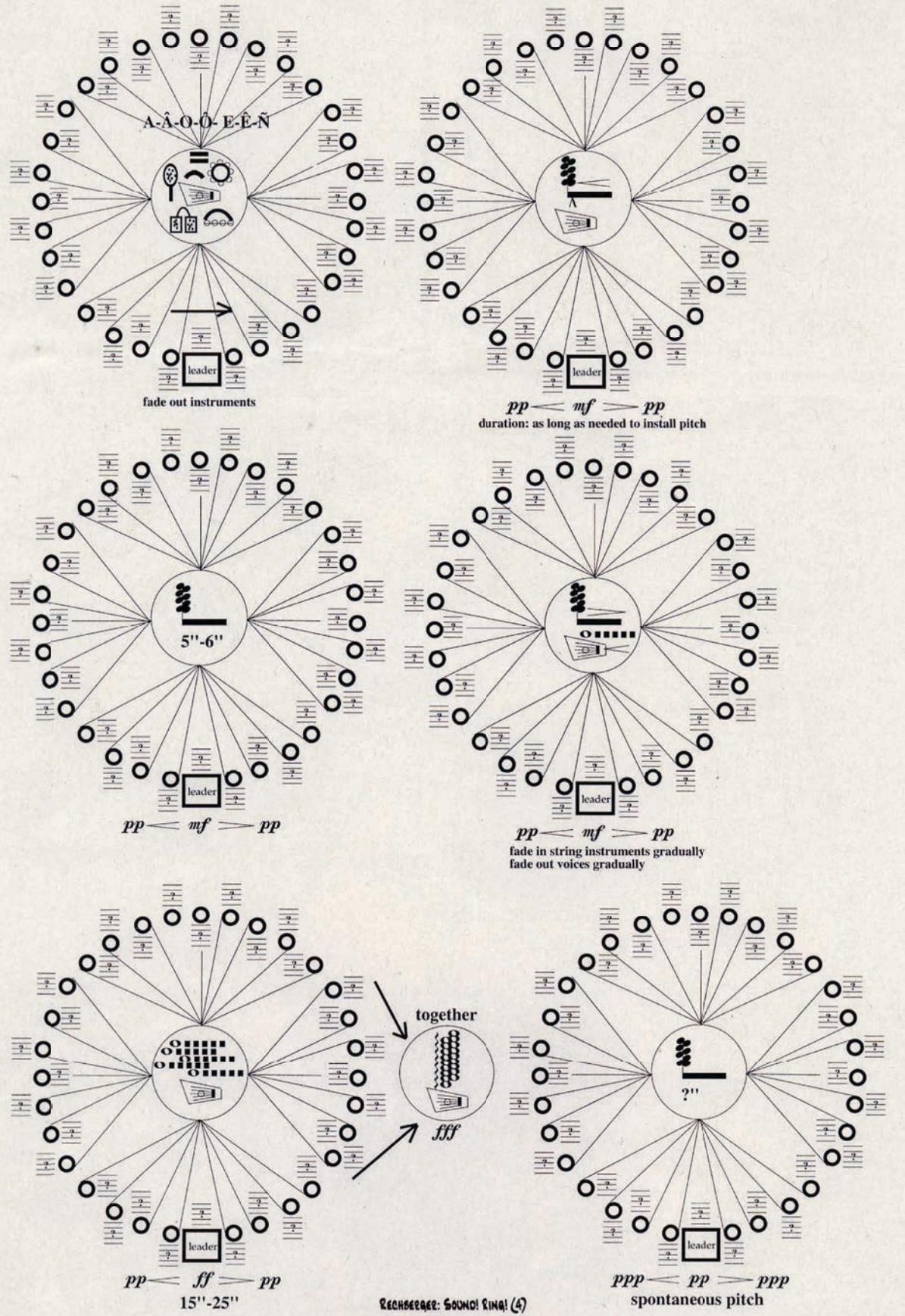
Choose freely your individual position and move if needed  
approx. 5 min.

Very low intensity

Henrik E. Rasmussen 2001

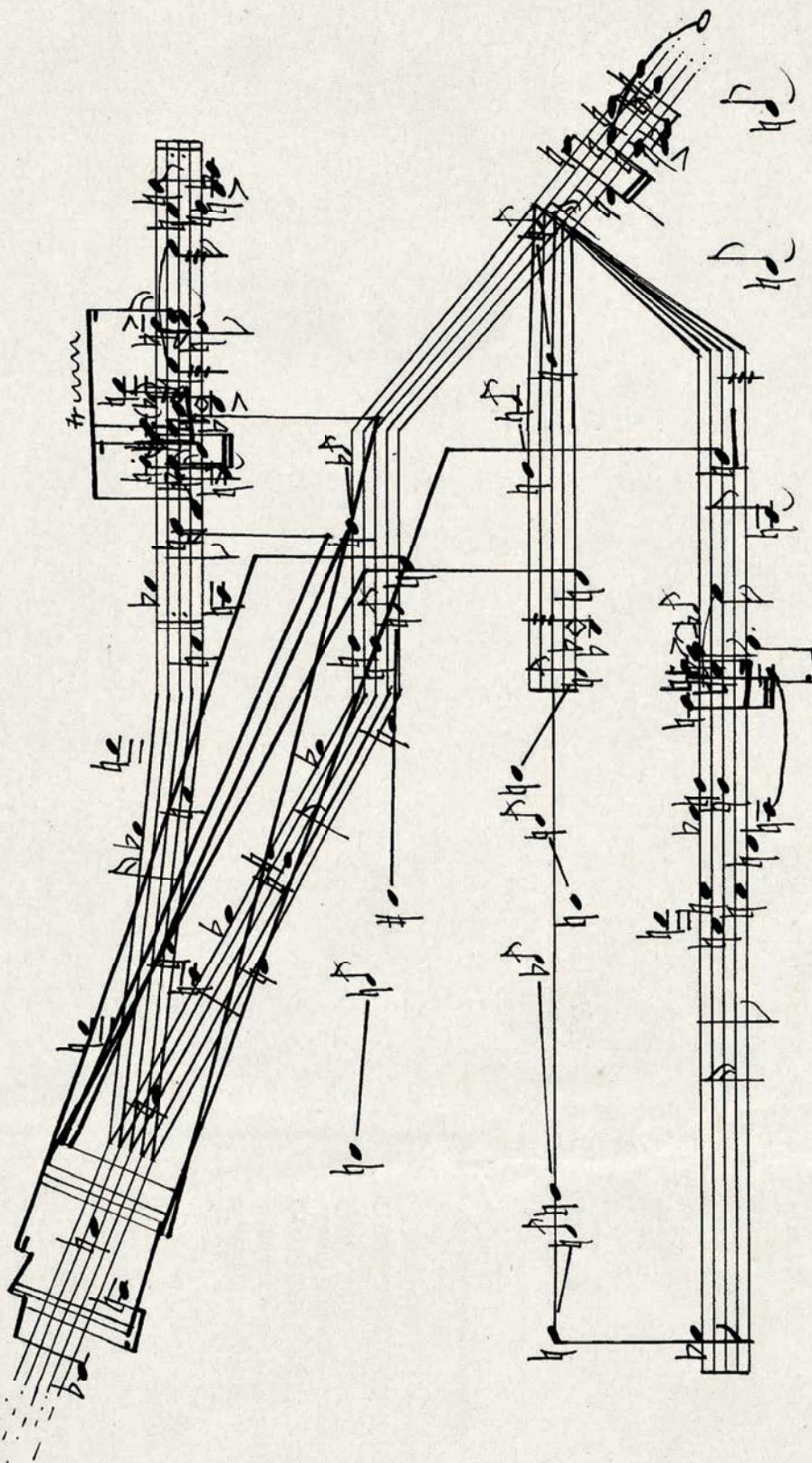
The image shows a hand-drawn musical score for 'Infinite Detours Through a Flower' by Henrik E. Rasmussen. It includes staves for Soprano, Flute, Recorder, Cello, and Piano. The score is divided into sections labeled '2<sup>o</sup>' and '20"'. Below the score is a large, detailed drawing of a flower with many petals and leaves. Annotations around the flower include 'Very high intensity' (near the top), 'Very low intensity' (near the bottom), 'Choose freely your individual position and move if needed approx. 5 min.' (near the bottom left), and 'Spacious stillness - Listen for spontaneous ideas' (near the middle left). A small icon of a person walking is shown next to the score. The entire page is signed 'Henrik E. Rasmussen 2001' at the bottom right.

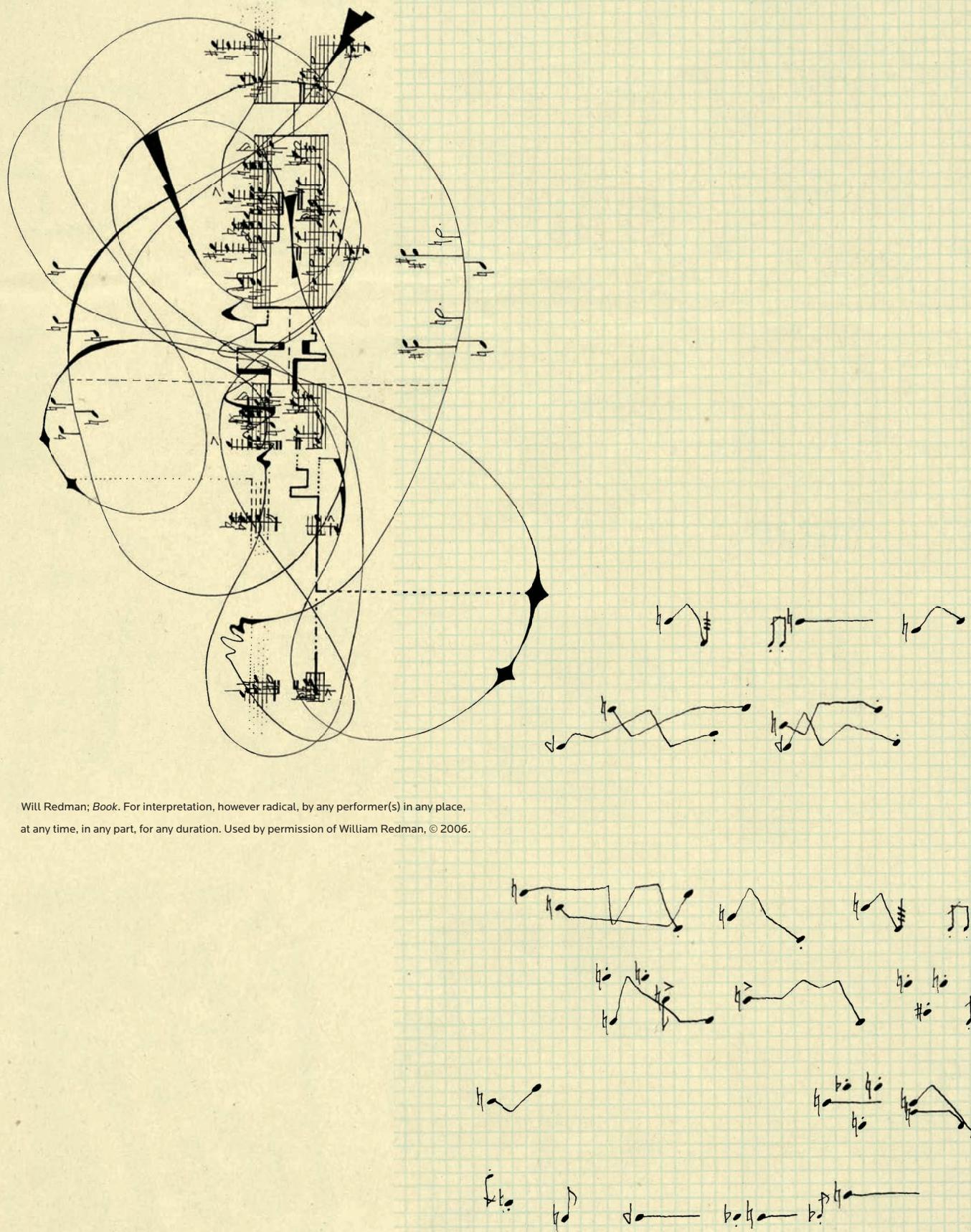
Henrik E. Rasmussen; *Infinite Detours Through a Flower*. For piano, flute, recorder, cello, and soprano. Used by permission of Edition Samfundet, © 2001.



RECHBERGER: SOUND!RING! (6)

Herman Rechberger; *SOUND!RING!*. For 20-25 vocalists and auxiliary instruments. Used by permission of Herman Rechberger, © 2000.

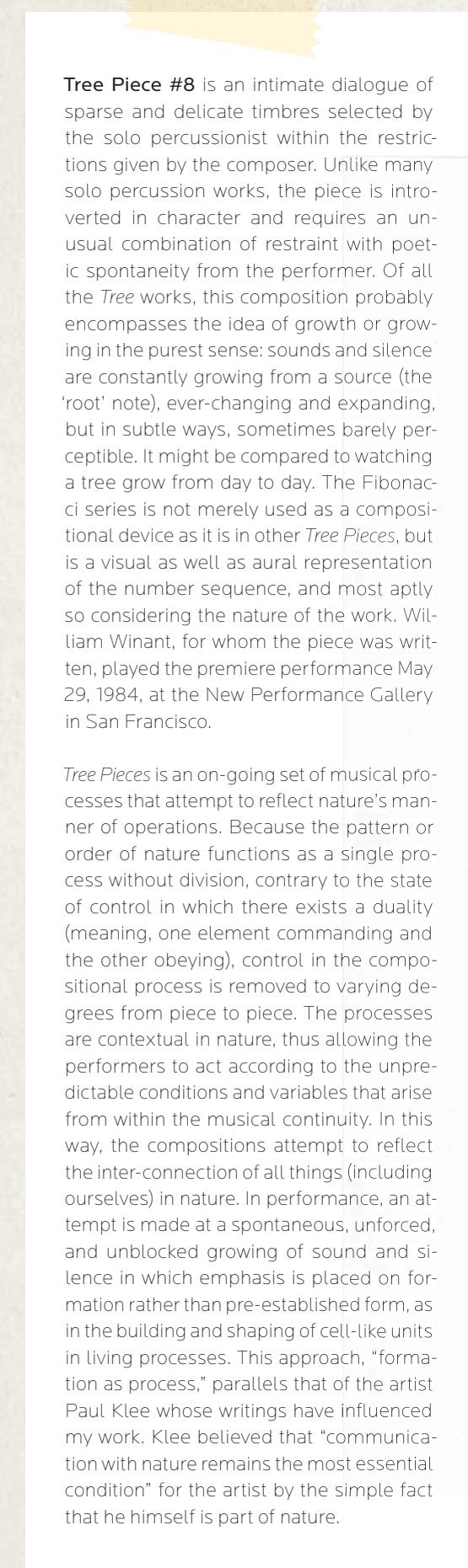




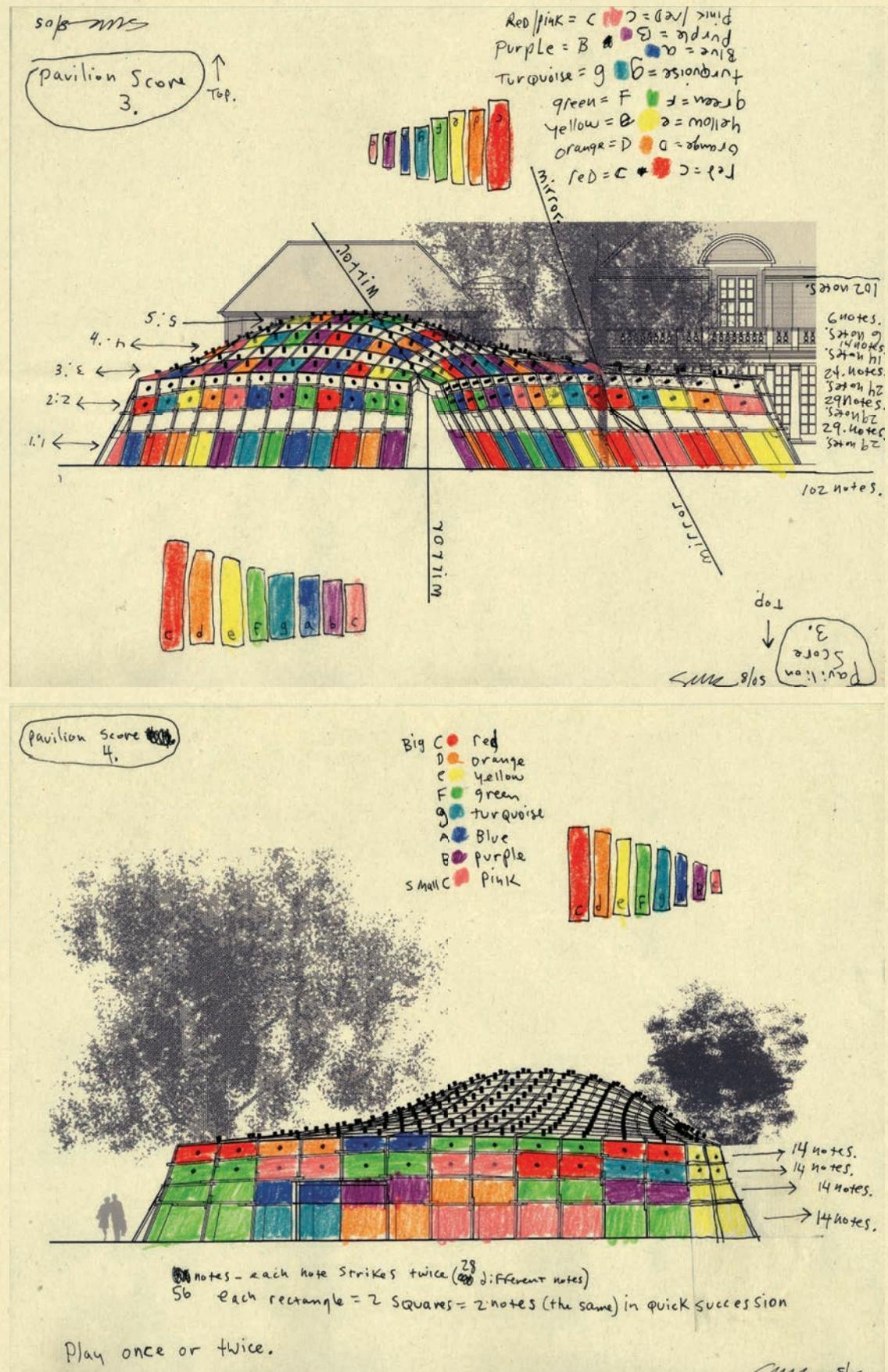
Will Redman; Book. For interpretation, however radical, by any performer(s) in any place, at any time, in any part, for any duration. Used by permission of William Redman, © 2006.

**Tree Piece #8** is an intimate dialogue of sparse and delicate timbres selected by the solo percussionist within the restrictions given by the composer. Unlike many solo percussion works, the piece is introverted in character and requires an unusual combination of restraint with poetic spontaneity from the performer. Of all the *Tree* works, this composition probably encompasses the idea of growth or growing in the purest sense: sounds and silence are constantly growing from a source (the 'root' note), ever-changing and expanding, but in subtle ways, sometimes barely perceptible. It might be compared to watching a tree grow from day to day. The Fibonacci series is not merely used as a compositional device as it is in other *Tree* Pieces, but is a visual as well as aural representation of the number sequence, and most aptly so considering the nature of the work. William Winant, for whom the piece was written, played the premiere performance May 29, 1984, at the New Performance Gallery in San Francisco.

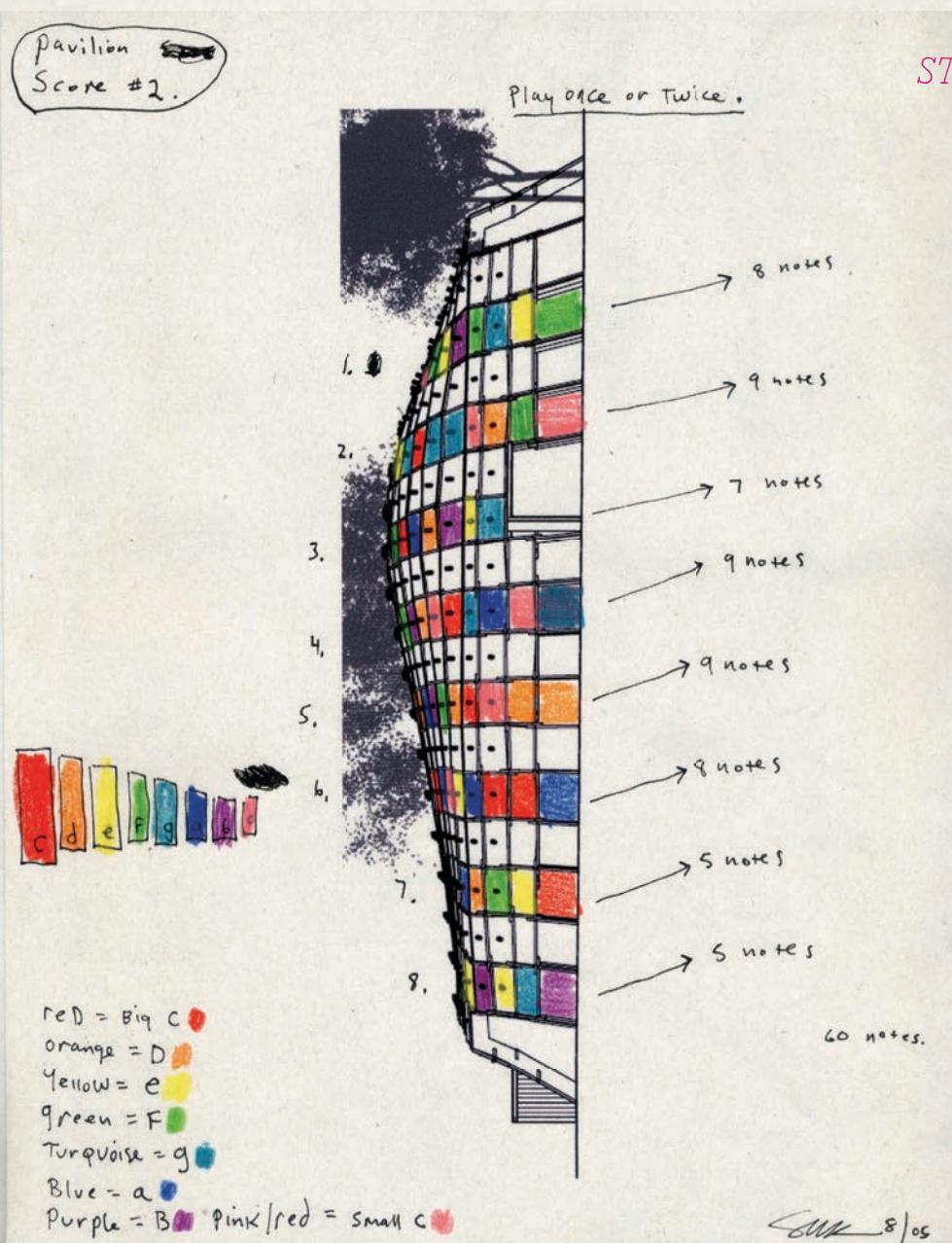
*Tree Pieces* is an on-going set of musical processes that attempt to reflect nature's manner of operations. Because the pattern or order of nature functions as a single process without division, contrary to the state of control in which there exists a duality (meaning, one element commanding and the other obeying), control in the compositional process is removed to varying degrees from piece to piece. The processes are contextual in nature, thus allowing the performers to act according to the unpredictable conditions and variables that arise from within the musical continuity. In this way, the compositions attempt to reflect the inter-connection of all things (including ourselves) in nature. In performance, an attempt is made at a spontaneous, unforced, and unblocked growing of sound and silence in which emphasis is placed on formation rather than pre-established form, as in the building and shaping of cell-like units in living processes. This approach, "formation as process," parallels that of the artist Paul Klee whose writings have influenced my work. Klee believed that "communication with nature remains the most essential condition" for the artist by the simple fact that he himself is part of nature.



Wendy Reid; *Tree Piece #8*. For solo percussion. Used by permission of Wendy Reid, © 1985.



Steve Roden; "mapping space in sound" from Pavilion Scores 1-5. For children's glockenspiel. Used by permission of Steve Roden, © 2005-2006.



**Pavilion Score:** In the summer of 2005 I was invited to create a site-specific work for the Serpentine Gallery's Summer Pavilion, designed by Alvaro Siza, Eduardo Souto de Mora, and Cecil Balmond. While I had been using score-based ideas to generate paintings for years, I had kept my sound-making activities relatively free from scores. When I received the architect's drawings in the mail, I was immediately smitten with the structure's visible units. I generally speak about the compositional process of my soundwork in relation to architecture; and the architect's drawings suggested to me the potential of building a soundwork that could mirror the construction of a space. The process was relatively simple: take 8 different colored pencils (one for each note

on an already color-coded child's glockenspiel) and fill in the pavilion plans with colors indicating musical notes. For each "view" I approached the color order through various chance systems, with "Pavilion Score 3," having the only discernable system in terms of its mirrored repetitions.

The intention was that these scores would be playable by anyone—musician or not—and during the performance I was accompanied by 4 members of the Serpentine staff (who were, it turned out, all non-musicians). The scores have a relatively clear set of notes, but timing, repetition, when to start and stop, etc. is entirely up to the performer. Because there were 5 elevations, I felt the most important "skill" would

be one's ability to listen to the other four, so that we would attempt to create a cloud rather than 5 roads moving in different directions.

Ultimately, my interest was in the simple idea that the performers would be mapping the space in sound, and that the audience would be listening to a drawing in sound of the space that they were sitting inside of. Obviously, I was also interested in seeing what would happen if the architect's drawings were used to generate music as well as architecture.

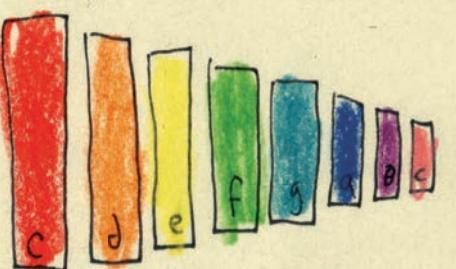
Pavilion Score 5.

- Big C red
- D orange
- e yellow
- F green
- g turquoise
- a blue
- B purple
- small C pink



Perimeter single notes,  
interior two note clusters,

For two hands/mallets.

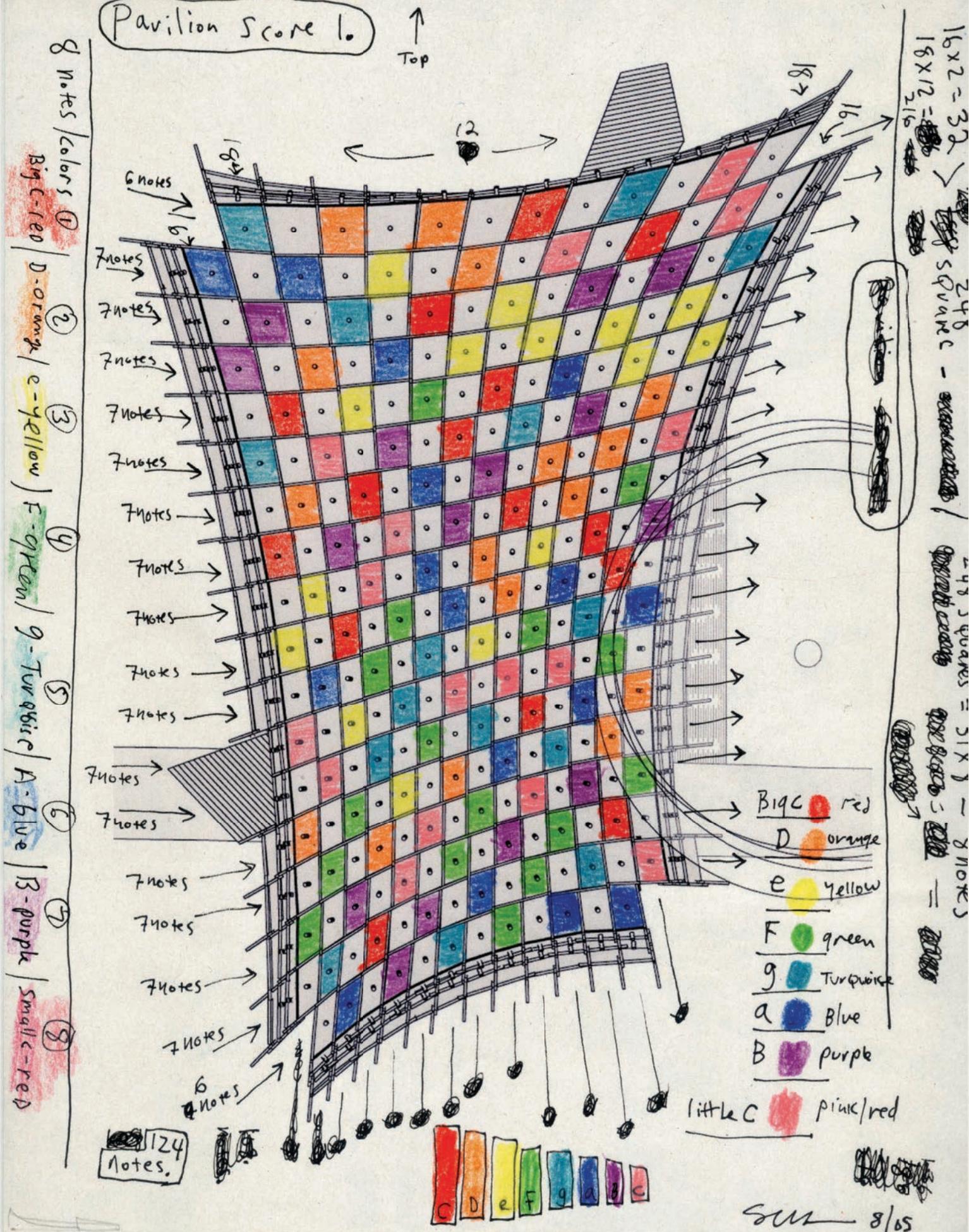


Score 8/05

Pavilion Score 1.

- 8 notes / colors ① Big C - red | ② D - orange | ③ e - yellow | ④ F - green | ⑤ g - Turquoise | ⑥ A - blue | ⑦ B - purple | ⑧ small C - pink / red

124 Notes.



Score 8/05

fruits

rodney (,) dirk

*at the right speed, quiet, with delay*

Mandolin      in the first section axe-cent the new notes slightly when they first appear.

when I tell you, begin tuning the open string(s) down to the F harmonic series!  
do it gradually, a little at a time for all the 2<sup>2</sup> or 3<sup>3</sup> strings

**Section 2**

*how many couples may dance with each other?*

gradually tune, when playing open strings, to the Bb harmonic series of last measure

(toone)

(tune)

(pthun)

(toon)

In sex-shun 2, play any measure any number of thymes. Play the measures in any disorder, and make up your own 3, foor, and five-node condemnations deerved from the measure marked with the win gum mobilis (N) or from the last measure in sect-scion 1, or from both. Leave out notes in any of the "lines" as you wysh.

begin tuning B# to B      begin tuning E to Eb

Mdn.      Mdn.      Mdn.

begin tuning A# to A

Mdn.      Mdn.      Mdn.

[F harmonic series complete]

Mdn.      Mdn.

(learn this only)

long live Henry II!

**D** \* No Clicks

12 Gradual dim. flautando  
Loop sul pont.  
l. Batt. sul pont. flautando  
ff pp

3

**E**

15 Loop 1 Loop 2 Loop 3  
sfz sfz fpp sul pont.  
sul pont. ff

20 Loop 4 Loop 5 Loop 6  
sfz pp fp fp ff

Loop 4 Loop 5 Loop 6

Vn. sfz pp fp fp ff

**F** \* No Clicks

24 fpp f  
3 1 sul. pont. ff

4

**G**

26 Loop Gradual crease  
pp fff

Vn. pp fff

1 batt. Reaction  
sfz

1 batt. Reaction  
sfz

**H**

28 fpp  
Vn. fpp

start together, create different length each repetition until I

**Inbetween** is written for violin and cello, both reacting to pre-recorded soundtracks.

The soundtracks are played through earphones during the performance and heard only by the performers—each performer hearing only his or her own soundtrack.

The soundtracks consist of letters A-L (indicated by voice naming the letters). Some of the sections include a series of clicks. The instructions for reacting to the clicks appear in the score. For the most part, the clicks indicate either movement from repeating one bar to the next; in other places the clicks trigger a specific reaction written in a square above the part.

**Bb Trumpet**  
(written in Bb)

**Zones of Coherence—Ia**

**Zones of Coherence—Ib**

[70] [43]

David Rosenboom; *Zones of Coherence*. For trumpet virtuoso. Used by permission of David Rosenboom, © David Rosenboom Publishing (BMI), 2003.

**Zone of Coherence**, in organic terms, is partly about the beauty of forms in nature reflected in the qualities of the trumpet itself and all of the human symbolism it contains. It is also about evolution and the spontaneous emergence of forms, a consistent theme in much of my music. The score for *Zones of Coherence* contains four musical configuration spaces. Inside each of these configuration spaces, musical time does not exist *a priori*. Each configuration space contains a collection of musical units, which may be combined and/or sequenced in a manner chosen by the performer. From the relationships manifested by the player among these distinct musical units, entwining and weaving them with their individual interpretations, their combinations, connections, sequences, links, warps, loops, and twists, a shared musical time-space is materialized creating the localized mass and energy of each individual performance. In this way, the performer is also invited into the creative process of the composition. The title refers to how zones of musical meaning emerge from a form in which the parts are modular, and though they require considerable virtuosity to master and arrange them in configurations, they are designed to be combined in many forms, each of which is equally musically coherent.

The musical material of each section moves through a progression, suggesting how the breath of life evolves into tone mediated by the trumpet, how breath energizes differentiated resonances, how the resonances organize themselves into scales, and how fluid lyricism emerges from this organization; characteristic virtuosity develops, rhythmic forms appear in a shared time-space, and virtuosity accelerates into clouds of complex, harmonic-temporal configurations. A synopsis might read: breath → movement → directionality → resonance → substance → scale → form → construction → virtuosity → materialization of the present, a shared now. This reflects the natural form of the trumpet itself as an articulator

of life, its flared bell symbolizing the exponentially expanding potential for human awareness awaiting its full realization.

The natural resonances of the three-valve trumpet's physical structure with all its eight possible valve combinations provide important metaphors for architectural components of the composition. These sometimes result in "altered" tunings, deviating from common practice, equal-tempered tuning. They are also related to links found among the overtones of the pitches B<sup>b</sup>, D, and G<sup>b</sup>, which reflect the beauty in special forms of nature described by the expression,  $1/p=1+p$  where  $p=(-5-1)/2$ . These are evident in the appearance of three important ratios: 70:43, 13:8, and 8:5. Relationships like this are deeply imbedded in both the harmonic forms and structural proportions of the score.

The score's cover sketch, viewed horizontally, depicts a mountainous horizon line viewed from the composer's back yard, suggestions of foliage, and a configuration time-space created by the most commonly used flight paths and landing spots for the birds in this ecosystem. X's mark these spots, lines are the flight paths, and X's in circles indicate commonly used points from which the birds enter or exit the space. In this system, as in *Zones of Coherence*, one feels the elastic tensions among each differentiation in the space, shifting positions creating individual nows, delineating the relationships in energy-matter-time-space (EMTS) we need to preserve our own self-differentiation.