

OPEN, MOBILE AND INDETERMINATE FORMS

submitted for the Degree of Doctor of Philosophy

by

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- *Blue Light/Red Light*
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- *Poker Test*

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Abstract of the thesis

Since the early fifties “open form” has become a generic description for many different compositional concepts having in common musical outcomes which to a certain degree are indeterminate. The introduction looks into different meanings given to “form” in music and gives a historical survey of the origins of compositional indeterminacy. Next, the concept of “open form” is elaborated into a territory which is usually not associated with it: jazz.

The introduction is followed by five case studies.

Folio (1952-54) by Earle Brown is considered to contain the first intentionally “open form” works. It is driven by improvisational ideas, either at the compositional stage or at the interpretative stage. Brown's affinity with jazz also offers connections to other topics of the thesis.

Miles Davis' *Ife* (1972) may at first seem like an odd inclusion in this study, but it is not. Its only oddity could be that of all the works discussed it has no score. But it is a composition; it is recognizable throughout its various incarnations and repeatable, and its outcome is indeterminate.

Adam Rudolph did not conceive *Ostinatos of Circularity* as an “open form” work, but it is an indeterminate composition: it does have a score the musical result of which depends on the decisions made by the composer/conductor during the performance as well as the choices made by the performers.

In Peter Zummo's *Experimenting with Household Chemicals* the performers play the same, often ambiguous, score, moving in the same direction at their own speed and discretion. The lack of synchronicity and the ambiguous notation result in a very elastic organic form.

Anne La Berge refers to her recent works as “guided improvisations”. The scores mainly consist of suggestive text materials, software preset descriptions and rudimentary verbal indications, leaving major decisions to the performers.

The last chapter is about my own work. It presents seven works (the scores of which can be found in the accompanying portfolio), composed between 2007 and 2011. Each of these works uses the score as a “field” through which the performers roam.

INTRODUCTION

At the core of this thesis is my work from recent years. Since the end of the 1990s I have gradually abandoned writing fully notated music in a craving for a type of spontaneity and surprise that I remembered experiencing back when I was still active as an improvising musician. I have been exploring methods that would still allow me to at least roughly sketch boundaries and directions as a composer while allowing performers relative creative freedom.

This thesis did allow me to situate my own practice within a wider field of open, mobile or indeterminate composition in order to be able to make comparisons, to find ancestry and, in a way, legitimation. The research led me back to the first occurrences of works that composers consciously conceived as being “open form”. Without underestimating his colleagues from the New York School, it is safe to say that as far as “open form” is concerned the central figure could only be the American composer Earle Brown, whose radical experiments still resound to this day. His work *December 1952*, the first graphic score, from the *Folio* collection has become an icon of 20th century music.

Brown's work of course is considered within the ground-breaking musical landscape of its day, on both sides of the Atlantic Ocean, but it is also important to acknowledge his jazz antecedents, which are further projected in time in this thesis. Jazz, leading an existence parallel to so-called serious music, is versed in its own way into indeterminacy.

After the historical survey of the origins of open, mobile or indeterminate form, including the misunderstandings, misconceptions and antagonisms that surrounded them, and an incorporation of jazz into the concept of the research, the thesis analyses Brown's *Folio* collection, and a 1972 composition of Miles Davis. Both quite different works do share common indeterminate grounds and rely on the spontaneity of the performers. This is then followed by four contemporary case studies.

Over the years the boundaries between “e-Musik” and “u-Musik” have become much vaguer than they were in the 1950s or 60s and the contemporary composers whose work

is presented in the case studies no longer make clear cut distinctions between genres. All of them, including myself, look for ways to implement human resources in the creative process. They all compose more or less open form works that rely on and profit from the unique creative talents of the performers. They all have conceived notation methods to this end. None of the scores presented require virtuoso reading capabilities, but instead they require virtuoso creative capacities. The less score you give, the more score the performer has to make up. Each of the composers calls for a certain degree of extemporization.

Adam Rudolph did not conceive *Ostinatos of Circularity* as an “open form” work, but it does match what I consider to be indeterminate composition: it does have a score the musical result of which depends on the decisions made by the composer/conductor during the performance as well as the choice made by the performers. It is different from the other works in that the main decision making and shaping of the end result is in the hands of the composer/conductor, while the performers' decision making happens on a micro-structure level. Both levels of spontaneous decisions exist alongside each other in concentric circles.

Experimenting with Household Chemicals can be considered a typical Peter Zummo composition. All the materials are notated, but the produce of the score relies on its interpretation by the individual musicians of the performing ensemble. To put it very simply one could say that all performers play the same score moving in the same direction at their own speed. Zummo's main metaphor when describing the instructions is that of a herd. This describes not only the lecture of the score by the performers, but also a social situation. The score is also very ambiguous and relies on the performers interpretations of these ambiguities.

Anne La Berge comes in a way the closest to improvisation as her “guided improvisation” scores are devoid of music or even graphic notation. She gives succinct verbal indications of what she expects and she offers the performers a technological framework by way of structure. Texts and poetry also serve as (symbolic) guidance.

My own work is again different, I (still) use notation, but in a very abstract way. I see the scores as fields through which the performers roam (something for which in a way I

am indebted to Peter Zummo), either all in the same direction or with no specific direction. All require the performers to carefully consider responsible decisions as how to interpret the materials.

When discussing their works with the composers they all seem very eager to be surprised, to find magic and epiphanies. All these works address similar questions about interpretation vs. improvisation, about notation and the necessity or superfluosity of the score, about freedom and responsibility. In a way they answer the questions, not always (rarely) clearly, with the music that results from them.

(...) music is sometimes able to create the illusion of time reversal, in which cause follows effect. In these extraordinary epiphanies, rare in ordinary life but relatively common in music, the moment becomes a “little bang”, a distant echo of the Big Bang of creation.

Typically, improvised music is full of such little bangs. Even if the improvisation is based on, and follows rigorously, a predetermined structure.¹ (Frederic Rzewski)

1 RZEWSKI, Frederic, 1999, 'Little Bangs: A Nihilist Theory of Improvisation', *Current Musicology*: Fall 1999; 67/68, 384

Chapter 1

ON FORM

1.1 What Form?

The basis of all Western musical form starting with Gregorian chant is the cadence, which implies that the forms are 'closed,' set within a frame and isolated. (Charles Rosen)²

When appreciating time based art forms, such as music, form is an ambiguous notion - it does after all change over time - unless we are confronted with a clear-cut one dimensional construction (e.g. a composition where the determinant aspect is exponential dynamic growth, where form could be seen as an outline or envelope). Form could be many things. Form refers to genre (in a rather indiscriminate way, e.g. opera, concerto, etude, mass, mazurka,...), to generative structures, like a fugue or a sonata, where the general components are usually assigned letters (e.g. ABA or ABBA), the sequence of which represents the overall structure; or 'form' applies to details - thus Arnold Schoenberg lists as 'forms of all sizes', "...melodies, main and subordinate themes, transitions, codettas, elaborations, etc...."³. If we were to apply those types of formal appreciation to architecture we would never obtain a relevant description of the architectural form. We would know what a building's function is, or the number of rooms it has, or decorative details regarding wallpaper or furniture, but we would have no idea of the actual architectural form or shape of the building in question.

The *New Grove Dictionary of Music & Musicians* defines form as "The constructive or organizing element in music,"⁴ which, though convenient, is maybe just too concise. Schoenberg is more helpful when he writes: "The form of a composition is achieved because (1) a body exists, and because (2) the members exercise different functions and

2 ROSEN, Charles, 1971, *The Classical Style*, Faber and Faber Ltd., 26

3 SCHOENBERG, Arnold, 1984, 'Folkloristic Symphonies' (1947), *Style and Idea*, University of California Press, 166

4 WHITTALL, Arnold, "Form." In *Grove Music Online. Oxford Music Online*, <http://www.oxfordmusiconline.com/subscriber/article/grove/music/09981> (accessed April 12 2008).

are created for these functions,”⁵ or, more relevant to the present thesis, when he states, “Used in an aesthetic sense, form means that a piece is organized; i.e. that it consists of elements functioning like those of a living organism.”⁶

It is this 'organization' - or rather its partial or complete absence in the score - which is meant when people use the term 'open form'. The lack of positive determination of what form and hence 'open form' is, can also explain the various types of “openness” that can be found under the same common denominator: such as aleatoric, or indeterminate, or free. If form relates to organization, then all these different descriptions relate to different styles, or different 'open forms' (how open, or what part is open?), because they all deal differently with the generative part of organization.

1.2 Precursors

In *Silence*⁷ John Cage indirectly suggests that Henry Cowell might be the precursor of what would later be considered 'open form'. It is indeed true that Henry Cowell developed what he called 'flexible' or 'elastic' music, but this was in the first place a very functional solution to problems he encountered as a composer and/or accompanist for dance groups. “Anyone who has worked in a dance studio knows that the dances are always being subjected to alteration through repeated trials, in semi-improvised fashion.”⁸ The solution Cowell offered to this problem was to compose modular music, the modules of which could be adjusted in length, or re-assembled in order to meet the alterations the choreography was subjected to.

The practical method of creating elastic form is something which must be studied, and since the subject is in its infancy, anyone who works at it has the opportunity to make new discoveries. One must begin a little at a time.

Possibilities of infinite elasticity are remote as a practical measure. But a

5 SCHOENBERG, Arnold, 1984, 'Tonality and Form' (1925), *Style and Idea*, University of California Press, 257

6 SCHOENBERG, Arnold, 1967, *Fundamentals of Music Composition*, Faber and Faber Ltd, 1

7 CAGE, John, 1973, 'History of Experimental Music in the United States' (1959), in *Silence*, Wesleyan University Press, 71

8 COWELL, Henry, 2002, 'Relating Music and Concert Dance' (1934), in *Essential Cowell, Selected Writings on Music by Henry Cowell 1921-1964*, McPherson & Company, 226

beginning has been made if there are even as many as two possible avenues of expanding a certain form, where there would have been only one before. [...] The whole work may, then, be short - the minimum length being determined by performing each sentence and section once only - or as is desired, by adding the repeats ad libitum. It may be performed with percussion alone, with piano alone, with orchestral instruments, or with one orchestral instrument, or with any combination of these. In this way, the individual rhythm, the phrases, the sentences, the sections, the whole work, the rhythmical and the tonal orchestration are elastic. The whole work will, in any of its ways of presentation, have form; but it may be easily adapted to the changes and freedoms so essential to the dancer's creation.⁹ (Henry Cowell)

Cowell seems to have deemed these ideas interesting enough to apply them to some of his music that had nothing to do with dance, e.g. *26 Simultaneous Mosaics* from 1963, which comprises 26 parts which may be played in random order. But, apart from the mention by Cage in *Silence*, Cowell's elastic music is never mentioned by any of the later open form composers. This can seem strange, but not much stranger than the fact that Cowell himself never mentions Percy Grainger's excursions in the territory of open form. While Cowell's modular approach might bear more formal relation to Mozart's dice game minuets than to the indeterminacy practices of the New York School, Grainger comes much closer to some concepts that would only be developed after 1950.

In 1912 Grainger conceived *Random Round* (which he described as an experiment in concerted partial improvisation), in an attempt to recreate the effect he so much enjoyed in the Rarotongan (Polynesian) polyphonic songs. *Random Round*,

(...) was planned for a few voices, guitars and mandolins, to which could be added (if available), mandola, piano, xylophone, celesta, glockenspiel, resonaphone or marimbaphone, strings and wind instruments. It consisted of sections (A, B, C, etc.), each of which was again divided into as many as 10 to 20 variants (A1, A2, etc.), some quiet, some noisy, some complex; each bar of each variant being composed in such a manner that it would form some sort of a

⁹ COWELL, Henry, 2002, 'Relating Music and Concert Dance' (1934), in *Essential Cowell, Selected Writings on Music by Henry Cowell 1921-1964*, McPherson & Company, 229

harmonic whole when performed together with any bar of any or all of the other variants of the same section.

The guitars formed the background for all the rest, and as soon as they got going with section A any or all of the other players and singers could fall in, when and how they pleased, with any of their variants of section A, provided their beats corresponded to those of the guitars.¹⁰ (Percy Grainger)

He also seemed conscious of the risks that would accompany performance freedom and seemed prepared to appreciate the potentialities of events stricter control would normally avoid:

It will be seen that a fairly large range of personal choice was allowed to every one taking part, and that the effectiveness of the whole thing would depend primarily on the natural sense for contrasts of form, colour and dynamics displayed by the various performers, and their judgement in entering and leaving the general ensemble at suitable moments.

Thus one player, by intruding carelessly and noisily at a moment when all the rest were playing softly, would wreck that particular effect, though, on the other hand, such an act, if undertaken intentionally in order to provide dynamic variety, might be very welcome.¹¹ (Percy Grainger)

But Grainger, much more than Cowell, was a very marginal figure and seemed to have been mostly ignored, or maybe not taken seriously by the generation which, about 1950, would radically change part of the musical world.

1.3 Open Form

Some of it may be written for no other reason than pour épater le bourgeois; some of it shows delicate evocations of sound; some of it is phony; some of it exciting. In itself it is a passing fad, but it does illustrate the breakup of values in

10 GRAINGER, Percy, 1915, 'The Impress of Personality in Unwritten Music', *The Musical Quarterly* 1915 1/3, 432

11 GRAINGER, Percy, 1915, 'The Impress of Personality in Unwritten Music', *The Musical Quarterly* 1915 1/3, 432

music the way so many other manifestations mirror the equivalent breakup in contemporary life and thought.¹² (Harold C. Schonberg)

Composer Earle Brown was probably the first to use the term open form to describe his music of the early fifties (early on he would use the word “mobile”, while “open form” would consistently appear in the papers he published and lectures he gave from the 1960's onward¹³). 'Form' in his case came from sculpture, as he was attempting to achieve something comparable to Alexander Calder's mobiles, which would show different combinations at different times.

It is maybe not such a bad thing that “open form” is a rather vague (or one could say 'open') notion, as all other definitions might be more restrictive. 'Aleatoric' or 'indeterminate' apply only to works the content of which are subjected to chance, which is something very different from leaving decisions to the discretion of the performer. 'Open structure', the term used by Thomas DeLio in his book *Circumscribing the Open Universe*¹⁴, might seem a safe way out of the issue, but then one could argue that the structure in the works of Feldman (e.g. the *Projection* and *Intersection* series) alluded to by DeLio is not very open, and the discussion should then also be what exactly the structure of a musical composition is. Or maybe 'open form' is a combination of all these things characterized by the ratios between them, the degree of indeterminacy. One could even argue that no work of music, unless performed by a machine with a predictable output, is 100% determinable.

Thus it could be stated that the degree of unpredictability of the musical outcome of a given score equals its “degree of openness”. It seems less important whether it is the form or the structure, or any other general parameter which is unpredictable, as long as the flexibility is radical enough.

12 SCHONBERG, Harold C., 1964, 'Bernstein et al Conduct 5th Avant-Garde Bill', *The New York Times*, February 7 1964

13 Although, in an interview with Carl Stone, Brown states: “Why couldn't I write a piece of music, all of the elements of which were composed, but that the relationships of those elements were not fixed, that they could be mobile. I originally thought of them as “mobile” and Europe eventually attached the name “open form” to it, which is fine.” Earle Brown, interviewed by Carl Stone, 1978, KPFK, archives of the Earle Brown Music Foundation, Rye, New York

14 DELIO, Thomas, 1984, *Circumscribing the Open Universe*, University Press of America

To differentiate between various types of “openness” it could be helpful to look at musical form “simply” as a sequence of events, which allows us to incorporate the various interpretations of form within a unified time-based construction. This is similar to the way James Tenney addresses form in *META Meta / Hodos*, the appendix to *Meta / Hodos*: “The perception of form at any hierarchical level involves the apprehension of three distinct aspects of form, at that and at all lower levels. These three aspects of form will be called state, shape and structure.”¹⁵ Tenney sees a work of music as a succession of what he calls “temporal gestalt units”, which could in a simplified way be called “time-based forms” (thus the total form of a piece of music consists of a succession of smaller forms, each in turn consisting of even smaller forms, etc., all the way down to the elementary clang, an indivisible unit). In this system “state” refers statistically to the global properties of each form element (the range of each of its musical and acoustic parameters and its duration), “shape” refers to the profile of the different parameters of each element (their envelopes), and “structure” stands for the relations between the constituent parts of each form element. These three aspects of form are interrelated at different hierarchical levels, from the most elementary constituent ‘formlet’ to the overall form. This somehow quite complex approach allows us to zoom in onto details or specific elements “granted freedom” by the composer.

In the end the openness of the form has all to do with how much responsibility the composer is willing to delegate to the performer(s); what element(s) of the composition she/he is willing to abstain control over. One could look at this from a perspective other than the composer's ego and see it as the composer assuming that certain elements hold more potential than just one unique and perfect cast. Looking at different examples of open works we see them ranging from total freedom (e.g. all parameters/elements in the case of Earle Brown's *December 1952*¹⁶) to very limited, merely aesthetic freedom (like the elastic duration of the individual notes, against a precise metronome, in Luciano Berio's *Sequenza I* for flute). John Cage takes this to a provocative extreme¹⁷, annihilating the argument, when he states, in his 1958 lecture *Composition as Process* that Johann Sebastian Bach's *Art of the Fugue* is an indeterminate composition: “In *The Art of the Fugue*, structure, which is the division of the whole into parts; method, which

15 TENNEY, James, 1986, *Meta / Hodos and META Meta / Hodos*, Frog Peak Music, 106

16 BROWN, Earle, 1961, *Folio and 4 Systems (1952/54)*, New York: Associated Music Publishers

17 Though irony should be deduced from the information on top of the page stating that “The excessively small type in the following pages is an attempt to emphasize the intentionally pontifical character of this lecture.”

is the note-to-note procedure; and form, which is the expressive content, the morphology of the continuity, are all determined. Frequency and duration characteristics of the material are also determined. Timbre and amplitude characteristics of the material, by not being given, are indeterminate.”¹⁸ Although the “missing” instructions were most probably part of the performance practice of those days.

1.4 New York vs. Darmstadt

Well, let's take Boulez and myself: I feel that my music is open. I feel that his music is closed; he's making objects.”¹⁹ (Morton Feldman)

We already mentioned that Earle Brown was probably the first composer to use the term “open form” (not necessarily in those exact words), and that his graphic score *December 1952* can be seen as the most radical implementation of the concept (even within his own oeuvre). But two years before Brown's work, without explicitly claiming any “openness”, Morton Feldman wrote his *Projection* and *Intersection* series. In the sleeve notes of the 1963 *Durations* recording he wrote about *Projection #2*,

My desire here was not to 'compose,' but to project sounds into time, free from a compositional rhetoric that had no place here. In order not to involve the performer (i.e. myself) in memory (relationships), and because the sounds no longer had an inherent symbolic shape, I allowed for indeterminacies in regard to pitch. In the *Projections* only register (high, middle or low), time values and dynamics (soft throughout) were designated.²⁰ (Morton Feldman)

Earle Brown tended to be restrictive as to what was 'open form' and what was not. Speaking to John Yaffé in a 1995 interview about Morton Feldman's early graphic scores (which, as we wrote, pre-dated Brown's first 'open' experiments by about a

18 CAGE, John, 1973, *Silence*, Wesleyan University Press, 35

19 WOOD MASSI, Richard, 2006, 'Captain Cook's First Voyage, An Interview with Morton Feldman', (1987), in VILLARS, C., *Morton Feldman Says, Selected Interviews and Lectures 1964-1997*, Hyphen Press, 225

20 FELDMAN, Morton, 1963, liner notes for *Morton Feldman-Earle Brown*, TIME #58007, Time Records, Inc.

year²¹) Brown says: “But Morty's early music on graph paper allowed the pianist to play any three notes in the high third of the piano, or any two notes in the bottom third of the piano. It was not open form, it was structured in time and metre.”²² It was in fact structured in time and register, but only relatively in metre (what can be seen as metre is in fact a duration grid - and a piece like *Intersection 1* grants the performer the freedom to 'come in' at any given time within the given duration) and the freedom of pitch within the register indications could in theory turn the work into anything in between totally consonant and completely dissonant. Pitch can be a determinant formal parameter, and Brown's criticism does show that the notion of “open form” is open to interpretation.²³ He most certainly had a very specific idea of what could be considered “open form” and what not:

(...) the first truly “open form” work, titled “Twenty Five Pages” completed in June 1953, and decidedly “controlled aleatory” - in that the content was totally determined but the form left “open”. (How do you define “open' formal structures”? If they are “open”, how are they “formal structures”? - “open structures are not “formal structures”. - “open-form” is not a “formal structure”) - the structure is a result of the “open” structural potential. Your (“aleatoric” or “improvisatory passages”, “within a larger predetermined formal structure”) is the antithesis of “open formal structure”. What you are referring to is not “open formal structure” but a traditional “safe” control of structure with “aleatoric” interior flexibility - sometimes/frequently defined as “Jazz” aesthetic, and not terribly, wildly “innovative”.²⁴ (Earle Brown)

In that same period John Cage, who was very supportive of his New York School companions, completed his *Music of Changes* in which the element of indeterminacy was happening at the time of the composition (in the sense that all decisions were left to deductions of the random procedures of the *I Ching* oracle), while no interpretative

21 “The first one of us, however, who really went in for indeterminacy in performance was Feldman with those pieces on graph paper (...)” WOLFF, Christian, 1998, 'Taking Chances, From a Conversation with Victor Schonfield' [1969], in *Cues, Writings and Conversations*, Edition MusikTexte, 66

22 YAFFE, John, 2007, 'An Interview with Composer Earle Brown', *Contemporary Music Review*, Vol. 26, Nos 3-4, June/August 2007, 303

23 Morton Feldman's *Intermission 6* (1953) for one or two pianos, comes very close to what Earle Brown would consider open form or mobile, as it presents the performer fifteen musical events to be played in no specific order.

24 BROWN, Earle, handwritten draft of what presumably was a letter, undated, unpublished, archives of the Earle Brown Music Foundation, Rye, New York

freedom at all was granted the performer, thus ruling out the “open form” qualification²⁵. Cage's first open form works, in which performers had to take some of the decisions were the *for a String Player* series of 1953, followed the same year by the *Music for Piano 2-19 pieces*²⁶, eventually culminating in the *Concert for Piano and Orchestra* (1957-58). But one could still argue that the interpretative freedom granted to the performer is not that very different from what Cage found in Bach's *Art of the Fugue*. Just as eager as he was to free the music from the composer's intentions, he would also avoid the performer's.

At the same time Europe, or at least one of its centres of musical innovation, Darmstadt, was witnessing the birth of serialism. Although serialism seems to be at the opposite end of the musical spectrum it might have more in common with indeterminacy than one would assume. As Herman Sabbe wrote in his thesis on serialism, “One could say that Cage and his companions achieved discontinuity and hence indeterminacy by means of 'under-determination' and the serialists by 'over-determination': the first by foreseeing as little as possible and the latter by foreseeing so much that at any given time just everything could occur.”²⁷

It was pianist David Tudor (incidentally accompanied by composer Stefan Wolpe) who first introduced the Darmstadt audience to American indeterminacy and open form in 1956, although word was spreading before through broadcasts and articles, and through the epistolary exchange between Pierre Boulez and Cage since 1949. Although indeterminacy, chance and open form were received with scepticism they also inspired the European avant-garde. Soon some of them, and not the least like Boulez and Stockhausen, would apply openness, or mobility to some of their scores. Boulez thus allowed the pianist quite some freedom in the assembly of elements of his third piano sonata (1955-57), and so did, albeit in a different and more 'lenient' way, Karlheinz

25 It is significant that Cage, in part II (*Indeterminacy*) of his lecture *Composition as a Process*, lists, as examples of compositions which are indeterminate in respect to their performance, works by Brown, Feldman and Wolff, but none by himself. (CAGE, John, 1973, *Silence*, Wesleyan University Press, 35-40)

26 It is interesting to compare *Music of Changes* (1951) with *Music for Piano 4-19* (1953) - as both were composed using the *I Ching* yet are quite different - and wonder whether the sudden freedom granted to the performer (pages to play (in combination or together with other pieces of *Music for Piano 21-84*), tempo, relative duration, dynamics) had been influenced by Feldman's and even more Brown's experiments.

27 SABBE, Herman, 1977, *Het muzikale serialisme als techniek en als denkmethode*, unpublished thesis, Rijksuniversiteit Gent, 414 (fn) (transl. Guy De Bièvre)

Stockhausen in his *Klavierstück XI* (1956) . Both these composers would later deny any direct relation between their 'open' works and those of their American colleagues. As Amy C. Beal tells in her book on the relation between the American avant-garde and the post-war European and more particularly German music scene, they were at times even downright condescending: “Later Stockhausen downplayed Cage's influence on European use of open form, insisting that those ideas came from American painters' appropriation of French abstraction. He claimed that it was wrong to “trace the European tendencies of 'open forms' back to American influences; the sources clearly are to be found in the European tendencies of mathematics and natural science.” According to Stockhausen, most avant-garde composers, including Nono, Maderna, and Pousseur, “found [Cage's] experiments interesting from a combinatorial point of view but banal and dilettantish if considered music.”²⁸ When we leave aside what can sound as a European supremacist discourse, or at least a biased perception of contemporary art history (Stockhausen in his conversations with Jonathan Cott, talking about the aleatoric techniques used by the abstract expressionists, states “I think this interest came from Paris.”²⁹ Referring to painter Georges Mathieu as a precursor and influence of the American abstract expressionists, while Georges Mathieu is known to have said in 1949 that he considered Pollock the greatest living American painter), Stockhausen had a point (even though he intended it as a criticism): the composers of the so-called New York School (at least Cage, Feldman and Brown) were indebted to their visual arts contemporaries (such as Robert Rauschenberg, Alexander Calder, Philip Guston, Jackson Pollock, Willem de Kooning), and had no problem admitting it.

What Stockhausen alludes to with 'European tendencies of mathematics and natural science' seems to be mainly his own, quite hermetic, translation of sound characteristics into the structure of his *Klavierstück XI*. “*Klavierstück XI* is nothing but a sound of which certain partials, components, are behaving statistically. There are 19 components, and their order can be changed at random.”³⁰ Pierre Boulez on the other hand refers in the first place to poet Stéphane Mallarmé and also to James Joyce and Paul Klee as “open form” influences. One notable thing in this respect is that those three writers/artists had passed away before Boulez had reached adulthood, while the

28 STOCKHAUSEN, Karlheinz, 1976, 'Interview with Dr. Ekbert Faas', *Feedback Papers* 16, 429-430 quoted in BEAL, AMY C., 2006, *New Music, New Allies – American Experimental Music in West Germany from the Zero Hour to Reunification*, University of California Press, 112

29 COTT, Jonathan, 1974, *Stockhausen: Conversations with the Composer*, Pan Books Ltd, 68

30 COTT, Jonathan, 1974, *Stockhausen: Conversations with the Composer*, Pan Books Ltd, 70

composers from the New York School were working side by side with the visual artists they saw as major influences. The predominance of literary influences could also explain why Umberto Eco in 1962, in his book *The Open Work*³¹, only mentions the European open form (though never using those words, preferring “open work” instead, much more convenient to his literary excursions) experiments of Pousseur, Boulez and Stockhausen (also Berio, but that remains a very disputable choice), ignoring those of the New York School.

In a way the divergence of opinions between the Darmstadt and New York Schools shows resemblance to the philosophical schism in 1925-26 between traditional physics and quantum mechanics, when 'dogmatic realism' (Einstein) disagreed with the possibility of the 'uncertainty principle' (Heisenberg). While Boulez and Stockhausen in the 50s seemed most inclined to dogmatically keep one foot in the Weberian past (or a past maybe even anterior to Webern), Cage and company were resolutely looking towards the indeterminate, quite uncertain future. It is easy from the score to make a fair prediction of performances of Boulez' 3rd *Sonata* or Stockhausen's *Klavierstück XI*, while it is much harder if not impossible to make a positive prediction of the outcome of Feldman's, Brown's or Wolff's open scores. The comparison shows quite some analogies with Heisenberg's: “In the experiments about atomic events we have to do with things and facts, with phenomena that are just as real as any phenomena in daily life. But the atoms of elementary particles themselves are not as real; they form a world of potentialities or possibilities rather than one of things and facts.”³²

1.5 Lost in Translation

Pierre Boulez mentions the poet Stéphane Mallarmé (1842-1898) as a major influence, certainly regarding his third piano sonata and especially Mallarmé's famous poem “*Un coup de dés*” (“*A throw of the dice*”). That very poem can be seen as the first conscious example of free verse, but it is not a work of open form; one cannot shuffle the pages, it is not meant to be read otherwise than from beginning to end (shuffling the pages would mean losing the main sentence, “A throw of the dice will never abolish chance”, which

31 ECO, Umberto, 1965, *L'oeuvre ouverte*, Editions du Seuil

32 HEISENBERG, Werner, 1958, *Physics and Philosophy*, Penguin Books, 128

is cut up in four parts occurring on pages 1, 2, 5 and 9, the last one being followed by what could musically be seen as a coda. Mallarmé's close friend Paul Valéry (the first person to have been presented the poem by its author) writes, in 1920, after having heard some people's intention to present the poem on the stage,

If those people would have known, however distantly, Mallarmé in person, and if they would have heard, like myself, Mallarmé discussing (almost in an algebraic sense) the minutest details of the positioning of the verbal and visual system he had constructed. If they had assisted him in the precise verification of the editing of this figure which was meant to contain the simultaneity of vision and the successiveness of speech, as if a very fragile balance depended on those precisions, I can assure them that they would never even have thought of letting chance by means of performers, abolish this deep calculation!³³ (Paul Valéry)

It was only after completing his third sonata that Boulez was introduced to Mallarmé's *Livre*, the notebook sketches of an ambitious, but never realized project to publish the ultimate book. This included possibilities of re-ordering content and other concepts not unlike those seen nowadays in hypertext. Ironically, in more than one way Mallarmé with his *Livre* seems to meet Cage (and antagonize Boulez) when he wants to get rid of the author: "'The pure work implies the elocutionary disappearance of the poet.' The *Book* (le *Livre*), presented as being authorless, accentuates this disappearance"³⁴ And at the same time he seems to be at the opposite end of Cage when he says he wants to get rid of chance: "One needs to get rid of the chance of words, each of which is constituted of a sometimes perverse contingent alliance between sound and meaning."³⁵ The chance Mallarmé wants to reject is that contained in the meaning of words and their associations, in a certain sense the molecular level of a text. On a higher organisational level his calculations create the illusion of control over all possible combinations of lectures or assemblages of the vast collection of autonomous pages his *Livre* was intended to be composed of.

33 VALÉRY, Paul, 1965, 'Le coup de dés, lettre au directeur des Marges' [1920], *Oeuvres* (vol.1), La Pléiade, 625 (transl. Guy De Bièvre)

34 SCHERER, Jacques, 1957, *Le "Livre" de Mallarmé*, Gallimard, XVI (transl. Guy De Bièvre)

35 SCHERER, Jacques, 1957, *Le "Livre" de Mallarmé*, Gallimard, XVI (transl. Guy De Bièvre)

The notes suggest almost Fluxus-like performative lectures (the *Book* does not only consist of syntaxless bits of text,³⁶ but mainly of specific and hard to fathom lay-out indications, and quite hermetic calculations of the audience numbers allowed at lectures, the price they will be charged to attend and the number of days a year the lectures should occur). These lectures, despite their complicated calculations, would seemingly rely at least partly on contingencies. The *Book*, because of all this, is more like the score of a happening, or Gesamtkunstwerk, (at least at this very early stage, where one can only speculate about the final project Mallarmé had in mind) than a work of literature. It is in a way strange that Boulez considers his encounter with the *Book* as an epiphany, because none of its anarchic strangeness seems to have made it into his music. After his third piano sonata he would apply open form techniques in just a few works (e.g. *Eclat*, in which only the conductor is given freedom, not unlike some of Earle Brown's later works). He had come to distrust interpreters. Joan Peyser wrote:

Obviously still inspired by Mallarmé's *Livre*, Boulez attempted in his own words, "to break completely the closed form." But he refused to share responsibility with the performer. In a 1964 interview in *The Times* of London, Boulez deprecated the performer's ability to participate in the creative process. "I have no confidence in the imagination of performers," he said. "The performer's head is full of formulas drawn from the music he plays. If he had the necessary invention, he would be a composer himself."³⁷ (Joan Peyser)

It is interesting that with such a statement he seems to reject the possibility that at least some performers could be composers as well (or the other way round). He did after all perform some of his own works and achieved fame as a conductor (though conductors seem to rank higher in his musical hierarchy). Maybe we have to see Mallarmé's influence mainly in the fact that Boulez kept reworking certain pieces, never considering them properly finished or suitable for publication, or flexible enough to be continuously reshaped.

36 In his introduction to Mallarmé's notes Jacques Scherer writes, "The manuscript is, for its main part, an elaboration of the structure of the *Book* and the conditions it should fulfil to exist. But Mallarmé has also tried to define the matter the *Book* should be made of, and along with the form he has tried to describe its content. However, this aspect of his work is way less developed than the other and all in all but very few pages of the manuscript are dedicated to what the *Book* was supposed to tell."

SCHERER, Jacques, 1957, *Le "Livre" de Mallarmé*, Gallimard, 125 (transl. Guy De Bièvre)

37 PEYSER, Joan, 1976, *Boulez*, Schirmer Books, 162

Mallarmé's famous poem *Un Coup de dés* also has an aspect that brings it closer to Cage's than to Boulez' work: its use of typographical silence. The poem is often sparingly spread over the white page. But otherwise there are no real indications that Mallarmé was of any influence on Cage. It seems to have been Boulez in his correspondence with Cage who introduced him (without much apparent consequence) to the French poet, and in a letter of 1953³⁸ even mentions sending him the *Pléiade* edition of Mallarmé's complete works (which would only include the *Livre* in later editions). Those letters read as a supportive exchange of ideas between two leading avant-garde composers, until Boulez in 1957 published, in *La Nouvelle Revue Française*, his text *Alea*³⁹. Although nobody is named in what reads as a very angry, yet meticulously constructed diatribe it is clear that it is directed at the New York School protagonists, at John Cage in particular. It opens with:

One can today note that many composers of our generation suffer from a constant preoccupation with chance, not to say they are haunted by it. It is, at least as far as I know, the first time such a notion occurs in Western music. [...] The most elementary form of the transmutation of chance can be traced back to the adoption of a philosophy laced with Orientalism masking a fundamental weakness of composition technique.⁴⁰ (Pierre Boulez)

Reading *Alea* one tends to forget that the subject is music and not some evil curse threatening humanity at large. Boulez goes as far as suggesting that indeterminate music is unfit for consumption:

Objectivity continuously dissolves in front of your eyes, like some sort of fragile and irritating mirage, draining and drying out all life force; those slices of chance are unfit for consumption, because, in the first place, *why* would one consume them!⁴¹ (Pierre Boulez)

38 BOULEZ, Pierre & CAGE, John, 1993, *The Boulez-Cage Correspondence*, (1949-1954), Cambridge University Press, 146

39 BOULEZ, Pierre, 1966, *Relevés d'apprenti*, Editions du Seuil, 41-56 (transl. Guy De Bièvre)

40 BOULEZ, Pierre, 1966, *Relevés d'apprenti*, Editions du Seuil, 41 (transl. Guy De Bièvre)

41 BOULEZ, Pierre, 1966, *Relevés d'apprenti*, Editions du Seuil, 43 (transl. Guy De Bièvre)

Open form notation is discarded because of its imprecision:

Notation will become sufficiently – though insidiously – imprecise to allow its grids – hypothetical diagrams – to let through the performer's instantaneous, changing and mottled choice. One *could* lengthen this silence, one *could* end this sound, one *could* accelerate, one *could*... at each moment...; in other words, one has chosen from now on to be meticulously imprecise.⁴²

The flexibility of form is added to the list of improper concepts:

In a musical universe in which all notion of symmetry tends to disappear, in which the idea of variable density gains more importance at each stage of the construction – from matter to structure – it is logical to look for a form that cannot be frozen, an evolving form which will rebel against its own repetition; in other words, a virtuality.⁴³ (Pierre Boulez)

Cage, who was clearly targeted in this passage would bitterly react:

After having repeatedly claimed that one could not do what I set out to do, Boulez discovered the Mallarmé *Livre*. It was a chance operation down to the last details⁴⁴. With me the principle had to be rejected outright; with Mallarmé it suddenly became acceptable to him. Now Boulez was promoting chance, only it had to be *his* kind of chance.⁴⁵ (John Cage)

Forty years after Boulez the German/Dutch composer Konrad Boehmer wrote an even more virulent attack on indeterminacy; agreeing with Boulez' criticism and naming the main subject of his attack. He starts by stating that, “The link between serialism and indeterminacy, which had already been critically elucidated without Cage's contribution, had produced works such as Boulez's *Third Sonata* [for piano; 1957-62] and

42 BOULEZ, Pierre, 1966, *Relevés d'apprenti*, Editions du Seuil, 43 (transl. Guy De Bièvre)

43 BOULEZ, Pierre, 1966, *Relevés d'apprenti*, Editions du Seuil, 45 (transl. Guy De Bièvre)

44 Stating that Mallarmé's *Livre* is a chance operation down to the last details – which it is not – suggests that Cage is only acquainted with the work by what Boulez told him about it (which is not much), rather than by reading Jacques Scherer's account (which, along with the *Book* itself was never translated into English) of it.

45 PEYSER, Joan, 1976, *Boulez*, Schirmer Books, 129

Stockhausen's *Zeitmasse* [for wind quintet; 1957]."⁴⁶ Claiming that the European composers came to indeterminacy all by themselves (as if who was first in this case is such an essential issue), he repeats Boulez' opinion with augmented virulence when he writes,

Cage had the greatest success among composers of inferior quality, those who wanted to escape from the rigours of serial composition anyway, but who - obeying the fashion of the times - did not dare return to the neutral idiom of Neoclassicism. Through Cage, they not only justified the discovery of a dismaying simplicity in technical matters; they also legitimated these as "up-to-date" by means of handy philosophical props. And the lament that Cage has had a catastrophic effect on musical development, raised year after year in the press, is only a half- truth; equally so are the protests by individual composers that their aleatory conceptions were in no way influenced by Cage.⁴⁷ (Konrad Boehmer)

He is however cautious enough not to mention any of those inferior composers by name.

It all seems to be a very personal issue and verges on the edge of ridicule when we read how Cage's influence (half a paragraph after reading that Cage had nothing to do with the European composers having their go at indeterminacy) was responsible for the demise of an otherwise most promising composer:

On the other hand, composers such as Stockhausen and Pousseur- however much they might personally deny it - have internalized the Cageian world view with no benefit to their production. This is especially so in the case of Stockhausen, who until the *Groups for Three Orchestras* (1955-56) wrote work on the highest level; his submission to ideological forms of indeterminacy was followed by a drastic drop in compositional quality, now evident.⁴⁸ (Konrad Boehmer)

46 BOEHMER, Konrad, 1997, 'Chance as Ideology', *October*, Vol.82 (Autumn, 1997), MIT Press, 62

47 BOEHMER, Konrad, 1997, 'Chance as Ideology', *October*, Vol.82 (Autumn, 1997), MIT Press, 62-63

48 BOEHMER, Konrad, 1997, 'Chance as Ideology', *October*, Vol.82 (Autumn, 1997), MIT Press, 63

In Boulez' case one could assume that some of his opinions on indeterminacy and/or chance vs. Cage's may have something to do with treacherous similarities between two languages: French and English. When Boulez writes,

'Aleatory' is a word that is frequently used, rightly or (more often) wrongly, when speaking of 'chance'. It means a directed, or controlled, chance, one that you have yourself chosen. [...] But to call this 'chance' is quite absurd, because chance [...] can give you only one satisfactory solution out of the 10 million that are possible; and this after all is not the object of composition. [...] In stating the problem of so-called 'chance' music, the material cannot be dictated by chance, because it is impossible to take the 10 million to one chance of success of happening on some interesting combination. (*Where are we now?* transcript of a lecture given in May 1968 in Saint Etienne)⁴⁹ (Pierre Boulez)

he seems to be confusing the English 'chance', meaning probability, and the French 'chance', meaning luck. It is strange, because it gives the impression that Boulez is not familiar at all with any of Cage's writings; or for that matter with Cage's letter to him from May 22 1951⁵⁰ in which he gave full details of the procedure he applied to compose *Music of Changes*.

1.6 Good vs. bad indeterminacy?

Alea's publication at the same time as Boulez' *Third Piano Sonata*, which allowed the performer various navigation possibilities through the material, suggested that though certain forms of indeterminacy were not to be done, others were acceptable. In an interview with musicologist Célestin Deliège Boulez specifies "One speaks of chance, which is fine; but one does not think about what its intrusion in a work in general means, nor about the annihilation of the aesthetic project, even when it accepts pure chance. Chance as such is not interesting at all."⁵¹ In the same interview he explains his own take on flexibility:

49 BOULEZ, Pierre, 1986, *Orientations*, Faber and Faber Ltd, 461

50 BOULEZ, Pierre & CAGE, John, 1993, *The Boulez-Cage Correspondence*, (1949-1954),

51 BOULEZ, Pierre, 1975, *Par volonté et par hasard, entretiens avec Célestin Deliège*, Editions du Seuil, 109 (transl. Guy De Bièvre)

The statute of the work does not really change: we give it a certain flexibility, but we do not alter its meaning, and fundamentally not even the perception we have of it. I have often compared that work to a city map: one does not change its layout, one perceives it as it is, but one has different ways of roaming, different ways of visiting it. The work is like a city or like a labyrinth. A city is often a labyrinth as well: we visit it and we choose our own directions, our own approach, but it is clear that to visit a city requires a precise map and certain circulation rules.⁵² (Pierre Boulez)

It certainly sounds like if we visit a park instead of a city we should not tread on the grass. Metaphorically comparing most of the European composers who ventured in the flexible world with their New York counterparts, one could say that the former give their performers cities and a map (to at all cost prevent them from getting lost), while the latter provide them with more or less specific materials to build their own cities and an array of instructions how to proceed, ranging from none to more restricting ones. A more musicological difference is the fact that the European avant-garde in Darmstadt was looking for a way to get beyond post-weberian serialism, which most of them saw as a dead end street, while this clearly was not an issue for Cage, Feldman, Brown or Wolff.

Though *Alea* was in the first place aimed at transatlantic targets, it elaborated in other directions as well. When Boulez wrote

There is however a more poisonous and more subtle kind of intoxication. [...] Composition aims for the most perfect, the smoothest, the most untouchable objectivity. And by what means? Schematization, simply, takes over from invention. Imagination – ancillary – limits itself to giving birth to a complex mechanism, in turn in charge of generating microscopic and macroscopic structures until the exhaustion of possible combinations indicates the end of the work.⁵³ (Pierre Boulez)

52 BOULEZ, Pierre, 1975, *Par volonté et par hasard, entretiens avec Célestin Deliège*, Editions du Seuil, 106 (transl. Guy De Bièvre)

53 BOULEZ, Pierre, 1966, *Relevés d'apprenti*, Editions du Seuil, 42 (transl. Guy De Bièvre)

it was no longer the indeterminacy of the New York School he had in mind. Thus the absence of names in *Alea* caused some collateral damage. One of the victims was the Belgian composer Henri Pousseur who wrote to Boulez that he did feel targeted too, which yielded, in a letter dated August 1957, the following interesting confession of his French colleague:

Finally, about my paper, who do you think those criticisms were aimed at? I will go as far as to paraphrase Flaubert when he said: “Madame Bovary, c'est moi.” Don't you think that the most tainted form of confession is the impersonal one, that the addressee is another ME and not anyone else? If you did feel concerned, it means we all have dreamt the same utopias, resulting in the same catastrophes. I beg you to believe that I am not gentle with my mistakes, even if something came out of them.⁵⁴ (Pierre Boulez)

While Boulez was apparently struggling with feelings of guilt, Henri Pousseur, in 1959 wrote his own view on the subject: *Musique et Hasard*⁵⁵ (*Music and Chance*). Pousseur's text is not aimed at discrediting anyone. To start with, he is unambiguous about the American origin of indeterminacy, referring more specifically to encounters in Darmstadt, in 1954, between John Cage and David Tudor and what was then still seen as the “younger generation” of European composers, Karlheinz Stockhausen in particular (specifying that Tudor's own ideas played a very important role in this). He also suggests that the European composers' struggle with finding the modalities of a post-weberian musical language proved to be a very fertile ground for any type of new ideas. Indeterminacy must have seemed like a radical liberation of the restrictions of serialism. “At first, the influence was felt in instrumental practice, a new notation, a new determination, more qualitative, more directly connected with the spontaneity of the realizing action (e.g. of the rhythmic phenomena) and, consequently in the reciprocal variability of the structures.”⁵⁶

54 BOULEZ, Pierre, cited in DECROUPET, Pascal, 1994, *Développements et ramifications de la pensée sérielle. Recherches et oeuvres musicales de P. Boulez, H. Pousseur et K. Stockhausen de 1951 à 1958*, unpublished thesis, Université de Tours, quoted in DELIEGE, Célestin, 2003, *Cinquante ans de modernité musicale: de Darmstadt à l'IRCAM*, Mardaga, 250 (transl. Guy De Bièvre)

55 POUSSEUR, Henri, *Ecrits Théoriques 1954-1967, choisis et présentés par Pascal Decroupet*, Mardaga, 109-135 (transl. Guy De Bièvre)

56 POUSSEUR, Henri, *Ecrits Théoriques 1954-1967, choisis et présentés par Pascal Decroupet*, Mardaga, 110 (transl. Guy De Bièvre)

After describing the historical situation, and warning, in a slightly reactionary way, for the dangers of the indeterminacy idiom (“The unconditional emphasis, without prior criticism, the almost blind application of certain ways of thinking and proceeding, and, especially, the negligence of specific problems distinguishing the European evolution from Cage's and his friends' approach, appear to us as containing real dangers.”⁵⁷), Pousseur opts for a much more constructive, rather than adversary approach. Thus the rest of the text addresses the concept of indeterminacy by means of a philosophical analysis of its opposite: determinism. Looking at determinism from, among others, the points of view of physics, gestalt psychology and information theory, Pousseur concludes that,

While we have long thought that chance and determination are opposites, it appears that the latter, on a mechanical level (but that is where the idea we have of it everywhere else originates), is nothing but a consequence of the former, as an absence of meaning and of creative intention. Indeterminacy on the other hand, is closely related to the existence of meaning and creative intention: it opens their action field. But just as they realize themselves by using all the inertias of the world, diverting them from their directions, foiling them by using them to their own advantage, chance can be used as a starting point for oriented indeterminacy. It is at the very heart of this cycle of ambiguities that a new understanding of the world seems to take shape, new relations between that world and men and between men themselves.⁵⁸ (Henri Pousseur)

This paragraph reads like the merging of the ideas of both Cage and the European avant-garde. Contrary to *Alea* (and Boehmer's pamphlet much later) Pousseur's text talks not of a dangerous threat to the future of music, but of a common ground (be it one offering different perspectives). With Pousseur serialism embraces indeterminacy as a complementary, rather than antagonizing dimension.

Serialism is not just seen as the will to mechanically control the elements that were initially chosen, to exhaust the addressed phenomenon by means of

57 POUSSEUR, Henri, *Ecrits Théoriques 1954-1967, choisis et présentés par Pascal Decroupet*, Mardaga, 110-111 (transl. Guy De Bièvre)

58 POUSSEUR, Henri, *Ecrits Théoriques 1954-1967, choisis et présentés par Pascal Decroupet*, Mardaga, 134 (transl. Guy De Bièvre)

organizing and combining operations, but as a tool capable of transgressing the author's omnipresent subjectivity, thus even meeting certain Cageian concepts.⁵⁹
(Dominique & Jean-Yves Bosseur)

Michel Butor, Pousseur's literary accomplice confirmed this when he said, "Yesterday's serialism was a closed serialism within which one imagined being able to explore all of the elements' possibilities; today structures are sought after which are always expanding, elements allowing continuously new perspectives."⁶⁰

While Boulez limited his applications of (controlled) indeterminacy to a few works (the 3rd *Piano Sonata*, *Eclats* and *Domaines*), Pousseur (whose first flexible work was the aptly titled *Mobile* for two pianos (1956-58)) would use mobile formats consistently throughout his oeuvre. One of his recurring methods was the use of scores with cut out windows in which fragments of other pages could appear and be subjected to the tempo or dynamic indications of the top page. Karlheinz Stockhausen would also apply different forms of indeterminacy in various works until the second half of the seventies. Though it was again Pousseur who, around 1980, tried to put things in perspective when interviewed by Dennis Levaillant.

Was openness exclusively a formal concern?

Certainly not for me. I remember having clearly signified, some twenty years ago, the social and political dimension of the first open form propositions: they went beyond a certain division of labour, they disposed of a certain form of subordination of the interpreter who, in certain cases, had become a real machine and because of that was living, be it in a very peculiar way, but not less exemplary, the worker's alienation. Stockhausen opposed this idea. He declared that, e.g. in *Zeitmasse*, he did not offer greater freedom to the performers, but only a more efficient form of notation. For me this is totally similar to the situation where workers are being offered a more humane relation to labour, not for liberating purposes, but to increase production. After all, the verbal scores of

59 BOSSEUR, Dominique & Jean-Yves, 1979, *Révolutions Musicales, la musique contemporaine depuis 1945*, Editions Le Sycomore, 79 (transl. Guy De Bièvre)

60 BOSSEUR, Dominique & Jean-Yves, 1979, *Révolutions Musicales, la musique contemporaine depuis 1945*, Editions Le Sycomore, 80 (transl. Guy De Bièvre)

Aus den Sieben Tagen were accompanied by totally imperative guidelines!⁶¹
(Henri Pousseur)

Other composers limited their explorations of the free world to just one experiment (e.g. Bruno Maderna's *Viola*, from 1971). The European composers of the Darmstadt school all found different applications of the concept of indeterminacy; not only different degrees of freedom, but also different techniques, yielding different aesthetics. Therefore it is remarkable, and sad, that the papers they published on the subject never seemed to address musical details, as if those were irrelevant compared to the risk of being accused of serialist apostasy.

1.7 How open?

The first thing is to consider one's domain.

Then, put a fence around it; for although it may be limited by other external circumstances, one wants to have a hand in this unwanted limit.⁶²(Paul Valéry)

It is striking that there is such a huge difference between the music resulting from the experiments with indeterminacy of Boulez, Stockhausen or Pousseur (to name but the three main European Darmstadt protagonists) and those of the New York School. There is a strong aesthetic similarity between the works of the European composers. However mobile, their musical content is heavily indebted to serialism. And it takes but one look at the scores to get a fair idea of how the music will sound. The indeterminate works of Brown, Feldman, Cage and later Wolff on the other hand, are very different from one another, imbued with personal aesthetics rather than with musical heritage. Although it must in all fairness be said that their performances are also flavoured by the then prevalent new music aesthetics, avoiding tonality or anything else that would remind the listener of older, more conventional music.

The performers of Boulez' *Third Sonata* or Stockhausen's *Klavierstück XI* have some freedom to shuffle elements of the score, but they still have to play the notes that the

61 POUSSEUR, Henri, cited in LEVAILLANT, Dennis, 1981, *L'improvisation musicale, essai sur la puissance du jeu*, Jean-Claude Lattès, 86 (transl. Guy De Bièvre)

62 VALÉRY, Paul, 1965, 'Monsieur Teste' [1896], *Oeuvres (vol.2)*, La Pléiade, 69 (transl. Guy De Bièvre)

composers had written, and those notes are responsible for the distinct serialist flavour. When following the composer's instructions it is not possible to give a 'wrong' performance of those works. Performers of Feldman's graph pieces, or Brown's *December 1952*, or Cage's *Variations* are free in their pitch choices and nothing in the instructions tells them for instance not to choose consonant materials. Or at least that is what one could assume from those guidelines. When Feldman writes in the instructions for the *Projection* or *Intersection* pieces: "Any tone within the ranges may be sounded. The limits of these ranges may be freely chosen by the player.", it sounds like a bluesy or even a single note (in various octaves) version would be acceptable. But it seems that the composer in these cases expected the performer to be aware of an unwritten set of aesthetic rules. Thus Peter Dickinson tells the following anecdote about a student performance, in the presence of Feldman, of *Projection 2*:

The score is written in the form of a graph with space equal to time. Each player has a copy of this so he can realize his own part and notice the others. In effect the piece is in bars of four beats, and the players are told when to play, exactly how many notes to use, but their choice in pitches is restricted only by division into high, middle and low.

At first Feldman asked for the sound to be 'sourceless' and demanded a perfection of tone once the chosen note had been achieved. He did not object to the players working out their parts in advance but emphasized listening. The pianist was rebuked for playing a close-position minor triad in the middle register, although there are of course no written instructions to the contrary.⁶³
(Peter Dickinson)

When Dickinson later informed about this 'contradiction' Feldman wrote:

As for our lovely pianist and her major 3rd ...

1. If she heard it - out of a maze - so to speak
2. If she heard it even as a tonal resolution
3. If she heard it as a color (or the COLOUR)
4. If - in fact - she heard it

⁶³ DICKINSON, Peter, 2006, 'Feldman Explains Himself During His First Visit to Europe in 1966' (1966), in VILLARS, Chris, *Morton Feldman Says, Selected Interviews and Lectures 1964-1997*, Hyphen Press, 21

THEN -

O.K.!!

But, I'm afraid her 3rd can best be described as a ... tick.⁶⁴ (Morton Feldman)

This could maybe be interpreted more as a responsibility requirement to the player (“you are allowed to play whatever pitch(es) you want, but make sure you have a very good reason, beyond mere arbitrariness, within the context of the work, for your decisions”), rather than a restriction of what is presented as freedom of choice.⁶⁵ But for Peter Dickinson it was clear that “Feldman is working within common practice stemming from Webern where intervals of the ninth, seventh or tritone dominate, and a suggestion of tonal relations would obviously be out of place.”⁶⁶ It remains a delicate issue and by now, for some performers, 7th or 9th intervals could also become “ticks”. On the other hand in the *Durations* series, where all pitches are notated but the different performers read through their parts at their own chosen speed the odd triad is unavoidable (but it will indeed not be the product of any “tick”, but of mere coincidence).⁶⁷

David Behrman comes to similar conclusions in his analysis of Feldman's *Durations*:

The unwritten rules describing such limits may in fact be imposed in rehearsal by the composer, the conductor, or by the players familiar with the composer's work upon those unfamiliar with it. They describe the boundaries of a

64 FELDMAN, Morton, 2006, 'Letter to Peter Dickinson', 1966, in VILLARS, Chris, *Morton Feldman Says, Selected Interviews and Lectures 1964-1997*, Hyphen Press, 22

65 A similar situation is recalled by Earle Brown: “I remember we were rehearsing at the American Dance Festival at Connecticut College and John (Cage) was conducting Morty's (Feldman) piece. Morty was in the audience and all of a sudden Morty stood up in the audience and said “I don't like what the violin is playing.” And John and everybody stopped and the violin said “Well, it says 'play three notes in the high register'. I play three notes in the high register, that is what you asked for, three notes in the high register.” And Morty said “Play three notes that I like.”” Earle Brown interviewed by Cornelius Duffalo and Gregg Bendian on May 5 2002, <http://musicmavericks.publicradio.org/programs/program7.html> (accessed on July 1 2010)

66 DICKINSON, Peter, 2006, 'Feldman Explains Himself During His First Visit to Europe in 1966' (1966), in VILLARS, Chris, *Morton Feldman Says, Selected Interviews and Lectures 1964-1997*, Hyphen Press, 21

67 Christian Wolff confirmed that this kind of openness was all but free of risks: “It was open to a kind of dangerous extent, because once you leave pitch choices open, especially with certain continuities there, people can stick a tune in - nothing says they can't. [...] What we said at the time was that we assumed, as everybody has a fair right to assume, a measure of good will on the part of the performers, and that they will not deliberately set out to sabotage a piece. But on the other hand, I also thought quite clearly in terms of making a piece so to speak sabotage-proof.” WOLFF Christian, 1998, 'In A Kind of No-Man's Land, Conversation with Cole Gagne' (1993), in *Cues, Writings and Conversations*, Edition MusikTexte, 254

personalized style (or “tradition” or “common practice”) built up by the composer and passed on in the course of performances to his players. They might be compared to the rules governing those facets of performance, unsettled in the scores of the past, which have become perennial subjects of speculation among musicologists: aspects (such as rhythmic alteration in the baroque) which were passed on through oral rather than written tradition.⁶⁸ (David Behrman)

Could we conclude that in the end things were maybe not as 'open' as they were presented, or that the radical openness was an unsuccessful experiment? This would explain the fact that all of the original 'indeterminists' would gradually close their forms during the following decades. Each of them in different ways: Feldman fully notating his compositions (while in fact retaining some of the structural aesthetics of the graph pieces); Brown substituting his early radicalism for 'conducted' modular constructions; Wolff pursuing until the mid seventies notation experiments often focussing on interaction based upon aural cues between the performers and eventually returning to 'traditional' notation.

John Cage seems to be the only one to have stuck to his original concepts (which were not that open to start with, at least not from the performers' point of view), often allowing players to simultaneously perform different works of his (merely suggesting which ones could work together, e.g. *Aria + Fontana Mix* or *Song Books + Concert for Piano and Orchestra* or *Rozart Mix*, but not limiting the choice to those).

1.8 Opening the closed form...and all that jazz

A great deal in jazz has always been left up to chance, but a framework of some sort was always in use (whether written, or stylized by custom).⁶⁹ (Don Ellis)

The world of music is composed of parallel universes. Jazz most definitely is one of them. The simplistic division into “serious” music (e-Musik) and “entertainment” music (u-Musik), can only be frustrating as it is an either/or assumption and makes no sense at

68 BEHRMAN, David, 1965, 'What Indeterminate Notation Determines', *Perspectives of New Music*, Vol3, No.2 (Spring-Summer 1965), 61

69 ELLIS, Don, 1961, liner notes, *New Ideas*, LP, Prestige NJ8257

all when the wide variety of musics co-existing under the jazz label are considered. No jazz composer or arranger (as they seem to share fairly equal hierarchical positions) has thought of classifying his or her creative output as “open form”, yet it often would fit the picture. It is quite significant that Earle Brown had jazz roots (which made him an exception among his New York School peers) and often referred to them when he would explain his compositional practice: “[...] I come out of jazz, and can make a decision. I'm not afraid to play the trumpet and play this and play that and play whatever; I come out of that tradition.”⁷⁰

Due to the ambiguity of the distinction between the composer and the performer - the latter often being considered more important than the former⁷¹, or indirectly a “re-composer” - that which in a way could be seen as a variation on a pre-existing theme is usually categorized as an “improvisation”. But as Chris Smith pointed out in his essay *Miles Davis and the Semiotics of Improvisation*, “The term 'improvisation' is utilized here with a limited definition, the one which is most commonly intended in jazz terminology. In this construction, 'improvisation' connotes musical procedures that depend on the selection, sequencing, and juxtaposition of musical elements, which selection is done in the moment by the players.”⁷² This description calls for some relativity: the selection can be done beforehand and the missing ingredient, often the main one, is (re)interpretation of a harmonic progression (in the case of free jazz a better description might be 'harmonic' field).

A recurring feature in jazz is the “great American songbook”, a collection of songs, most of which were written during the first half of the 20th century, usually as part of a series of songs from a specific show. This collection has been seen throughout jazz history as a very convenient staple. It provided usable harmonic structures and melodic lines, offering the extra advantage that the basic materials were known to a vast audience.

70 BROWN, Earle, 2007 , video interview on *Tracer*, DVD, Mode 179, Mode Records

71 People will for instance speak of John Coltrane's “*My Favorite Things*”, when he played his version of the song, rather than mentioning Richard Rodgers, the original composer.

72 SMITH, Chris, 1998, 'A Sense of the Possible: Miles Davis and the Semiotics of Improvisation', in NETTL, Bruno, RUSSELL, Melinda, 1998, *In the Course of Performance, Studies in the World of Musical Improvisation*, The University of Chicago Press, 286 (n)

None of the original songwriters (Gershwin, Porter, Carmichael, Rodgers, etc.) would have thought of their compositions as being “indeterminate” or “open”, yet a majority of jazz musicians and arrangers saw the songs as very flexible material; and through the evolution of jazz that flexibility only increased. None of the songwriters had given any explicit permission to alter their music in any way either. Their leniency might have had to do with the fact that they were professionals, living of their art, depending on sheet music sales, but also, and much more so, on royalties, which were the same regardless of the alterations their music was subjected to. Some jazz musicians would take the same liberties with so-called “serious music”. Miles Davis and Gil Evans thus subjected Joaquin Rodrigo's *Concierto de Aranjuez* to their jazz aesthetics and arrangements on the *Sketches of Spain* record. Davis recalled the following anecdote: “Joaquin Rodrigo, the composer of *Concierto de Aranjuez*, said he didn't like the record, and he - his composition - was the reason I did *Sketches of Spain* in the first place. Since he was getting a royalty for the use of the song on the record, I told this person who had played it for him, “Let's see if he likes it after he starts getting those big royalty checks.” I never heard anything about or from him after that.”⁷³

It seems as if jazz musicians (at least those with original views, who did not just copy their peers) would look at the score of a song from the standard repertoire and then wonder where they could alter it, what kind of liberties they could take with it to have it functioning within their current aesthetic, thus opening its form. At best they would keep the original harmonic structure (though often they would elaborate on it) and the main melody (or at least part of it) as a root for improvised solos. In other words: they had no inhibitions whatsoever declaring a determinate composition indeterminate. Usually the materials would be derived from “Fake” or “Real” books, collections of standards reduced to elementary melodic and harmonic features. The first liberty these reductions would take with the score is getting rid of the introduction (which indeed was but rarely sung or played outside of the original show context, and therefore less present in the collective memory than the rest of the song). Those “Fake” or “Real” books are in a way collections of open form compositions, as it never was the idea to merely play the songs as they appeared in them. And contrary to the conscious open form compositions of the avant-garde, their performances do not have to agree with the canon or tradition of the composers, but with the aesthetical zeitgeist of jazz at the time

73 DAVIS, Miles & TROUPE, Quincy, 1989., *Miles, The Autobiography*, Simon & Schuster, 234-235

of their performance.

(...) instead of the simplistic, though touching note-for-note replay of the ballad's line, on this performance each note is tested, given a slight tremolo or emotional vibrato (note to chord to scale reference), which makes it seem as if each one of the notes is given the possibility of “infinite” qualification, i.e., scalar or chordal expansion ... threatening us with those “sheets of sound”, but also proving that the ballad [Billy Eckstine's *I Want to Talk About You*] as it was written was only the beginning of the story.⁷⁴ (Amiri Baraka)

An understandable criticism of the claim that jazz musicians are opening up a closed form would mention the fact that they usually stay within a 16 or 32 bar structure. But structure and form are not necessarily the same thing. As said earlier all musical parameters can have an influence on the form perceived by the listener. *My Favourite Things* as sung by Julie Andrews in *The Sound of Music* has the same structure as John Coltrane's version of the song, yet it would be very reductive to say both have an identical form. From another perspective one could say that a Calder mobile may present different configurations, but always the same (overall) form, while Earle Brown would see Calder's work as an example of “open form”.

1.9 Anti-music?

In December 1965, as a culmination of almost 30 years of continuously evolving standard “re-lectures”, trumpeter and band leader Miles Davis, with what came to be known as his second great quintet (featuring Wayne Shorter, tenor saxophone; Herbie Hancock, piano; Ron Carter, double bass and Tony Williams, drums) played three consecutive nights (each comprising two sets) at the Plugged Nickel in Chicago. According to saxophonist Wayne Shorter, as a reaction to the tediousness of the routine the band had by then reached, drummer Tony Williams suggested “What if we made anti-music? Like, whatever someone expects you to play that's the last thing you play?”⁷⁵ To which they all agreed.

74 JONES, LeRoi (Amiri Baraka), 2010, *Black Music*, New York: Akashi Books: Renegade Reprint Series, 77

75 MERCER, Michelle, 2007, *Footprints: The Life and Work of Wayne Shorter*, Tarcher/Penguin, 109

Much to their surprise the record company (Columbia) had decided to record those concerts, but they still stuck to the challenge they had imposed upon themselves (though it might have been insecurity about the experiment that prompted Davis to object to the recording of the first night). The record company was clearly not prepared for the results of the recording and kept them in the vaults until 1982, when it released an edited selection of them. It was only in 1995 that the complete set was published (disclosing the cautiousness that was applied when the 1982 'highlights' were selected).

It can seem strange that at a time when free jazz had been around for half a decade⁷⁶, the liberties the Miles Davis band took with the standards did not seem appropriate. Maybe Columbia assumed the recordings would not match the expectations the audience had of Miles Davis, who by then was known for creative yet relatively controlled standard interpretations. The Plugged Nickel versions of the songs are confusing, even to a trained ear. In his analysis of one of the songs (some are repeated over the course of the different sets and are given different treatments each time), "*Stella By Starlight*" (by Victor Young), Henry Martin writes about a specific passage: "The rhythmic complexity of this transition is not only dazzling, but it also obscures the form - that is, it is hard to tell when the fourth chorus begins. In moments such as these, it seems possible that the group is abandoning the form."⁷⁷

Starting to listen in the middle of one of the songs, and being familiar with the original chord changes, it is very hard to guess which song is exactly being played. When for instance we consider "*I Fall in Love too Easily*" (by Sammy Cahn and Jule Styne), which the band plays four times over the two nights, we are treated to four different approaches within a similar macro-structure. We are tempted to state that this structure has become the main form, rather than the original harmonic structure. Each song begins with the trumpeter playing 'the head', the recognizable melody, subjected to a very elastic time/rhythm (different in all four versions) and occasional fragmentation, which then gradually, chorus after chorus, disintegrates. In some versions the piano joins from the start, in other it waits a few bars. After some time it moves away from the chord structure from the original song, not necessarily matching what the soloist does.

76 It must be said that free jazz but rarely used the songbook repertoire, rather relying on own compositions.

77 MARTIN, Henry, 1997, 'The Nature of Recomposition: Miles Davis and "*Stella by Starlight*"', *Annual Review of Jazz Studies* 9 (1997-1998), 79

After 4 choruses the tenor saxophone takes over from the trumpet and by then we are far away from the original theme, of which at best merely small fragments are quoted (yet not even in all of the performances). We can assume that the saxophone solo also lasts 4 choruses, but this is hard to make out for sure, partly because the drums join in the general liquefaction. The tempo accelerates and slows down again, the patterns and even the meter changes. The saxophone is followed by the piano solo, again with an extreme interpretative elasticity (proportionally the piano solo in the four different versions takes between 12 and 31% of the total length). Then, seemingly without waiting for a specific conclusion of the piano, the trumpet takes over again with something close to the original melody. It would all make perfect sense if the transitions would show some logic, if the listener would be able to follow the time based structure. But instead one hears a collage of very different readings, tied together by a hard to pinpoint flow. Although the music seems to lead a very natural life of its own it is very hard, if not impossible to figure out the system that controls it. Continuity prevails over consistency.

On visual recordings of the same period it seems as if the band does not rely on visual cues. Although Chris Smith, on the same subject, did deduce that, “Visual cues between players are extremely subtle, almost invisible to outsiders.”⁷⁸ The audible cues seem much more important and are sometimes very obvious, though not necessarily repeated. Davis for instance often signals his next chorus with rhythmic accents (dotted rhythms, staccato playing), sometimes combined with a tonal indication (a note way out of the chord of the moment), that he will stray away from the changes. He also seems to decide on the end of the piano solo by just starting to play over it (in each of the four versions he starts his final solo in a different harmonic stage of the piano solo). All the other signals seem to come from the drums, by means of colour change (cymbals instead of snare drum or change from sticks to brushes), rhythmic change (ranging from accentuation to meter) or tempo change (either by rhythmic doubling or radical slowing down or accelerating). It is likely that there are more cues, very subtle ones, considering the fact that these were musicians who knew each other very well. Considering the variety of events and responses to them one could assume that the audible cues are more a kind of language than beforehand agreed upon codification. The major structuring

78 SMITH, Chris, 1998, 'A Sense of the Possible: Miles Davis and the Semiotics of Improvisation', in *In the Course of Performance, Studies in the World of Musical Improvisation* (Bruno Nettl, Melinda Russell, ed.), 1998, The University of Chicago Press, 263

anchor of the quintet was probably bassist Ron Carter, who often remained harmonically the closest to the original song, at least delivering strategic pedal points, which would explain why nobody ever seemed to get really lost, however distant they strayed from the original.

In a way the musicians (as this is a collective effort) are recomposing the original. (Would it be blasphemous to compare it to for instance what Beethoven did to Mozart's *Magic Flute* arias in his *Variations for cello and piano* (Op.66 and WoO.46)?) And they are recomposing it as an open form work, which allows for different results each time it is performed.

If one were to write the score based upon the performances, it could be limited to the melody (written with stemless notes) and the indication that there should be a sequence of solos (trumpet, saxophone, piano, trumpet) more or less based upon its original harmonization. The opening and closing solos should be close to the melody. The solos should run over an 'accompaniment' on piano, bass (both more or less harmonically relating to the melody and/or to what the soloists play and to each other) and drums (specifying a binary meter (though not excluding ternary or polyrhythmic excursions) at a moderate tempo (not necessarily steady)). The performers should at all time be aware of each other.

1.10 Aimless rambling

An essential difference between jazz and “non-jazz” avant-garde music seems to be the importance given to artistic concepts underlying the composition in the latter. Jazz music seems to be mainly interested in the musical result, rather than the idea(s) behind it. This is in a way nicely demonstrated in the early work of trumpet player and composer Don Ellis who happened to attend one of the first performances of Cage's *Cartridge Music* in New York and gave the following appreciation of it:

The concert tended to make one more aware of the music in the sounds surrounding us in our daily living, but I had the feeling that jazz musicians, given the conception, could do much more with the indeterminacy principle

involved. One of the pieces, 'Cartridge Music,' was performed by Mr. Cage and David Tudor. They had cards to which they referred, presumably for directions. This to me, is 'controlled' indeterminacy, which is an extension of something which has been taking place in music for a long time. It seemed valid to take Cage's idea one step further and not predetermine anything except the performers and their instruments. The idea of having planned cards with predetermined choices seemed too rigid. If the performers had more freedom they would be able to interact with the audience even more – giving a heightened dimension. Classical musicians, I reasoned, are not trained for this type of extemporizing today, but jazz musicians are.⁷⁹ (Don Ellis)

Ellis clearly did not know what the concept behind *Cartridge Music* was (for one thing, interacting with the audience was not an intention of John Cage at all), nor its performance rules. The concert however did inspire him to experiment with what he might have thought the idea was:

Al Francis and I tried improvising a duet with just free associations. This was not satisfying to me. I needed to hear more of an overall direction than aimless rambling. The idea of using an emotional framework, rather than a musical one occurred to me. We tried it once keeping in mind the thought of progressing from despair to hope. It 'happened.' I did not try it again before the record date for fear of establishing any set musical routine. When we came into the studio, this was the first thing recorded. Other than the emotional framework and the instruments and means at our disposal nothing was planned. We did one take.⁸⁰ (Don Ellis)

It is ironic that Stefan Wolpe's description of open form, when he was introducing the Darmstadt audience in 1956 to a piano piece by Earle Brown, "Open means leaving open. It means spans that are not divided up, not at all symmetrical, not given to the same voice part. Rather new events reach into the empty space from the outside and bisect it at a usually asymmetrical point. Open means dropping something and not picking it up (...)"⁸¹ would be more appropriate to describe the Miles Davis' Quintet

79 ELLIS, Don, 1961, liner notes, *New Ideas*, LP, Prestige NJ8257

80 ELLIS, Don, 1961, liner notes, *New Ideas*, LP, Prestige NJ8257

81 WOLPE, Stefan, 1984, 'On New (and not-so-new) Music in America' (1956), *Journal of Music*

approach to standards in 1965, than Brown's work (even more so because the work by Brown that was performed after Wolpe's introduction supposedly being *Perspectives for Piano*, which is not 'open' at all).

A few years after the Plugged Nickel concerts Miles Davis would veer away from the standard repertoire while elaborating on the technique he used to open up the standards. His own compositions would often consist of a melodic theme (later a riff, providing rhythmic information as well) and just a few chords used by the other musicians as improvising motifs or backdrop. Confirming that grey area, which in a way exists since the early open form works, between improvisation and composition.

1.11 Conclusion

My aim is to borrow from the (visible) world nothing but forces - not forms, but the means of making forms. (Paul Valéry)⁸²

Most of the music addressed in this introduction dates back to the 1950s (with the exception of the jazz examples) and this could give the impression that “open form” is a musical phenomenon limited to a specific time period. This is of course not the case; my intention was to concentrate on its origins. Open forms would occur in various incarnations throughout recent music history up to this day. It has become part of the contemporary composer's potential arsenal. It has branched out into free improvisation and graphic and verbal notation (cf. Cornelius Cardew's *Treatise* or Karlheinz Stockhausen's *Aus den sieben Tagen*), two forms that will not be addressed in this thesis (with the exception of Earle Brown's *December 1952*, due to its seminal importance), as they raise issues of their own.

Already we have seen that the open form label applies to quite a variety of expressions, some even antagonizing each other. Where the avant-garde composer grants liberties to the performer, the jazz performer takes ungranted liberties with a composer's work. The freedom granted to the performer by the avant-garde composer has nothing to do with

Theory, Vol. 28, No.1 (Spring 1984), 13

82 VALÉRY, Paul, 1965, 'Monsieur Teste' [1896], *Oeuvres (vol.2)*, La Pléiade, 69 (transl. Guy De Bièvre)

democratization or generosity; it is an aesthetic compositional tool.

People sometimes ask, why don't you specify what you want and be done with it? I do! Actions are indicated more directly and simply. Their results, the sound and rhythm of these pieces (the rhythm, for instance, produced when one no longer knows where one is) could as far as I know, be brought about in no other way.⁸³ (Christian Wolff)

This freedom also sheds a different light on the social relationships between composer, composition and performer(s) by emphasizing them as an essential part of musical creation. These relationships are too often taken for granted. On the other hand the more or less open score is not a completely new invention: before fully notated scores became common, a larger responsibility was given to the performer and his or her ability to improvise, usually according to the practice of the time (as we have seen with the example of Morton Feldman, this still, in some cases, can be a requirement).

Drawing an extreme picture one could say that the fully notated, 'closed', music has in a way been performed by the composer beforehand, leaving the performer with a mainly reproductive role to play, or at least not a formative role. The open form score on the other hand cannot be reproduced and must therefore contain a generative/formative seed.

To paraphrase Werner Heisenberg we could consider the presence of the objective element of tendency and the subjective element of incomplete knowledge in the open form score. The ratio between these two elements could be a determining factor to differentiate various open form practices. In Boulez' *Third Piano Sonata* the element of tendency is by far stronger than the one of incomplete knowledge, while Brown's *December 52* offers a completely opposite ratio. The jazz performers situate themselves in between; the element of tendency could be seen as the period based aesthetic and the freedom taken with the original material being responsible for the incompleteness of the knowledge. It is interesting that both elements will also be experienced by the audience (when attending, for instance, a concert of Mozart's music one knows the tendency and

83 WOLFF, Christian, 1962, liner notes for *John Cage-Christian Wolff*, TIME #58009, Time Records, Inc.

can have fairly complete knowledge of the music).

When confronted to extreme openness one can wonder what the added value of the score is as opposed to free improvisation. Anthony Braxton, who often situates his musical activities in the border area between both notation and improvisation, offers an interesting opinion about their relevant coexistence when he states,

Notation as practised in black improvised creativity is not viewed as a factor that only involves the duplication of a given piece of music - and as such an end in itself. Rather, this consideration has been utilized as both a recall factor as well as a generating factor to establish improvisational co-ordinates. In this context notation is utilized as a ritual consideration and this difference is important for what it signifies about extended functionalism. For in this position notation can be viewed as a factor for establishing the reality platform of the music - dictating the harmonic and rhythmic sound-path of activity and also as a centre factor... Notation in this context invariably becomes a stabilizing factor that functions with the total scheme of the music rather than a dominant factor at the expense of the music.⁸⁴ (Anthony Braxton)

We are aware that our use of the word “form” is ambiguous, which is why we did explore the issue at the beginning of this introductory chapter. Indeterminacy is too radical a description, as most open form works are only indeterminate to a certain extent and most composers have a fair idea of what they expect at least the general “flavour” of the end result to be. Maybe “open score” is a more satisfying denomination assuming compositional intention. The open score is a form generator rather than a form in itself, ideally providing (potential) totality, transformations and self-regulation.

[...] open form means that until that particular piece is over, its form is forever becoming.⁸⁵ (Leo Smith)

84 BRAXTON, Anthony, 1985, *Tri-axium Writings*, Volume 3, Synthesis Music, 35, quoted in LOCK, Graham, 1988, *Forces in Motion, The Music and Thoughts of Anthony Braxton*, Da Capo Press, 317

85 SMITH, Leo, 1975, liner notes to Marion Brown, *Duets*, Arista Freedom 1904

Chapter 2

EARLE BROWN - FOLIO

2.1 Never the same twice, yet always the same

I like form when it occurs. And I am interested in the human communications and provocations which will produce form, but I am not interested in forcing form. ⁸⁶(Earle Brown)

The so-called New York School is often presented as a homogeneous musical movement. Yet its four plus one members (John Cage, Morton Feldman, Christian Wolff, Earle Brown, and the “fifth musketeer” David Tudor, who, once he transmuted from virtuoso performer into live-electronics composer, would end up consistently producing the most indeterminate - relying on the unreliability of his maverick electronics - music of the group) did show more individual differences than their counterparts in Darmstadt (e.g. Boulez, Stockhausen, Pousseur, Nono, etc., at least in the early 1950s, when they had serialism as a common vehicle). Those European composers all seemed to share Webern as a common root, while Cage and co. had very diversified roots (and they were not very pronounced). They were also far away from the centres of tradition and saw that only as a advantage. ⁸⁷

John Cage was the oldest of them (14 years older than Brown and Feldman and 22 years older than Wolff) and had, by the time their association began, already established quite a reputation ⁸⁸. Next to his status he was (and would remain) by far the most verbally expressive of them, publishing essays and giving lectures. He was the one who would use “indeterminacy” as a common denominator between their musics, but they all gave their own interpretation to that concept, sometimes strongly contrasting with Cage's.

86 BROWN, Earle, 1966, *The Bases of Kinetic Form and Content in Music and Art*, lecture given at the Library and Museum of the Performing Arts, New York, unpublished, archives of the Earle Brown Music Foundation, Rye, New York

87 CAGE, John, 1973, 'History of Experimental Music in the United States' (1959), in *Silence*, Wesleyan University Press, 73

88 In March 1943 *Life Magazine* devoted an article with picture spread to a performance by his percussion ensemble at the Museum of Modern Art in New York and by 1948 he also gained extra fame as the composer of the *Sonatas and Interludes for Prepared Piano*.

The four composers are often associated with the New York School of visual arts, the abstract expressionists, but this association is again very different for each one of them. Morton Feldman would hold the closest rapport to the abstract expressionists, or at least to some of them like Philip Guston, Willem De Kooning, Franz Kline or Mark Rothko (even referring to them in composition titles). John Cage seems to have merely been a social acquaintance to them (his ideas of removing the artist or his/her intentionality from the art work being the opposite of what was “expressed” in abstract expressionism), as one of the active members of the Artist Club (later also known as the “8th Street Club”), where artists, composers, writers, poets, thinkers, etc. met, discussed and gave lectures. He would find more in common with Marcel Duchamp and then later with the newer generation of artists who were to follow the abstract expressionists, mainly Robert Rauschenberg (whose “white paintings” gave Cage the licence to launch his famous “silent” piece *4'33*”). Earle Brown would specifically relate to Jackson Pollock and even more to Alexander Calder (who was not an abstract expressionist). The much younger Christian Wolff seems to have witnessed this all from the sideline.

Ironically enough, while the Darmstadt serialists all saw Webern's radical implementation of Schoenberg's twelve-tone concept as the essence to feed upon, it was also Webern who played a key role in the origin of the friendship between the New York School protagonists. In 1950 Feldman and Cage both started exchanging their enthusiasm about Webern's music after a commonly attended concert (where Webern's *Symphony Op.21* was performed and ill-received) and Webern was also the magic name dropped by Earle Brown when he met Cage for the first time in Denver in 1951⁸⁹. In a different way it was also Webern's *Symphony* that Cage wanted his young 'student' Christian Wolff to analyse in 1950. Though none of them, unlike their European counterparts, felt the need to continue from where Webern had stopped. The contrast in appreciation of the music of Webern in New York and in Darmstadt is striking, while in Europe composers saw in it a licence to extend the series' parameters to dynamics, timbre and envelope, the four American composers seem to have heard it as an invitation “to let the sounds be themselves”. The irony was that their interpretation was somehow announced by Adorno when he wrote “In Webern the musical subject, falling

89 “At the party, John played his *Sonatas and Interludes*. Afterwards, I said to him, 'Do you think your music has any connection to Anton Webern?' He said, 'What do you know about Webern?!' It didn't seem strange to me that I knew about Webern, but he seemed shocked.” in YAFFE, John, 2007, 'An Interview with Composer Earle Brown', *Contemporary Music Review*, Vol. 26, Nos 3-4, June/August 2007, 293

silent, abdicates; Webern abandons himself to the material, which assures him indeed of nothing more than the echo of muteness.”⁹⁰ One cannot help thinking of Cage, Feldman, Brown and Wolff when reading about the silencing of the musical subject and the echo of muteness and especially about abandoning oneself to the material (the sound?). It seems as if on one side of the ocean people were reading the sparse notes and the system that held them together and on the other side they were listening to the silences that were framing them, allowing their individual existences. John Cage confirmed this when he wrote:

[...] Cowell remarked at the New School before a concert of works by Christian Wolff, Earle Brown, Morton Feldman and myself, that here were four composers who were getting rid of glue. That is: Where people had felt the necessity to stick sounds together to make a continuity, we four felt the opposite necessity to get rid of the glue so that sounds would be themselves.⁹¹ (John Cage)

Morton Feldman would put it in a more metaphysical manner, “We liked Webern very much, for the nature of his poetry and not for his theory. [...] Cage and I, we are the illegitimate sons of Webern.”⁹²

Of the New York School⁹³ members Earle Brown was the one whose early music did show most affinities to twelve-tone music and later serialism, although he seems to have arrived there by a detour. Originally (and for the rest of his life) Brown was a jazz enthusiast, at first actively, as a trumpet player. Aiming at becoming an aeronautical engineer he enrolled in Northeastern University in Boston, but these studies were interrupted by his enlistment in the army in 1944 (wanting to become a pilot). With the war ending before he could complete his training as a pilot, he joined the U.S. Army Air Force Band, simultaneously teaching himself harmony, counterpoint and arranging.

90 ADORNO, Theodor, 2006, *Philosophy of New Music*, University of Minnesota Press, 2006, 87

91 CAGE, John, 1973, 'History of Experimental Music in the United States' (1959), in *Silence*, Middletown, CT: Wesleyan University Press, 71

92 FELDMAN, Morton, 2006, 'Waiting, Martine Cadieu' (1971), in VILLARS, Chris, *Morton Feldman Says, Selected Interviews and Lectures 1964-1997*, Hyphen Press, 39

93 “The phrase “The Cage School” seemed so ironic to me because our earliest musics did not sound alike, our developed musics in the fifties didn't sound alike and they don't sound alike today. (...) But what brought us together was not that our musics were so much alike, it was more that our minds were working quite alike and our backgrounds, the art influences, literary influences, painting influences, etc happened to coalesce, they happened to parallel.” BROWN, Earle, interviewed by John Holzaepfel, 1989, unpublished, archives of the Earle Brown Music Foundation, Rye, New York

Once his military service was over, followed by a short-lived attempt to resume his engineering studies, he decided that, rather than an engineer, he wanted to be a musician, which led him to spend the next four years attending the Schillinger School of Music in Boston.

Schillinger's (mathematical) system was Brown's introduction to systems which to him presented similarities to serialism:

Not being European, or having been in Europe during the beginnings of “serial music”, I may have a rather warped conception of what a European thinks of it, however, my sympathy with it, in principle, is based on my intimate connection to a very similar way of thinking at nearly the same time as the first European serial work...between 1945 and 1950. The “similar way of thinking” was in the techniques of Joseph Schillinger: similar in that it was a “system” of total organization based on the serializing (enumeration) of all sound elements, generating materials by permutation and expansion within arithmetical and geometrical series, generating macroform from very small units (nuclei), concepts of density in strata (fields), and various statistical concepts.⁹⁴ (Earle Brown)

Schillinger would be an influence throughout his entire oeuvre, although he would shed the part of the theory he did not agree with:

The Schillinger principles which continue to be of interest to me are concepts such as: structural density, strats, the use of graphs in preliminary scoring, coordination of time structures, acoustic distribution of elements, and multi-coordinate systems of defining and organizing the sound continuum. (...) I do not agree with the overly mechanistic and mathematical basis of his aesthetic orientation.⁹⁵ (Earle Brown)

At the same time as he studied at the Schillinger School, he also took private lessons

94 BROWN, Earle, 1981, 'Serial Music Today', in BATTCKOCK, Gregory, *Breaking the Sound Barrier, a critical anthology of the new music*, 1981, E.P. Dutton, 100

95 BROWN, Earle, 1961, untitled, unpublished, archives of the Earle Brown Music Foundation, Rye, New York

from Roslyn Brogue-Henning, who was a twelve-tone composer herself⁹⁶. Both studies explain why the early published works (written while living in Denver), *Three Pieces for Piano* (1951), *Perspectives* (1952) and *Music for Violin, Cello and Piano* (1952), are explorations combining twelve-tone and Schillinger techniques. About the two former works Brown wrote:

In both cases the compositional technique is polyphonic (as differentiated from contrapuntal) but with a conscious plan to eliminate any audible linear independence of the individual voices to achieve a monophonic resultant sound texture of varying densities. Structurally both works are serial (...) and utilize generative principles suggested by Schillinger studies: such as, arithmetic and geometric series techniques applied to the transformation of sound elements and groups, and acoustically based density structures. These are the last works of mine which use tone rows and serial techniques of structural development and extension.⁹⁷ (Earle Brown)

There was however a fascinating and hard to fathom evolutionary jump from Brown's serial works to the contrastingly radical *Folio*, a collection of 7 works⁹⁸ (among which the legendary *December 1952*) composed between 1952 and 1953. For one thing it coincides with Brown's move to New York City (by way of Black Mountain College), where surrounded by works like Feldman's "graph pieces" and Cage's *Imaginary Landscape Nr. 4* and *Nr. 5*, *Black Mountain Piece* (which Brown likely attended in the summer of 1952), or *4'33"*, not too radical serial works could have seemed out of context. It would however be very unfair to accuse Brown of opportunism, rather one could assume that the context acted as a licence, if not an inspiration, to apply certain ideas he had been considering in the years prior to 1952.⁹⁹

96 In June of 1951 Earle Brown also contacted Arnold Schoenberg, requesting to study with him, which Schoenberg agreed with. Unfortunately a few weeks later, before Brown had made the move to Los Angeles, Schoenberg passed away.

97 BROWN, Earle, 1961, untitled, January 2 1961, unpublished, archives of the Earle Brown Music Foundation, Rye, New York

98 *Folio* was published together with an eighth work, *4 Systems* (1954).

99 Earle Brown confirmed this by way of Morton Feldman: "Morty always said, and I agree with him totally, that we didn't study with John, and we weren't influenced that much by John. But John gave us permission to be ourselves, and to take a chance on our own instinctive artistic potential. He sort of liberated and supported us." YAFFE, John, 2007, 'An Interview with Composer Earle Brown', *Contemporary Music Review*, Vol. 26, Nos 3-4, June/August 2007, p.304

When, in a 1995 interview, John Yaffé inquired about the radical change, from *Perspectives to Folio*, Brown explained:

This development had to do with so many different dimensions of things that interested me. I used to go to a little poetry bookshop on Boylston Street. I came across poetry pamphlets by Kenneth Patchen (...) Henry Miller, Ferlinghetti and Rexroth. I used to haunt that bookshop. Among other things, I found a book called *Vision in Motion* by Moholy-Nagy, a visual artist. (...) There were also Museum of Modern Arts booklets on Calder. And, I remember that in 1949, Life Magazine came out with the first major colour spread of the abstract expressionists (...).

(...) It was all these things, the spontaneity of jazz and the immediacy of what'll I do next - you don't think "What'll I do next?" You just do it.¹⁰⁰ (Earle Brown)

Earle Brown had experienced the spontaneity of jazz first hand as a trumpet player and while in Boston, at the end of the 40s he also got very interested in the spontaneity in the work of Jackson Pollock. He eventually would even try his hand at Pollock's way of working¹⁰¹: "While in Denver I was teaching arranging and composition--Schillinger techniques--and at that time I experimented by painting somewhat in the style of Pollock to get the feeling of what it was like to work that spontaneously."¹⁰² Next to the idea of spontaneity he was also fascinated by the concept of mobility in Alexander Calder's work¹⁰³: "Under the influence of Calder¹⁰⁴, I considered this kind of thing to be a mobility, which is to say a score that was mobile--a score that had more than one potential of form and performance realization."¹⁰⁵ Although very different, he saw something in common between Pollock's spontaneity and Calder's mobility: "What I thought of Pollock and Calder was, "Here is something which has in it its own potential

100 YAFFE, John, 2007, 'An Interview with Composer Earle Brown', *Contemporary Music Review*, Vol. 26, Nos 3-4, June/August 2007, p.298-299

101 The influence of Pollock seems to restrict itself to the works he painted more or less between 1947 and 1951, those relying almost exclusively on dripping techniques, of which any figuration or symbolism is absent (unlike the earlier and to a lesser extent the later works), which are also the works he is mainly associated with. (e.g. *Summertime: Number 98* (1948) or *Autumn Rhythm: Number 30* (1950)).

102 BROWN, Earle, 2008, 'On December 1952', *Journal of American Music*, Volume 26, Number 1, 1

103 The name "mobile" was suggested to Calder by Marcel Duchamp in 1931 and was first used in an exhibition of mobiles in France the same year.

104 Ironically, when two short films were made about Alexander Calder (1950, by Herbert Matter) and Jackson Pollock (1951, by Hans Namuth), their music was composed respectively by John Cage and Morton Feldman.

105 BROWN, Earle, 2008, 'On December 1952', *Journal of American Music*, Volume 26, Number 1, 1

for life”.”¹⁰⁶

Thus there was no obvious direct influence from Cage, especially considering the fact that Cage did not care for jazz (nor did Morton Feldman or David Tudor) nor much for Jackson Pollock either:

It was easy to see that, from observing a large canvas of Jackson Pollock's, he had taken five cans or six cans of paint, had never troubled to vary the colour of the paint dripping from the can, and had more or less mechanically - with gesture however, which he was believing in - let his paint fall out. So the colour couldn't interest me, because it was not changing. (...) And if you look at your daily life, you see that it hasn't been dripped from a can either.¹⁰⁷ (John Cage)

John Cage nonetheless had created an atmosphere of artistic tolerance around him, giving more importance to new approaches of compositional creativity than to their aesthetic content or flavour, never suggesting that his methods and concepts were the only legitimate ones. After all, Brown from his side did not agree with all of Cage's ideas:

I am as impatient with “chance” (the nonutilization of choice by the artist) as a “compositional technique” as I am with serialism as a justification. The former producing a pseudo-lifelike entropy and the latter a pseudo-machinelike entropy, at their purest point of self-realization of principles.¹⁰⁸ (Earle Brown)

106 BROWN, Earle, 1966, *The Bases of Kinetic Form and Content in Music and Art*, lecture given at the Library and Museum of the Performing Arts, New York, unpublished, archives of the Earle Brown Music Foundation, Rye, New York

107 KOSTELANETZ, Richard, 1988, *Conversing with Cage*, Omnibus Press, 177

108 BROWN, Earle, 1981, 'Serial Music Today', in BATTCKOCK, G., *Breaking the Sound Barrier, a critical anthology of the new music*, 1981, E.P. Dutton, 101

2.2 *Folio*

There was both success and failure in these *Folio* pieces.¹⁰⁹ (Earle Brown)

The *Folio* collection is a milestone in 20th century music, a showcase of new compositional concepts: graphic notation, reduced punctuation, floating clefs, transcriptions of graphics, proportional notation (originally 'time notation'), absence of metric system, etc, and combinations of these, all pre-dating (and most likely influencing) related experiments in Europe. For Brown it was a true laboratory in which he tried out his wildest ideas, taking some to extremes he would never return to. Unfortunately *Folio*, and particularly *December 1952*, became the one work Brown would be associated with to this day, while he chose for a much more specific, less “open” path right after it, using some of the ideas he had suggested in it or even relying on more “conventional” notation and performance guidelines:

It's so frustrating to spend forty-five years writing music, and then to be talked about in connection with only one or two pieces. I would like people to realise the range, the aesthetics and the optimism of my work. And, I would certainly want to clarify the differences between the pieces for which I am notorious and the pieces that people don't know. Everybody wants to reproduce *December '52* and the graphic things. (...) But I've written so much music in so many different ways. I've never understood why people want to put me in a box and throw me away.¹¹⁰ (Earle Brown)

He never repeated the more extreme ideas of *Folio*, while producing a substantial and often still (though less radically) innovative body of work afterwards, for most of which *Folio* had a seminal function. The seven compositions/pages of *Folio* are presented chronologically, and an eighth work, *Four Systems* (1954), was published together with the *Folio* collection for the main reason that Brown thought the publisher would not be too interested to publish a single page and also because, after all, it would not be out of context.

109 BROWN, Earle, 1961, untitled, unpublished, archives of the Earle Brown Music Foundation, Rye, New York

110 YAFFE, John, 2007, 'An Interview with Composer Earle Brown', *Contemporary Music Review*, Vol. 26, Nos 3-4, June/August 2007, 309

2.3 October 1952

(...) the first thing I did was to take away the rests so that the performer is thrown directly into a proportional world.¹¹¹ (Earle Brown)

This first work in the *Folio* collection, written for piano, does, at first sight, not stray too far away from conventional notation, although one immediately notices the absence of clefs, meter indications, bar lines and at closer inspection, the absence of rests and the unusual horizontal spacing of the notes. One can only guess at the function of the enharmonic spelling of Eb/D#, Db/C# and Ab/G#. The work is otherwise fully chromatic, but no tone-row or other system can be detected. It does however sound fairly serial, due to the wide intervals and the contrasting dynamics, changing event after event.

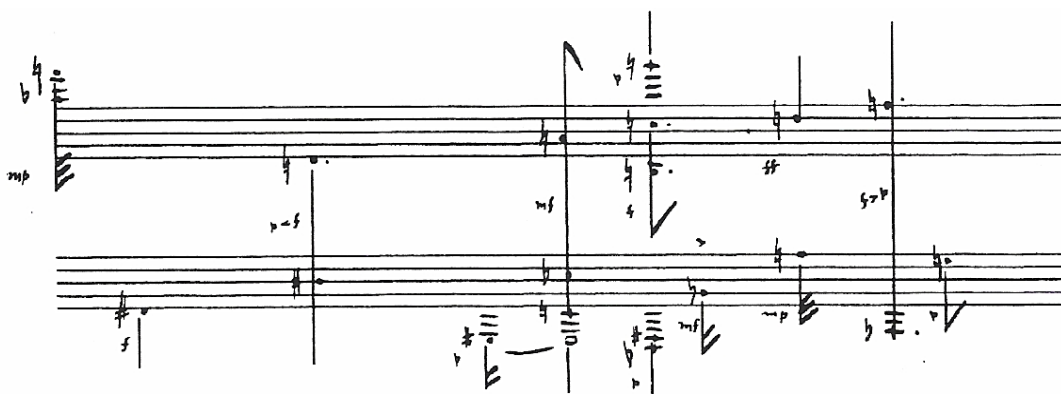


Fig. 1 - the first system of Earle Brown, *October 1952*
(Associated Music Publishers)

The instructions on the score specify:

Clefs are in the usual treble-bass relationships. (...) The total time-duration of the piece and the implied metrical-time relationships between events are to be determined by the performer. The absence of rests produces an intentional ambiguity and is intended to eliminate the possibility of a metrically rational performance. The performer may move through the space at a constant or variable rate of speed relative to “real” time or to intuitive time.¹¹² (Earle Brown)

111 BROWN, Earle, 1984, unpublished interview by James Pritchett, archives of the Earle Brown Music Foundation, Rye, New York

112 BROWN, Earle, 1961, performance note to the score (*October 1952*, part of *Folio*), Associated Music Publishers Inc., USA

The absence of clefs (while they are suggested as conventional piano clefs in the performance note) does not seem to have a specific function, except maybe to make it clear from the start that the performer should not approach the score as a conventional one. What is also striking is the unusual positioning of the very first note at the edge of the staff in both the first and third system and what looks like a tie from the penultimate note seemingly leading out of the score (or, even stranger, it could be a slur starting under the last note). In a way these things can be reminiscent of Pollock not stopping at the edge of the canvas, giving the impression of something ongoing, larger than the “detail” shown. Maybe the one missing natural sign in front of the first A of the third system is not an accident, but it also ended up off the “canvas”. After all the prefatory note to *Folio* mentions “intentionally ambiguous graphic stimuli”. The absence of any melodic or harmonic handle makes it an extremely abstract work, again quite close to the works of Pollock from the end of the forties. The absence of rests (meaning the performer can add them freely) and of a specific tempo along with the permission to vary the speed, makes for a work with an extremely elastic temporal form, which will, regardless of that, always sound recognisable.

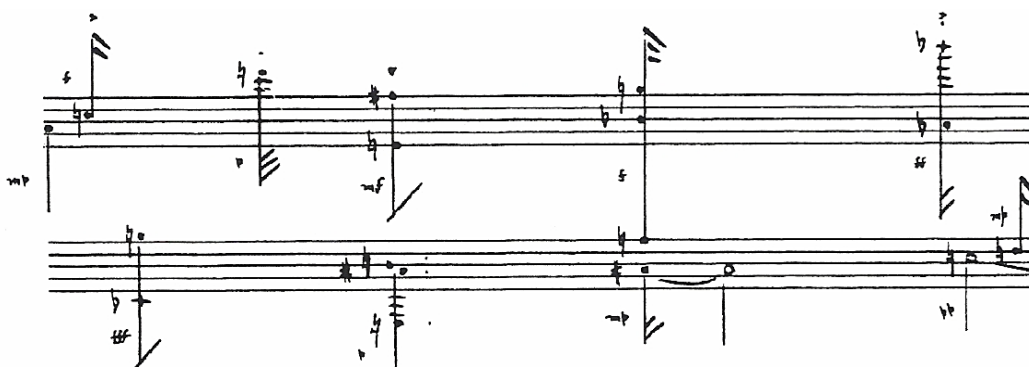


Fig. 2 - the third (and last) system of Earle Brown, *October 1952*
(Associated Music Publishers)

2.4 November 1952 (“Synergy”)

And then the next step was *November 1952* in which I even took away the actual, the precise pitch.¹¹³ (Earle Brown)

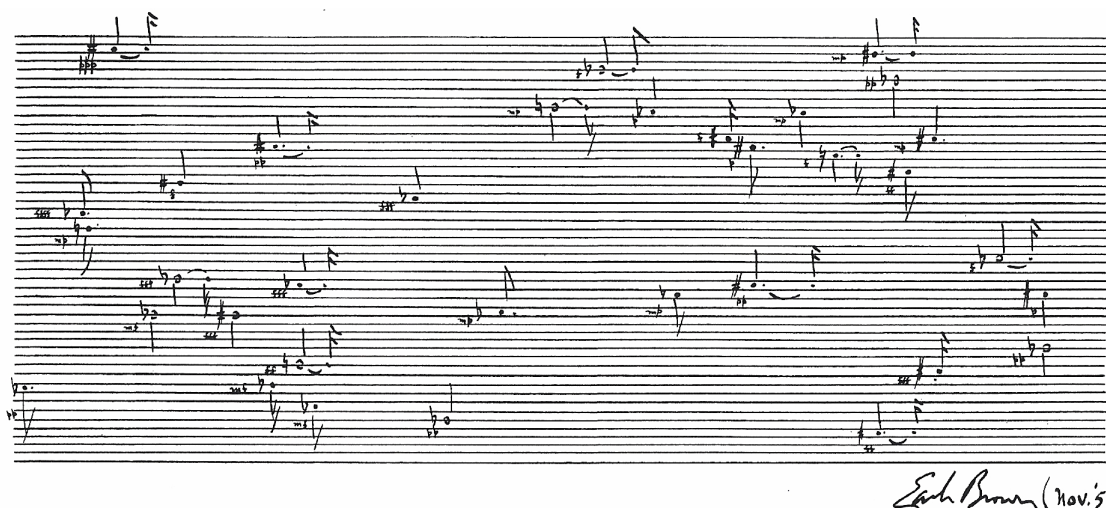


Fig. 3 – Earle Brown, *November 1952*
(Associated Music Publishers)

November 1952 takes the notation experiments a big step further than *October 1952*. It shows a layout which, if approached in a conventional manner encompasses more than 12 octaves. It is for piano and/or other instruments or sound-producing media (the original sketch limited it to “one or more pianos”) and is again clefless and without metrical indications. The performance instructions do clarify things a little bit:

The frequency range will be relative to that of each instrument performing the work. To be performed in any direction from any point in the defined space for any length of time. Tempo: as fast as possible to as slow as possible...inclusive. Attacks may be interpreted as completely separated by infinite space, collectively in blocks of any shape, or defined exactly within that space. Lines and spaces may be thought of as tracks moving in either direction (horizontally at different and variable speeds) and clef signs may be considered as floating (vertically over the defined space)...this indicates the theoretical possibility of all the attacks occurring at the same instant (and on the same frequency, for any

113 BROWN, Earle, 1984, unpublished interview by James Pritchett, archives of the Earle Brown Music Foundation, Rye, New York

amount of time) or any other expression of simultaneity. The defined space may be thought of as real or illusory, as a whole or in parts. Either space (vertical or horizontal) may expand, contract, or remain as it seems to be here. Vertical space will vary according to the performer's view of the floating clefs¹¹⁴.¹¹⁵ (Earle Brown)

These guidelines, in a way, make *November 1952* the most poetic of the *Folio* pieces. Everything is notated and at the same time open to interpretation. The guidelines suggest one extreme possibility: “all the attacks occurring at the same instant (and on the same frequency, for any amount of time)”, i.e. one big note¹¹⁶ (in which case all the dynamic indications (once again, in a serial sounding manner, a contrasting one per event) become irrelevant). When we read “the frequency range will be relative to that of each instrument”, does that mean that if an instrument with a 5 octave range is used and no vertical change is applied a microtonal interpretation would be allowed, or do the accidentals contradict this¹¹⁷, and do they suggest a pentatonic flavour? Brown seems to confirm the latter when he states:

(...) I just took five lined paper, music paper and drew lines in between to create a field and so that the performer can go from any point to any other point. As a trumpet player, when I see something like this it implies Ab or Eb to me not Cb, we don't usually play Cb, but Ab or Eb this is C# to me, and that's what I wanted that quick spontaneous A sharp, F sharp, D flat, B natural, F sharp you know and that's how it should be performed in my experimental mind. (...) ¹¹⁸ (Earle Brown)

Contrary to *October 1952* different performances will not “sound the same”. When we compare the version of David Arden on the CD *Earle Brown: Music for Piano(s) 1951-*

114 “floating” clef signs indicated that the vertical position of an event in the field was not necessarily an indication of the frequency to be produced.” (BROWN, Earle, 1961, untitled, unpublished, archives of the Earle Brown Music Foundation, Rye, New York)

115 BROWN, Earle, 1961, performance note to the score (*November 1952*, part of *Folio*), 1961 Associated Music Publishers Inc., USA

116 In an earlier draft of the guidelines Brown wrote “The view can lead to any degree of complexity up to the entire piece being expressed by a single note of the longest duration and loudest dynamic.”, BROWN, Earle, notebook, unpublished, archives of the Earle Brown Music Foundation, Rye, New York

117 There are only 5 naturals out of 34 pitches.

118 BROWN, Earle, 1984, unpublished interview by James Pritchett, archives of the Earle Brown Music Foundation, Rye, New York

1995¹¹⁹ and the one by Eberhard Blum, Frances-Marie Uitti and Nils Vigeland on the CD *The New York School*¹²⁰, we have, regardless of the different instrumentation, two seemingly unrelated works. While David Arden's performance can easily be followed from the score (except for his vertical interpretation of the pitches, although they are proportionally representative), as it slowly goes from left right, it is impossible to relate what the Blum/Uitti/Vigeland trio plays to the score. Both versions are nonetheless “accurate” interpretations.

Earle Brown explained the subtitle of the piece (*Synergy*) as follows:

The December 1952 issue of *Art News Magazine* had this article by Elaine De Kooning on Buckminster Fuller, and I read that article and I came upon the word “synergy” and Bucky's general definition of what synergy meant. And what it meant was: (...) synergy is the energy released by two energies intersecting, and the resultant energy of the two energies intersecting cannot be predicted back exactly to the cause of any of the original energies. In other words, energy is above and beyond, it is more than the sum of its parts. And thinking about it and reading that article and reading Bucky's definition of synergy it occurred to me that what I am trying to do with these graphic scores - and *November 1952* is subtitled *Synergy*, that's why I put it in there. (...) the December issue comes out in November, obviously, and I read it and I put that synergy onto *November 1952*, and what I thought was: I have a concept to write a piece, I then put it on paper, so my concept is one energy, what I put on paper is another energy, I give it to David Tudor for instance, and that's a third energy. And when I was doing these graphic things the result could not be seen to be solely residing in my concept, or my piece of paper, or my action, or David's, because I had allowed enough flexibility and space in there in the process to make the result unpredictable according to me or David. It is the intersection of an ambiguous graphic score based on a concept of mine going to another person, a performer, resulting in something that is not directly traceable back to even David exclusively, or to me exclusively, or to the piece of paper exclusively.¹²¹ (Earle

119 BROWN, Earle, *Music for Piano(s) 1951-1995*, New Albion Records, NA082, 1996

120 *The New York School*, Hat Hut Records, HatART 6101, 1992

121 BROWN, Earle, 1989, unpublished interview by John Holzaepfel, archives of the Earle Brown Music Foundation, Rye, New York

Brown)

2.5 December 1952

(...) and then came *December 1952*, which did away with nearly everything except proportional vertical and horizontal proportional lines.¹²² (Earle Brown)

While *November 1952* gave the performer a high degree of freedom, *December 1952*, gave that freedom an even further expression by getting rid of all musical symbols or suggestions (unlike a lot of graphic scores that would appear afterwards, which often had either derivatives of musical notation or abstracted musical gestures). It is one of the icons of 20th century music and it is certainly the one work Earle Brown is associated with. Sadly, and very much to his own disappointment, it did overshadow and still does, his other compositions. But this is not surprising as it was such a radical artistic statement. It is on a par with that other 1952 milestone, John Cage's *4'33"*, except for the fact that Brown's piece has a much stronger and concentrated visual presence. It is after all the first example of truly graphic notation¹²³ (probably one of the only scores that more people have seen than heard).

Ironically enough, while he recognizes the influence of visual artists for his radical aesthetics of the early fifties and later, his most graphic work was conceived from a purely sonic point of view:

The painters influenced me a great deal aesthetically, but this score wasn't really influenced by anything that I can remember as far as painting or graphics. It's frequently pointed out that this score, *December 52* score, looks sort of like the early Mondrian 'plus and minus' drawings¹²⁴, which it does, but it never occurred

122 BROWN, Earle, 1984, unpublished interview by James Pritchett, archives of the Earle Brown Music Foundation, Rye, New York

123 David Cope, in his *New Directions in Music*, claims that the very first example of fully graphic notation is Paul Ignace's *It Is*, from 1946. The only problem with this statement is that, although his book shows the score, Cope nowhere mentions its source, nor the publisher, nor any biographical data on Ignace. When one researches Paul Ignace one only encounters quotes referring to David Cope's book, which does raise some questions. (COPE, David, 1989, *New Directions in Music*, (1971), fifth edition, WM. C. Brown Publishers, 137)

124 cf. Piet Mondriaan's *Ocean and Pier and Ocean* series, painted between 1914 and 1917 (a very vague resemblance only)

to me at the time that it would look like that. I was thinking totally in terms of implications of sound parameters.¹²⁵ (Earle Brown)

Originally though, inspired by Calder, Brown had intended *December 1952* to be a three dimensional kinetic score¹²⁶:

In my notebooks at this time I have a sketch for a physical object, a three-dimensional box in which there would be motorized elements--horizontal and vertical, as the elements in *December* are on the paper. But the original conception was that it would be a box which would sit on top of the piano and these things would be motorized, in different gearings and different speeds, and so forth, so that the vertical and horizontal elements would actually physically be moving in front of the pianist. The pianist was to look wherever he chose and to see these elements as they approached each other, crossed in front of and behind each other, and obscured each other. I had a real idea that there would be a possibility of the performer playing very spontaneously, but still very closely connected to the physical movement of these objects in this three-dimensional motorized box. This again was somewhat an influence from Calder: some of Calder's earliest mobiles were motorized and I was quite influenced by that and hoped that I could construct a motorized box of elements that also would continually change their relationships for the sake of the performer and his various readings of this mechanical mobile. I never did realize this idea, not being able to get motors and not really being all that interested in constructing it all.

(...)

Not having constructed the mechanical box, which was the origin of the idea for *December 1952*, it occurred to me that, on a piece of paper, I could represent a vision of these horizontal and vertical elements of different thicknesses in a way which would be one representation of that thing. I describe it, I believe, in the score to *Folio*: it was like a photograph of these elements at one moment. But one should consider them constantly in movement in all dimensions. So that

125 BROWN, Earle, 1978, interviewed by Carl Stone, KPFFK, archives of the Earle Brown Music Foundation, Rye, New York

126 In 1979 and 1980 Earle Brown realized his only kinetic work, the installation *Wikiup*, which had 6 cassette players on a system of ropes and pulleys which could be configured three-dimensionally by the audience.

idea was transferred from the mechanical box mobile. This then made the score become what I call the conceptual mobile.¹²⁷ (Earle Brown)

To realize this “conceptual mobile” Earle Brown found his own equivalent of Cage's *I Ching* (which Cage had used to compose *4'33*” that same year):

The placement of the lines in *December 1952* was through the use of “Random Sampling Tables” (*Tracts for Computers*¹²⁸, Department of Statistics, University of London, Cambridge University Press, 1951). (...) They are tables of random numbers used by statistical types in “sampling”. (...) The one I used is No. XXIV and contains 100.000 numbers.¹²⁹ (Earle Brown)

Tracts for Computers, Random Sampling Tables is a collection of 100.000 numbers from 0 to 9, shown two by two in tables of a thousand each. It was intended for statistical purposes where random numbers were needed (e.g. to make a “random” selection out of a larger collection of data). Statisticians were/are convinced that, however unbiased, a human selection can never be truly random. “It is becoming increasingly evident that sampling left to the discretion of a human individual is not random, although he may be completely unconscious of the existence of bias, or indeed actively endeavouring to avoid it.”¹³⁰

It is in a way ironic that Earle Brown would use a scientifically more purely random method than John Cage, who still relied on the very human coin flipping to determine *I Ching* hexagrams.

127 BROWN, Earle, 2008, 'On December 1952', *Journal of American Music*, Volume 26, Number 1, 4

128 “Computers” here meaning human “calculators” rather than the machines we know today.

129 BROWN, Earle, 1971, draft or cc of a letter to Genevieve Marcus (then a musicology student at UCLA), archives of the Earle Brown Music Foundation, Rye, New York

130 KENDALL, M.G. & BABINGTON SMITH, B., 1938, 'Randomness and Random Sampling Numbers', *Journal of the Royal Statistical Society*, Vol. 101, No 1, 151 - To assemble this collection of truly random numbers Kendall and Babington designed a machine consisting of a disc divided into ten equal sections on which the digits 0 to 9 were inscribed. The disc rotated (at 250 rpm) in a dark room and was illuminated from time to time by a neon flash for a very short period, creating the impression that it stood at rest. At each flash a number indicated by a pointer was chosen.

Fifty-fifth Thousand										
	1-4	5-8	9-12	13-16	17-20	21-24	25-28	29-32	33-36	37-40
1	02 59	42 55	48 84	48 59	61 03	81 56	22 46	48 28	54 03	63 32
2	88 26	26 12	69 27	15 31	76 97	23 91	78 32	98 35	59 51	64 89
3	37 27	98 55	25 14	16 92	76 86	24 40	29 94	71 79	39 74	98 52
4	46 16	22 33	16 63	39 71	50 96	66 89	96 01	67 43	79 56	19 93
5	78 91	48 65	57 78	10 57	42 10	46 15	74 56	79 69	70 27	55 98
6	85 86	08 95	15 63	84 47	18 43	13 77	95 68	41 20	75 83	90 97
7	44 82	55 26	03 24	68 81	43 62	59 16	07 36	94 48	39 67	27 40
8	95 93	73 79	22 07	45 88	29 75	96 24	31 39	33 16	29 25	23 70
9	68 90	01 88	48 69	11 28	39 98	73 10	02 51	51 37	23 92	25 87
10	10 57	43 00	25 67	90 50	48 37	99 13	94 62	56 10	17 29	20 67
11	32 59	05 74	59 64	22 91	94 45	61 78	92 25	58 47	62 99	37 58
12	19 18	66 67	75 19	09 47	64 55	46 10	87 41	85 49	13 64	07 16
13	55 77	18 62	56 90	09 37	29 33	69 77	19 63	80 84	81 52	39 36
14	46 33	24 16	61 70	86 37	72 77	13 15	31 44	86 30	69 27	74 30
15	07 23	96 16	38 52	27 64	30 57	18 11	20 83	91 58	57 92	05 99
16	59 72	12 19	54 45	64 43	29 30	13 22	72 96	40 63	93 97	43 89
17	12 95	37 82	85 83	76 80	60 55	30 19	51 27	91 53	19 82	06 56
18	75 37	20 04	03 70	49 66	39 66	92 37	29 50	92 84	78 02	10 45
19	70 00	42 09	90 17	31 36	44 63	41 74	84 53	50 45	49 25	78 89
20	71 88	69 90	59 02	21 61	79 89	81 36	32 07	25 89	11 31	81 74
21	95 13	91 66	87 34	56 09	95 38	64 15	99 59	07 01	84 36	05 11
22	24 65	17 50	34 37	31 91	99 95	06 77	61 68	06 39	73 82	80 54
23	00 43	06 80	76 35	63 22	27 42	42 06	23 88	22 16	00 02	31 28
24	28 95	86 24	03 18	67 51	51 01	73 11	29 43	11 64	71 55	12 06
25	59 10	20 54	04 25	23 67	20 55	30 71	18 36	63 85	49 66	95 94
Fifty-sixth Thousand										
	1-4	5-8	9-12	13-16	17-20	21-24	25-28	29-32	33-36	37-40
1	56 43	25 47	60 25	56 04	90 39	64 99	90 59	40 86	26 31	03 90
2	30 24	61 25	50 95	13 31	12 35	93 29	11 96	92 59	77 40	76 04
3	75 41	88 40	17 83	26 80	72 82	47 43	66 86	85 69	14 13	16 95
4	24 96	63 55	80 35	01 44	07 19	84 98	65 42	00 13	26 10	59 83
5	14 64	30 17	50 53	17 47	41 27	45 88	79 69	52 48	64 15	94 89
6	95 19	52 34	68 32	55 33	13 52	76 96	26 94	60 45	25 02	14 90
7	56 59	54 13	05 71	54 45	50 94	12 85	58 48	73 77	57 51	38 44
8	01 17	20 85	05 32	40 65	33 12	77 43	83 17	33 09	47 44	19 79
9	22 71	55 32	09 34	16 38	09 70	72 88	07 53	65 49	35 96	72 34
10	95 41	94 35	67 08	24 85	32 46	03 11	31 59	48 74	84 23	04 56
11	87 86	29 53	54 00	82 63	65 99	01 43	58 34	01 49	11 76	83 08
12	79 53	03 80	96 65	73 91	83 08	96 14	88 53	60 90	89 68	39 34
13	53 28	21 17	56 72	78 63	80 61	50 24	00 19	90 23	50 70	63 65
14	61 78	32 75	24 88	20 27	32 78	32 77	54 13	26 33	56 46	21 29
15	05 90	65 09	53 79	28 92	69 85	11 24	20 33	26 47	06 67	05 19
16	04 44	55 42	77 54	52 05	34 89	48 80	84 24	97 33	26 08	02 24
17	43 44	91 74	08 55	83 91	89 79	68 82	50 68	66 09	14 46	02 65
18	82 77	13 05	97 68	34 11	68 44	56 51	65 17	42 02	80 59	39 80
19	49 97	42 82	08 49	94 37	94 51	26 16	64 92	68 95	00 14	32 84
20	03 28	94 53	39 02	45 59	38 95	47 37	55 64	59 16	12 95	43 00
21	20 44	06 39	52 70	93 14	51 95	23 92	80 17	91 44	11 33	09 23
22	78 00	92 19	47 62	35 19	18 51	64 75	96 57	34 51	84 93	41 99
23	97 46	74 15	82 60	09 92	85 98	85 43	47 12	63 00	19 44	47 47
24	67 31	15 09	57 48	17 87	41 84	97 95	24 72	60 43	18 76	90 56
25	47 78	48 11	43 87	40 33	66 93	29 61	90 45	28 86	06 42	64 06

Fig. 4 - page 34 from *Tracts for Computers XXIV**Tables of Random Sampling Numbers*

by M.G. Kendall and B. Babington Smith

1971 Cambridge University Press

Brown did use the same source of random numbers to compose his electronic work *Octet 1* (1953) (realized while working for John Cage on *Williams Mix* at the *Project for Music for Magnetic Tape*), and then later at least once more for *Indices* (1954)¹³¹. He did admit that he was probably influenced by Cage's use of randomness while working on *Williams Mix*, but at the same time distanced himself from that particular type of randomness:

Although I had never been (personally) particularly interested in “chance” as Cage used it, my interest in the random tables was probably influenced by that way of working. But more than anything, the *Indices* idea was very close to the Schillinger concepts of ratios, densities, statistical distribution, rather than to the pure (or impure), “uninfluenced” CHANCE activities of Cage.¹³² (Earle Brown)

and

I loaded the dice in effect and I violated the purity of the random sampling numbers around the numbers so that I prejudiced certain things to happen structurally in dynamics, instrumentation, timbre of instrument, dynamics duration etc.¹³³ (Earle Brown)

For *December 1952* he had drawn an abscissa and an ordinate (which can still be seen on the original of the score) to dimension and position the graphic elements of the score:

I could show you the original of *December 1952* and it has a scale in the numerical sense, not the musical sense, (...) like in geometry, it's the abscissa and the ordinate right? (...) because I knew from the beginning that I could not predict the continuity of this piece and didn't want to, which you can begin anywhere and go to any other point. I got this bright idea which John [Cage] liked a lot. He didn't like the fact it would be improvised, but he liked the idea of how I did it. He said it was like dropping sounds into a pool and you could drop

131 In the letter to Genevieve Marcus Brown also says he used the random number tables for *October 1952*. BROWN, Earle, 1971, draft or cc of a letter to Genevieve Marcus (then a musicology student at UCLA), archives of the Earle Brown Music Foundation, Rye, New York

132 BROWN, Earle, 1986, in Merce Cunningham, ed. KLOSTY, James, 1986, *Limelight*, 75

133 BROWN, Earle, 1984, unpublished interview by James Pritchett, archives of the Earle Brown Music Foundation, Rye, New York

one anywhere at any time. So there was no subjective potential in this for me, there was no reason to be subjective about where these went and what they looked like, so I used this abscissa and ordinate and I used the random sampling tables.

(...)

You see those little units and I would get a 3 from the random sampling table I would get a 3 unit number between 001 and 190 or 193 and for instance it might be this whatever it is, (...) and then another number on this dimension and with (...) a ruler find it, it was at that point, another random number would give me an indication of (...) how long it was, and how thick it was, you know, and whether it ran vertically from that point in space or horizontally from that point in space.¹³⁴ (Earle Brown)

The decision to stop the process was an arbitrary one (in which he also very much differed from Cage's application of randomness, where that decision would be determined beforehand):

I chose to consider the entire area a field of activity and within this field, by this coordinate technique, the various elements were placed and their thickness and direction were determined. At a certain point—and certainly by taste—I stopped filling this space. It could have gone on and on and on until the entire thing had become black, obviously. But what one sees today when one looks at the score of *December 1952* is the collection which I assembled through a process of random sampling tables and the fact that I chose to stop at the point where I considered that the number of elements in the field was sufficient to stimulate the kind of performance action that I was interested in provoking.¹³⁵ (Earle Brown)

134 BROWN, Earle, 1984, unpublished interview by James Pritchett, archives of the Earle Brown Music Foundation, Rye, New York

135 BROWN, Earle, 2008, 'On December 1952', *Journal of American Music*, Volume 26, Number 1, 5

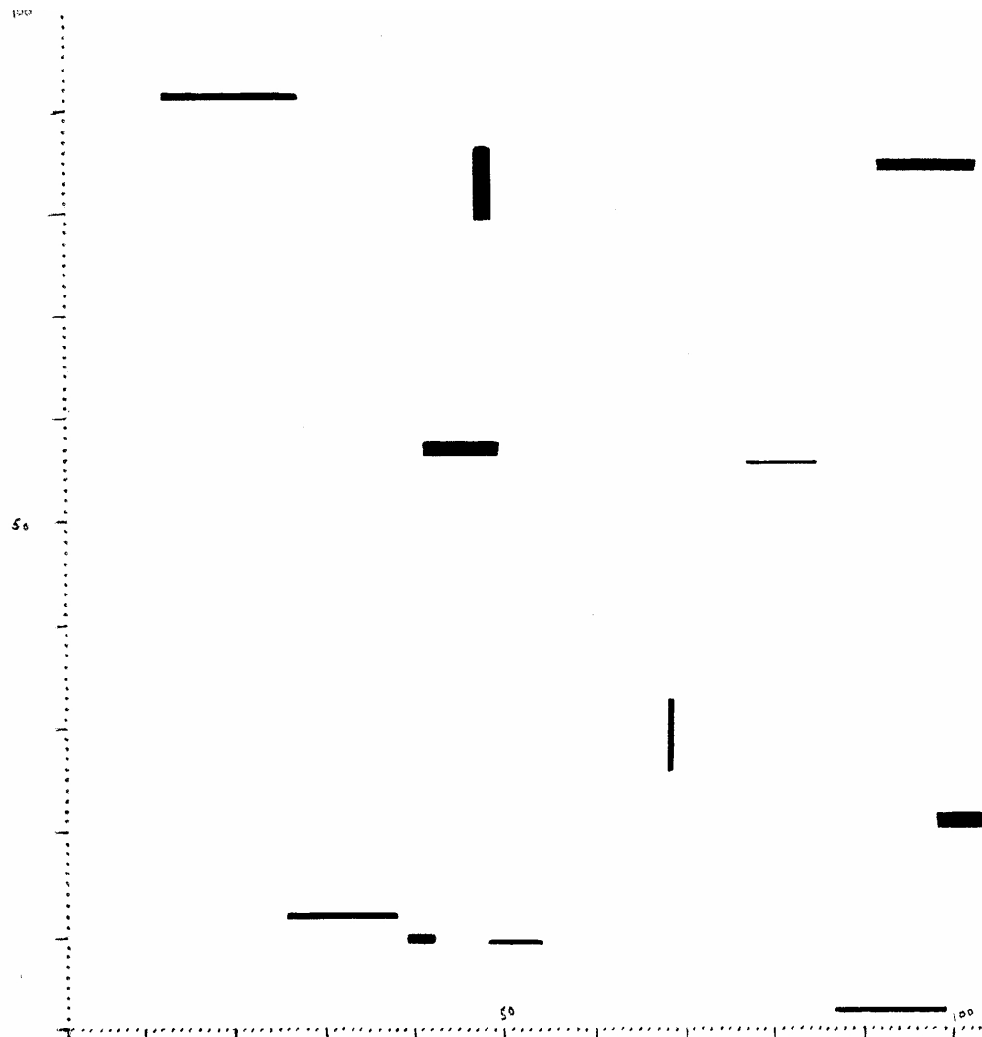


Fig 5. - detail of the lower left quarter of the original of Earle Brown, *December 1952*, showing the abscissa and the ordinate used to draw the elements of the score.
(courtesy of the Earle Brown Music Foundation)

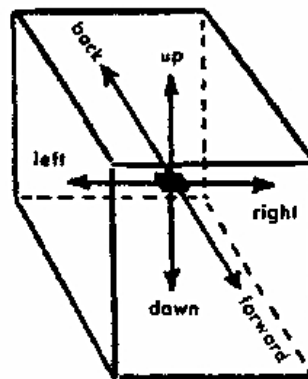
December 1952 was first of all intended as a means to improvise, at a time when improvisation (unlike nowadays) was an unexplored territory in the world of “serious” music. For Earle Brown, and his experience as a jazz musician, improvisation was a sorely missed self-evidence and one way to incite musicians to improvise was to give them a score (a prerequisite to performance for most performers he was dealing with) with even less musical information than *November 1952*.

For years people did not make the connection between my open form music and the notations.(...) They never made the connection between the fact that I had grown up as a jazz musician and people look at me and they say “how did you

think of doing that *December 1952*, in 1952, how did you think of that?" I think it just grew (...), you look at *October*, *November*, *December* into early '53, you can see a procedure, a mental process going on, where I keep taking more and more information away from the musician, which is an negative way of looking at it, what I am doing is giving them more and more to put in, by taking information of my own away from them. What my intention is is giving them more and more to do themselves.¹³⁶ (Earle Brown)

As suggested in the notes published with it, the score should be seen as a three dimensional assemblage. The note further 'specifies':

(...) to have elements exist in space...space as an infinitude of directions from an infinitude of points in space...to work (compositionally and in performance) to right, left, back, forward, up, down, and all points between...the score (being) a picture of this space at one instant, which must always be considered as unreal and/or transitory...a performer must set this all in motion (time), which is to say, realize that it is in motion and step into it...either sit and let it move or move through it at all speeds.¹³⁷ (Earle Brown)



space relative to conceptual mobility and transformation of events in arbitrary, unstable time

Fig 6. - Drawing in the prefatory note to Earle Brown, *December 1952*

(Associated Music Publishers)

136 BROWN, Earle, 1992, unpublished interview by John Holzaepfel, archives of the Earle Brown Music Foundation, Rye, New York

137 BROWN, Earle, 1961, performance note to the score (*November 1952*, part of *Folio*), Associated Music Publishers Inc., USA

This statement does remind one of the original idea of the never realized three dimensional kinetic score and the freedom granted is very similar to the freedom of *November 1952* (even though the score looks very different). Coincidentally in its suggestion of sound in space, it seems to be an illustration or realization of Schoenberg's almost metaphysical view of musical space.

(...) the unity of musical space demands an absolute and unitary perception. In this space, as in Swedenborg's heaven (described in Balzac's *Seraphita*) there is no absolute down, no right or left, forward or backward. Every musical configuration, every movement of tones has to be comprehended primarily as a mutual relation of sounds, of oscillatory vibrations, appearing at different places and times.¹³⁸ (Arnold Schoenberg)

Further guidelines specify that “the thickness of the event indicates the relative intensity” (which lets one deduce that each shape on the score is to be seen as 'an event') and that in order to assure spontaneity “no further preliminary defining of the events, other than an agreement as to total performance time, take place.” The score has 31 of those events, but this does in no way mean that a performance could not count less or more. Proportionally it also looks like there is more silence than sound, although that is rarely apparent in performances. In various writings and interviews Brown merely suggests interpretations, always cautious not to sound exclusive.

Each performer is free to read the page from any of the four quadrant positions (...). This is a kind of physical mobility. If one happened to be an instrument able to play clusters or more than one note at a time, one can see that by setting the score page on one of its sides, there would be more clusters available to play than if it were sitting on the bottom (where the signature is). But any reading from any of these four positions - and from any point to any other point - is possible. One could begin a performance very quietly by choosing to read only the thinnest lines at the beginning, and moving from point to point in various frequencies, playing only the very thinnest. Or one could start very loudly by playing the thicker lines. Such things are all within the potential of a performer's

138 SCHOENBERG, Arnold, 1984, 'Composition with Twelve Tones' [1941] *Style and Idea*, University of California Press, 223

decision of determination of how he will perform the piece.¹³⁹ (Earle Brown)

When Earle Brown would conduct the piece he would give slightly more specific instructions to the performers: “The performers are instructed that the top of the page is the top of their register and the bottom of the page is the bottom of their register, no matter what instruments they play on.”¹⁴⁰ Next to the frequencies on the vertical plane, the horizontal one, from left to right would represent time (which contradicts the instructions accompanying the score, allowing it to be performed in any direction). He would of course also specify the meaning of his conducting gestures:

When I put my left hand at the top of my head, it indicates that I want the musicians to realize the score in their high register. When my left hand is at my waist, it indicates that they are to realize the graphics in their low register. In the performance, I choose timbre and select combinations of instruments. In other words, I can have all the musicians working constantly, or I can stop them, start them, change tempi, change instrumentation (which is to say color).¹⁴¹ (Earle Brown)

When conducting *December 1952* he saw the orchestra as his instrument to perform the work. Musicians would still be relatively free to interpret the graphic events, but he would orchestrate the performance, controlling dynamics, general articulations, range, etc., acting in a way as an improvisation moderator. Rehearsals only served the purpose to get acquainted with the concept of the work and the meaning of the conductor's gestures.

What was however constant was the demand to the performer to be responsible of his/her choices and actions. When Cage disapproved of those *Folio* pieces which gave the performers freedom of choice, arguing that they would play “their little tunes”, Brown would respond that the score nowhere suggested whatever little tunes:

Every once in a while you get somebody in a large group that will quote a little bit of something, being funny, but that does not bother me very much. But if

139 BROWN, Earle, 2008, 'On December 1952', *Journal of American Music*, Volume 26, Number 1, 6

140 BROWN, Earle, 2008, 'On December 1952', *Journal of American Music*, Volume 26, Number 1, 9

141 BROWN, Earle, 2008, 'On December 1952', *Journal of American Music*, Volume 26, Number 1, 11

everybody started doing that it would bother me a hell of a lot. (...)
“Improvisation? OK”, [sings the *Yankee Doodle Dandy* melody], that is not even an improvisation, it is a quote, and I would say “where do you find the regularity of the symbols, or a C-major scale?”, if you look at the score you see that there is nothing step-wise like a C-major scale, they are all over the lot, they are scattered intentionally, so that they are discontinuous. So that throws immediately into the contemporary music world, rather than a *Blue Danube* world.¹⁴² (Earle Brown)

December 1952 as a score has something quintessential about it, going deeper into the psyche of the composer than what we are used to as a musical score, which is at best the filtered transposition of a mental abstraction: “(...) what I was doing with these *Folio* things and experimentations and wanting other people to come into my work, not just say 'do this now', but 'come into my work and let's see what we can do together, synergetically'.”¹⁴³ It is in a way a risky venture; Earle Brown would tell the audience to thank the performers for a great performance or blame the composer for a poor one. “A 'danger' worth running...for the sake of (*dec.*'52) experiencing the failure and the degrees of exploitation and sincerity as they intersect with each other and with the original conceptual essence.”¹⁴⁴

It seems that *December 1952* was not publicly performed until 1960, when it accompanied the Merce Cunningham dance *Hands Birds* in Venice and Cologne. Quite remarkably the performers were John Cage and David Tudor (in a version for two pianos), neither of whom believed in improvisation:

John played it quite freely, spontaneously, and David played a “version” that he worked out, as I remember and I had a feeling that it was like two sides of the coin and that one was overcontrolled and the other was undercontrolled. But I have a vague feeling that I was not really satisfied with that, but that could either

142 BROWN, Earle, 2002, interviewed by Cornelius Duffalo and Gregg Bendian on May 5 2002, <http://musicmavericks.publicradio.org/programs/program7.html> (accessed on July 1 2010)

143 BROWN, Earle, 1989, unpublished interview by John Holzaepfel, archives of the Earle Brown Music Foundation, Rye, New York

144 BROWN, Earle, 1963, unpublished notes for an article for FR. magazine, to Benedicte Presle, Paris, archives of the Earle Brown Music Foundation, Rye, New York

be my fault, David's fault or John's fault.¹⁴⁵ (Earle Brown)

Nobody has to play *December 1952*, and you can play without *December 1952*.¹⁴⁶ (Earle Brown)

2.6 MM - 87 1953 / MM - 135 March 1953

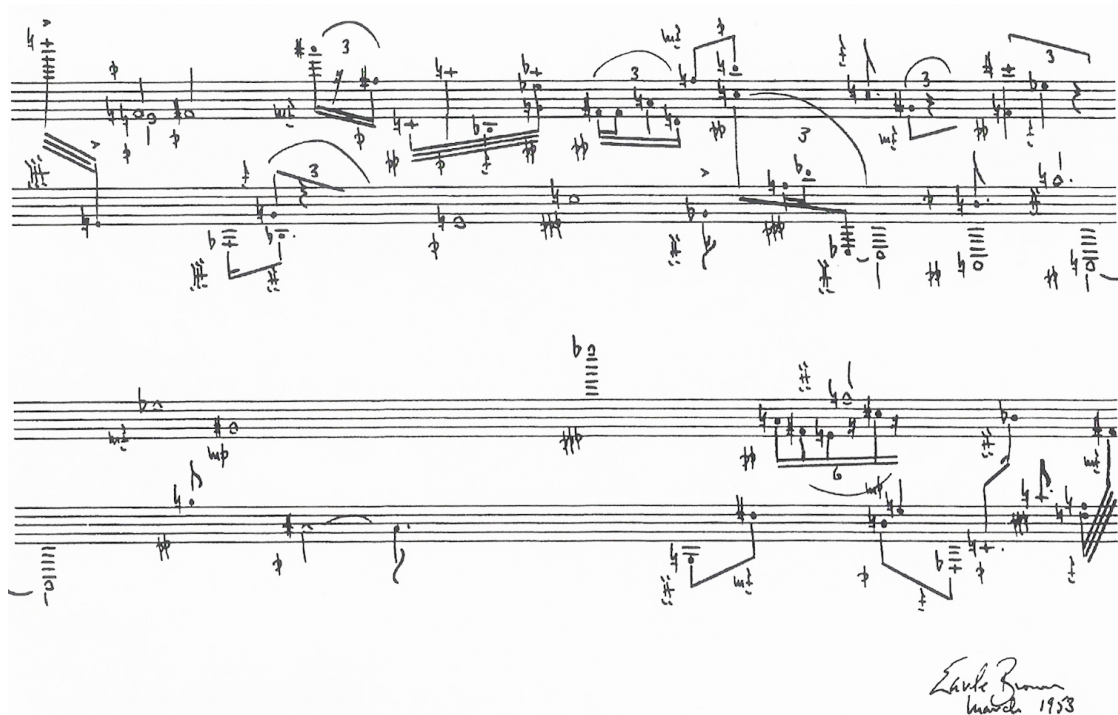


Fig. 7 - the two last staves of Earle Brown, MM-135 March 1953

(Associated Music Publishers)

MM-87 and *MM-135* brings us back into more charted territory, maybe even more 'conventional' than *October 1952*. Both pages show clefs and indicate a tempo (which is also the title). Again there are no metrical indications, barlines or rests (except for the omissions in triplets or other rhythmic groupings, but never between independent events).

It is again chromatic with serially flavoured contrasting dynamics. The instructions refer

145 BROWN, Earle, 1992, unpublished interview by John Holzaepfel, archives of the Earle Brown Music Foundation, Rye, New York

146 BROWN, Earle, 1992, unpublished interview by John Holzaepfel, archives of the Earle Brown Music Foundation, Rye, New York

to those of *October 1952*, although mainly the suggestion that “The absence of rests produces an intentional ambiguity and is intended to eliminate the possibility of a metrically rational performance.” seems to be relevant in this case. It would mean that the time lag between notes is free, but one should rather assume a visually proportional notation, which would give sense to the spacings. What is new here, within *Folio*, is that Brown says that both pages may be performed simultaneously (a possibility often suggested by Cage for his own works), which does create a mobile condition, consisting of recognizable materials, closer to what Brown would come to consider as 'true' open form.

Although *November 1952 (Synergy)* and *December 1952* can both be considered “open form” works, for me the fact that the content of those works is not fixed would seem to put them in another category; that of “solo or collective improvisations based on graphic implications”, perhaps. *Twenty Five Pages*, in which all of the sound-content is fully controlled in the composing (pitch, duration, loudness, attack and timbre), is “open form” as distinct from the “open content, open form” characteristics of the 1952 works. My distinction here is in the fact that the “integrity” of the controlled content of *Twenty Five Pages* ensures that in each performance it will always be that work, and no other, and is recognizable from performance to performance.¹⁴⁷ (Earle Brown)

Both *MM-87* and *MM-135* are in fact an attempt at spontaneity in the composing stage. In the prefatory note to the score Earle Brown writes that both pieces “were composed very rapidly and spontaneously and are in a sense performances rather than compositions.” They were composed as fast as it takes to perform them, representing the influence of Pollock rather than Calder's.

They are attempts to produce pieces in which decisions as to the validity and rational function of details, such as pitch and vertical aggregates, in general the editorial aspects of composition, were minimized as much as possible and qualities of spontaneity and immediacy considered to be the most direct and essential aspects of the work. It was an attempt to realize graphically the essence

147 BROWN, Earle, 1972, 'Notes on Some Works: 1952-1971', *Contemporary Music Newsletter*, Volume VI, Number 1, 1

of the piece... the initial intuitive conception, before it has been moulded to conform to technical and aesthetic concepts of structure, form, continuity, art, beauty, and other acquired habits and prejudices of taste and training. These pieces are in the standard notation and are to be performed as usual, but were written in an extremely rapid, direct and impulsive manner. The entire piece would be sketched within a few minutes, (relative frequency, intensities, durations and contours) and then notated and “punctuated” as music.¹⁴⁸ (Earle Brown)

Both pieces seem to have been made possible by the experience gained with *October 1952*, as the absence of metrical structure is essential to this kind of very fast notation, where metrical values and vertical consistency would only get in the way of the flow (just like having to stay within the edges of the canvas would have been a major obstacle to Jackson Pollock). The spontaneity of the composition does transpire in the performance of both works which do sound like improvisations, as if consisting only of gesture.

148 BROWN, Earle, 1961, untitled, unpublished, archives of the Earle Brown Music Foundation, Rye, New York

2.7 Music for “Trio for Five Dancers” June 1953

I found that giving people notes and letting them invent the rhythm is much safer than giving them the rhythm and letting them make up the notes.¹⁴⁹ (Earle Brown)

Music for “Trio for Five Dancers”
transcribed from floor plan spatial patterns of a dance by Carolyn Brown

even number in sequence
chart of dance = ♯ = lift inaudible
odd number = ♭ = shorter.

Duration & length of
Dance

Fig. 8 - excerpt from Earle Brown, *Trio for Five Dancers* (June 1953)
(Associated Music Publishers)

Trio for Five Dancers (1953) is yet another experiment in the *Folio* “lab”. It is an “objet trouvé”: the floor plan of a choreography (by Carolyn Brown) subjected to music staves and intended to last as long as the dance. The score uses only two different “note-like” symbols, one (the even numbers in the dance chart) to hold until it becomes inaudible; the other (the odd numbers in the dance chart) meant to be shorter. It turned out to be a double chance composition, because Carolyn Brown's choreography (made for a workshop given by Cage) was composed according to paper imperfections¹⁵⁰. Although proportionally notated, it does sound unlike any other Brown composition, monophonic (except for the overlap of held and shorter notes), almost reminiscent of Feldman's graph pieces, if these would not have been temporally restricted, and without the dynamic contrasts (it has no dynamic indications) of most other *Folio* works.

149 BROWN, Earle, 2002, interviewed by Cornelius Duffalo and Gregg Bendian on May 5 2002, <http://musicmavericks.publicradio.org/programs/program7.html> (accessed on July 1 2010)

150 BROWN, Carolyn, 2007, *Chance and Circumstance, Twenty Years with Cage and Cunningham*, Alfred A. Knopf, 41

2.8 1953



Fig. 9 - excerpt from Earle Brown, 1953
(Associated Music Publishers)

1953 is a one page study for *25 Pages* (and comes with the same performance instructions, except for those that apply to the multiple pages). The first thing one notices is the time notation, long horizontal lines indicating both pitch and length. It is reminiscent of a 1927 text by Henry Cowell titled *Our Inadequate Notation* in which he states:

Present notation is not graphically correct. A notation should express the sound to the eye with as great a degree of graphical perfection as possible. The rhythm represents a certain amount of horizontal distance (...). In our notation of rhythm we have different sorts of dots and ovals, some of which represent tones 256 times as long as others. Yet that difference is not expressed graphically in any way; one must learn the differences mechanically, by an involved system of stems and hooks. How simple to present the execution of a quarter and two eighth notes to a young student, if the duration of each were indicated by a like duration of the note itself:¹⁵¹ (Henry Cowell)

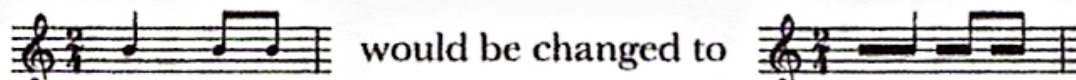


Fig. 10

Henry Cowell, 'Our Inadequate Notation' in *Essential Cowell, Selected Writings on Music by Henry Cowell 1921-1964*, Kingston, NY: McPherson & Company, 245

¹⁵¹ COWELL, Henry, 2002, 'Our Inadequate Notation' (1927), in *Essential Cowell, Selected Writings on Music by Henry Cowell 1921-1964*, McPherson & Company, 244

The next thing one notices is the fact that the page bears the composer's signature on both ends and that the dynamic indications are thus written that they can be read each side up (accidentals are limited to sharps and naturals, which look identical in both directions). Once again there are no rests and no clefs, but this time the instructions state that "events within each two line system may be read as either treble or bass clef". Duration can fluctuate per two line system between 20 seconds and 2 minutes.

With the page inversion possibility, the free clef choice per event and the duration freedom per system, the work presents a great elasticity, yet should proportionally remain quite recognizable, especially due to, once again, diversified and contrasting dynamics and mostly large pitch intervals.

2.9 *Four Systems*

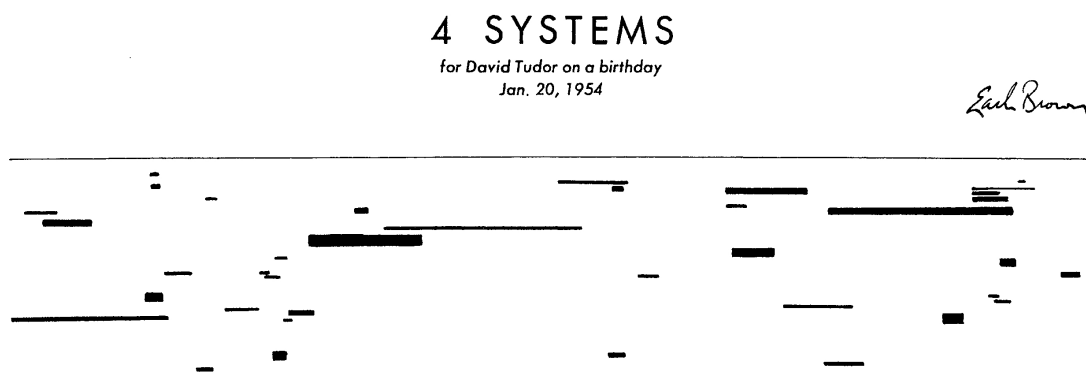


Fig. 11 - the first system of Earle Brown, *4 Systems*
(Associated Music Publishers)

Four Systems (January 1954) is, as said previously, a sort of bonus to *Folio*. It was dedicated to David Tudor and composed for his 28th birthday (very quickly, on the day itself).

The performance notes specify:

May be played in any sequence, either side up, at any tempo(i). The continuous lines from far left to far right define the outer limits of the keyboard. Thickness may indicate dynamics or clusters.¹⁵² (Earle Brown)

It is in a way an encounter between *1953* and *December 1952*; it has the time notation (and permission to be read upside down) of the former and part of the interpretative freedom of the latter, as it gives very little specifications. It is clear that, as in the previous *Folio* works, the idea is to rely on the spontaneity of the performer and that all the graphic information is very relative. Yet there is irony in the fact that the very performer it was written for was not inclined to improvise. David Tudor would transcribe the score to a more “conventional” notation form. He subdivided the area between the continuous lines of each system into 88 equal parts and thus determined the exact pitch of each event, he also measured the exact length of each event to determine its duration and then transcribed it all on music paper.

2.10 Laboratory

With *FOLIO* I intentionally extended the compositional aspect and the performance process as far out of normal realms as I could.....just short of producing nothing at all. Within the same year I wrote works having extremes of finite control and extremes of infinite ambiguity, knowing full well that what I was looking for lay somewhere in between. (I wrote a note to myself at that time which was to the effect that, truth lies at a point somewhere on the arc stretched between two extremes of paradox and that the point is always fluctuating.....as I was)¹⁵³ (Earle Brown)

Folio is a unique collection of scores, not only for their radically innovative character, but also for the fact that they grant us a rare in depth look into a composer's experimental laboratory, materials that usually remain unpublished. *Folio* contains the seeds of many ideas which would reappear or remain used throughout Brown's oeuvre.

152 BROWN, Earle, 1961, performance note to the score (*4 Systems*, published with *Folio*), Associated Music Publishers Inc., USA

153 BROWN, Earle, *Writings and thoughts regarding works; 1952-1955*, unpublished, archives of the Earle Brown Music Foundation, Rye, New York

Some ideas would never re-occur because they either yielded unsatisfying results or had provided all there was to be achieved with them (though, certainly where graphic notation is concerned, they re-appeared as new incarnations in other composers' works).

Of all the concepts he developed in *Folio*, the proportional notation remained most present in his subsequent work, almost to the very end. But graphic notation (though not as abstract as *December 1952*) would also occur regularly, as well as passages where the performer is required to improvise. His own (or other conductors') conducting in later works like *Available Forms* (1961) (the first open form orchestral work) is also an improvisation. The musicians may have precisely notated materials to play (though some works also contain graphic notations to be improvised), but the instructions they receive from the conductor, as to which part of the score to play, when to stop playing events and move to other, when to hold or resume, when to disregard notated dynamics and follow the conducted ones, etc., are spontaneously decided upon.

Like it is the case with Feldman's graph scores, performers can assume that interpretative freedom, like the one granted in *Folio*, should be dealt with according to Brown's aesthetic concepts. His melodic language is modernistic, favouring wide intervals and avoiding consonance. He made this clear for instance in the instructions to *Syntagma III* (1970), where he specifies that the “slashing” lines are not to be interpreted as glissandi, but are “basically 'atonal' lines”:

1

Musicians follow ensemble flow and enter in relation to each other.
Basically "atonal" lines.

FAST & lightly
VERY FAST VERY LIGHTLY
VIOLENT VERY FAST
Ritard --- (LIGHTLY)

FLT.
B. CLAR.
CEL. PNO.
HARP
VIBE
MARIM.
Vln.
Vcl.

Arco
Arco
Arco
Arco

"slashing" lines do not mean glissandi -
they discrete attacks along their trajectory.

Fig. 12 - excerpt from Earle Brown, *Syntagma III* (1970) (Edition Peters)

Although, “atonal” is an ambiguous concept. It seems obvious that he does not just mean “avoiding a tonal centre”, but that “atonal” here stands for something like a modernistic or serial feel, something abstract, preferably unrelated to any other recognisable musical mode. Which also explains that Brown would rather leave rhythm open than pitch. This conscious choice for a certain modernism might also explain why, of all the New York School composers Brown was the only one who was still very welcome in Darmstadt after Wolfgang Steinecke's death in December 1961. His music, although conceptually different, did not sound foreign among the European post-serialists. But because of this it might also have been misinterpreted at times or its essence been given less attention than it deserved. Earle Brown kept repeating that at least one key to his music could be found in his jazz antecedents, which put him in a fairly unique position, but also one that was easily ignored in the universe of “serious” music.

There is no doubt, as I have frequently written, that my work in 'classical' music was tremendously and significantly influenced by my early experiences as a jazz musician (trmpt.). If I had not had the jazz induced trust, collaborating musicality of jazz improv. and controls, I would never be heard from again. I could not have had the nerve to do what I did.

I realized that the warm and poetically intimate sound events that could be created, provoked, stimulated by not demanding accuracy to a pre-determined incontinuity, but achieved by a combination of compositional determination activated by a conceptual flexibility and improvisational 'program', that I wanted. It necessitated a search for a delicate balance between 'control and freedom'.¹⁵⁴ (Earle Brown)

154 BROWN, Earle, 2000, handwritten draft about *Cross Sections and Color Fields*, May 1 2000, unpublished, archives of the Earle Brown Music Foundation, Rye, New York

Chapter 3

MILES DAVIS - *IFE*

3.1 Bitches Brew

It's a much more compositional thing than I had thought of. Where is it going?
It's not just going to the end of the tune because there's no such thing like that
anymore. (Dave Liebman)¹⁵⁵

The inclusion of Miles Davis among the case studies of this thesis may seem odd, but, as already touched upon in the introduction, the world of jazz (for want of a better name) since its very origins does deal with open form (or at least flexible furnishing of the form), without really making claims for that concept as it seems to be a natural inclination.

By the end of the 1960s, when Miles Davis recorded and released what maybe was the most radical and seminal of his various musical course adjustments, *Bitches Brew*¹⁵⁶ (1969), (right after its “prelude”, *In a Silent Way*), many jazz purists refused to consider his new direction as jazz, considering it at best a sellout to rock music. While a single audition is sufficient to realize the pointlessness of this remark.

And then came the fall. *In a Silent Way*, in 1969, long, maudlin, boasting, Davis' sound mostly lost among electronic instruments, was no more than droning wallpaper music. A year later, with *Bitches Brew*, Davis was firmly on the path to the sellout. It sold more than any other Davis album, and fully launched jazz rock with its multiple keyboards, electronic guitars, static beats and clutter.¹⁵⁷
(Stanley Crouch)

The music was indeed lacking conventional jazz features: it had electrified keyboards, guitars and bass; the instrumentation was deviant for a jazz ensemble, including up to

155 PERLA, Gene, 1974, 'Dave Liebman talks with Gene Perla', *Coda*, January 1974, Volume 11 No.5,26

156 DAVIS, Miles, *Bitches Brew*, 1999, Sony, B00000J7SS

157 CROUCH, Stanley, 1990, 'Play the Right Thing', *The New Republic*, February 12 1990

three electric keyboards, two drummers, two bass players, two percussionists and the recording relied heavily on post-production editing. But beside these very material things, the music was indeed very different: gone was the 16 or 32 bar framework and along with it the traditional chord changes; there were no show-off solos any more, nor the hierarchy that usually came with them. This was a collective endeavour rather than a leader/band construction. It was a completely new approach, very different even from what by then the jazz world had become used to with free jazz. Free jazz often still offered a more or less conventional relationship between rhythm section and soloists. None of that survived in *Bitches Brew*. The listener was now facing music resulting from a spontaneously organized social situation rather than from a previously agreed upon number of bars, chord progression and chorus sequence. What made it probably even more confusing was that the improvisations were happening within a fairly consonant world, resulting in an energizing friction between something presumably safe and accessible (modal forms and harmony) and something quite unpredictable (a spontaneously self-organizing form). Within this new situation a collective was playing alongside repetitive patterns and improvising with minimal materials. Notable events were often more of a serendipitous rather than a pre-composed kind. Davis made it clear that the extreme reduction of materials was intentional:

I had been experimenting with writing a few simple chord changes for three pianos. [...] So I had been writing these things down, like one beat chord and a bass line, and I found out that the more we played it, it was always different. I would write a chord, a rest, maybe another chord, and it turned out that the more it was played, the more it just kept getting different.¹⁵⁸ (Miles Davis)

While prior to this “jazz” would often mean that a limited amount of material was extracted from a standard and used as a seed for improvisation; here a very limited amount of original material was given to the performers who played with it, in and over ostinato-like structures. It bore the conscious influence of the repetitiveness of the “groove” of the then contemporary commercial funk and rhythm 'n' blues and it relied very much on the performers' acute auditory attention to each other and to the common result. In this context the result depended a lot on the choice of performers, a phenomenon common to most if not all “open form” composition or improvisation.

158 DAVIS, Miles & TROUPE, Quincy, 1989, *Miles, The Autobiography*, Simon & Schuster, 288

Miles Davis would pick them for their background, experience, and the colour they would bring to the musical mix.

The years following *Bitches Brew*, Davis would further elaborate this new approach into rudimentarily composed improvisations. The size of the band would increase as well as the diversification of the instruments (more percussion and exotic colours like tabla or (electric) sitar were added to the mix).

3.2 *Ife* 1972-1982

In 1972 Davis recorded the next of his very radical statements: *On the Corner*¹⁵⁹. Even more than *Bitches Brew* it put the relentless drums and bass up front while the rest of the instruments (now including wahwah processed trumpet) fused as a backdrop to it. *On the Corner* did announce very assertively what would be explored the next three years. As percussionist James Mtume put it:

On the Corner was the seed, and the seed can never match the plant. It was the beginning of the formation of a new direction. There was a lot of searching before the direction became clear.¹⁶⁰ (James Mtume)

The week after the *On the Corner*¹⁶¹ sessions, early June 1972, the search for the new direction continued and more music was recorded, one composition of which, *Ife*, would later be released, among older materials, on the *Big Fun*¹⁶² album. While coming from the same sessions (with a slightly smaller collective) *Ife* contains a different musical statement, adding much more space to the *On the Corner* world, creating a much free-er atmosphere. While *On the Corner* shows everybody hard at work, *Ife* gives a more relaxed impression, where the musicians become more active if they feel like it or find it appropriate. *Ife*, would, of all the works from that period, remain longer on Davis' playlist than any other, up until 1982. It was partly conceived by Paul Buckmaster, the British cellist who had joined Davis for the *On the Corner* sessions,

159 DAVIS, Miles, *On the Corner*, Sony, B2000, 00004VWAF

160 TINGEN, Paul, 2001, *Miles Beyond, the Electric Explorations of Miles Davis, 1967-1991*, 2001, Billboard Books, 145

161 DAVIS, Miles, *On the Corner*, Sony, B2000, 00004VWAF

162 DAVIS, Miles, *Big Fun*, Tristar, 1992, B0000020H6

who explains its concept as follows:

I had written lots of keyboard phrases that were to occur at certain points in the piece. They were little fragments, phrases, or fills of two, four or eight bars long. The musicians interpreted them, and completely distorted them. The main melody of *Ife* and the chord accompaniment are mine. I think the bass line is Michael's [Henderson, bass player]. The opening phrases on organ were written by me and interpreted by Herbie [Hancock, keyboard player].¹⁶³ (Paul Buckmaster)

Listening to different versions of *Ife* over the years, it seems as if the only recurring element from the original is the “main melody”, a slow, plaintive, quite elastic six note phrase in C minor, and a bass ostinato which is never repeated in exactly the same way from version to version (even though almost all versions have the same bass player).



Fig. 13 - the *Ife* melody

The first realization, published on *Big Fun*, was performed by an ensemble of eleven musicians: Miles Davis, trumpet; Carlos Garnett, soprano saxophone; Bennie Maupin, bass clarinet; Herbie Hancock, electric piano; Harold I. Williams Jr., organ and synthesizer; Lonnie Liston Smith, organ; Michael Henderson, electric bass; Al Foster, drums and percussion; Billy Hart, drums and percussion; James Mtume, percussion and Badal Roy, tabla. It lasts 21 minutes and 30 seconds and consists of 4 parts, of which the first and the third bear most resemblances.

It starts with the two organ phrases mentioned by Buckmaster, which are more like a sound gesture than actual phrases and do not reappear beyond the intro and do not occur at all in later versions (at least not in those that were published, nor on the many

163 TINGEN, Paul, 2001, *Miles Beyond, the Electric Explorations of Miles Davis, 1967-1991*, 2001, Billboard Books, 143

bootlegs of that period that are in circulation). After the intro, about 20 seconds far, the bass ostinato starts, along with the drums, at a fast pace.



Fig. 14 - bass ostinato

Due to the fact that there are four percussionists involved the entire piece has strong underlying polyrhythmic features, although the main rhythmic sensation comes from the binary bass ostinato. Below the bass and the drums (not pitch wise, but rather as a hierarchical gradation), throughout the recording, there is a keyboard thicket from which single keyboards, the flute and the reed instruments every now and then emerge. The keyboard phrases mentioned by Buckmaster never seem to exist as independent entities. This turning upside down of the instrumental jazz hierarchy was one of the determining innovations introduced by Davis with *On the Corner*: the rhythm section (the bass and the drums) is up front, rather than accompanying and supporting from behind. It is this “in your face” driving energy that some listeners experienced as aggressiveness. We no longer have the choice not to focus our attention on it, we have to listen through it to get to the rest. In this it is closer to sub-Saharan music, where the percussion is often louder than the singing, than to for instance James Brown's music, in which a related effect is achieved by turning the entire band into one large rhythm section. Buckmaster's chord accompaniment should also not be overstated as there is no real chord “accompaniment” in the traditional sense beyond a strong C minor feel.

The main melody of *Ife* occurs a first time after about 1 minute and 17 seconds, when it is played by the soprano saxophone. It is first answered by the wah wah processed trumpet, not playing the exact phrase, but playing with parts of it. After two and a half minutes the drums slow down (changing from 16th to quarter notes), while the bass ostinato stays the same, but the general atmosphere becomes more spacious. This is the beginning of the second part. At 2 minutes and 50 seconds the trumpet plays the *Ife* melody for the first time. The trumpet continues soloing throughout most of this second part. The bass starts varying the ostinato around 6 minutes and 50 seconds, first by

leaving some notes out of the riff and then by playing it an octave higher. Then gradually everything slows down to end with a C minor chord before the third part, which starts at 8 minutes and 6 seconds with the bass playing its original motif again and the drums this time playing 8th notes instead of 16th along with the bass, like they did in the first part. In this part the soprano saxophone does most of the soloing which is later taken over by the bass clarinet, along with occasional gurgling synthesizer noises and other keyboard phrases. This intensely driving sound continues until 15 minutes and 15 seconds., when everything slows down again and the trumpet introduces the final movement with the *Ife* melody. The bass riff is now played only half as fast and the drums do not accentuate the beat but join in with the two percussionists producing an irregular background tapestry. The organ alternates very slowly a G minor and an Ab minor chord and variations around both while the trumpet again does most of the soloing. It sounds as if the floating music could just go on forever as it is clearly not building up to any climax. It just ends with bass and trumpet playing Ab and we hear Davis, addressing producer Teo Macero, saying something like, “That's enough, let's hear it some time, Teo.”

The next published version of *Ife* is on a live recording from September 1972¹⁶⁴. The group is slightly smaller, but some of the essential players are the same (bass and drums): Miles Davis, electric trumpet; Carlos Garnett, tenor saxophone; Cedric Lawson, electric piano, synthesizer; Reggie Lucas, guitar; Khalil Balakrishna, electric sitar; Michael Henderson, electric bass; Al Foster, drums; Badal Roy, tablas and James Mtume, percussion. It begins with the bass ostinato, which is different from the studio version (cf. fig.15).



Fig.15 - bass ostinato

The tempo is also a bit slower (144 bpm instead of 168). After two bars the bass is joined by the guitar, playing the same riff. By the fourth bar the drums join in, accentuating the steady pulse of the bass and the percussion starts a polyrhythmic

164 DAVIS, Miles, *In Concert: Live at the Philharmonic Hall*, Sony, 1997, B000002AH5

barrage. Gradually a layer is formed by the other instruments, the underlying fabric becomes more and more active. Some instruments add little spikes, while others provide longer phrases. The trumpet, again with wahwah, starts playing slow plaintive tones, announcing the *Ife* melody, which is first heard a little after 4 minutes. The melody is immediately responded to by keyboards and guitar in a chaotic and slightly dissonant manner, reminiscent of Charles Ives' *Unanswered Question*. The trumpet goes on with variations on the theme throughout the entire first movement. The bass ostinato is steadily maintained into the second movement, which begins a little under 12 minutes. The second movement is mainly characterized by a reduction of activity, especially of the drums and percussion. The trumpet continues playing the *Ife* theme and variations of it to finally end the movement with a descending C minor line two octaves down. The third movement begins abruptly (most likely after a visual cue from Davis) after 14 minutes at a higher tempo (168bpm) and the bass playing the riff of the *Big Fun* version and variations on it. Everything becomes gradually very active and very dense. At 18 minutes and 16 seconds the intensity is interrupted by a 30 second slow interlude of organ chords and hand percussion. A trumpet shriek introduces the fourth movement, in which the bass plays a new riff and the trumpet continues soloing, while the drum accentuates the beat. This movement lasts about two and a half minutes and is followed by the last movement at a much lower tempo (60bpm). The bass ostinato, again at times parroted by the guitar, is now very relaxed and alternates between G – Bb – C - Bb and F – Ab – Bb - Ab. The *Ife* melody is not heard any more. The plaintive tones of trumpet, organ and guitar merely suggest remnants of it. This last movement lasts just under 7 minutes and like the *Big Fun* version it gives the impression it could last forever as it does not call for any resolution. This version lasts over 27 minutes, while never showing any loss of momentum.

Bootleg recordings show *Ife* as a very regular feature on the programs following the first officially published live recording, and it is again made public on the 1975 Japanese live concert recording *Another Unity*¹⁶⁵, albeit in a very different form. The group is again slightly different, except for the rhythm section and consists of Miles Davis, trumpet and organ; Sonny Fortune, saxophones and flute; Pete Cosey, electric guitar and percussion; Reggie Lucas, electric guitar; Michael Henderson, electric bass; Al Foster, drums and James Mtume, percussion. The bass ostinato and tempo are more

165 DAVIS, Miles, *Another Unity*, live in Tokyo January 1975, 2001 MegaDisc MD0122

or less identical to the previous concert recording, but is here first introduced by a heavily distorted guitar. What makes it so different of the two previous versions is the long flute solo (by Sonny Fortune) beginning shortly after the start and lasting four and a half minutes. The aesthetics of the phrygian flavoured flute solo sound like something foreign and dated, strongly contrasting with the quite coarse background. The flute solo ends to make space for the trumpet introducing the *Ife* melody and further extrapolating on it. The other obvious differences becoming clear after the flute solo are the two electric guitars adding a strong funk and rock aesthetic to the mix. A second movement begins a little before 11 minutes, it is much quieter and less raucous, involving more trumpet soloing, though less inspired than in the two previous recordings, and guitars that have taken over the role of the absent keyboards. This movement very gradually segues into the next, once again more intense, movement. The end of that movement seems to be announced by the mbira playing of Pete Cosey, after about 17 minutes. The mbira then becomes the centrepiece of the 90 seconds lasting quiet coda, as if to accentuate the very hybrid character of this version of *Ife*.

The last version of *Ife* takes us to 1982. A concert¹⁶⁶ performed by a small group, featuring Miles Davis, trumpet and keyboard; Bill Evans, saxophone, flute; Mike Stern, electric guitar; Marcus Miller, electric bass; Al Foster, drums and Mino Cinelu, percussion. Drummer Al Foster is the only 'veteran', who took part in the original recording, all the other players are younger and would be regular sidemen of Davis in the 1980's. This version starts with a slight hesitation, but quickly the bass launches its ostinato (cf. fig.16), once again not identical to the original riff.



Fig. 16 - bass ostinato

The entire beginning has once again a long flute solo, against layers of drums and percussion and the bass ostinato, just to be interrupted around 2 minutes and 50 seconds by the *Ife* melody on the trumpet. This is followed by the continuation of the flute solo with occasional brief keyboard accents by Davis, for another 2 minutes, until Davis

166 DAVIS, Miles, *Spring*, live in Rome, April 1982, 1992 Jazz Rarities JR 001/002

starts another much longer solo integrating regular occurrences of the theme and closing with it around 9 minutes and 30 seconds. The bass stopped playing its original ostinato around 5 minutes and 50 seconds, to indulge in much free-er playing from then on. The texture over which this all is happening consists of various percussion sounds and brief guitar chords (not trying to match the rhythmic grid of bass and drum). After the trumpet solo the guitar takes over the soloing to be briefly joined again by the trumpet, playing the theme, around the twelfth minute, after that a guitar and bass duet. Around 15 minutes and 15 seconds Davis reintroduces the theme, announcing a return to the bass ostinato from the start and the beginning of the coda which is built around his final trumpet solo, ending the piece after 17 minutes and 45 seconds.

3.3 *Ife*, as a composition

[...] all the information necessary for generating the entity is resident in the parts, so that spontaneous assembly occurs simply as a result of their interaction.¹⁶⁷

(B.C. Goodwin)

We have just given a brief analysis of four “versions” of the same composition. All four are quite different from each other, yet recognizable as *Ife*. As far as we know *Ife* was never published as a score (unlike older compositions by Miles Davis). What would/could the score look like if it existed? It should give the *Ife* melody, as it is recurring in each performance and therefore essential; it could indicate the meter, 4/4 (at least for the bass ostinato and the supporting drum, not necessarily for the remaining percussion); it could specify the key everything should happen in, C minor, and demand a simple bass ostinato. Maybe it could also hint at a C minor 7th chord, to make sure Bb gets a prominent role. Furthermore the performance should consist of different movements, contrasting in intensity, character and/or tempo. A way of signalling the end of the movements should be agreed upon. The last movement should be of a quiet, slow almost liquefied atmosphere, dissolving all that preceded it.

It is not clear how the work was communicated to the performers, but we can assume it

167 GOODWIN, B.C., 1985, 'Developing Organisms as Self-organizing Fields', in *Mathematical Essays on Growth and the Emergence of Form*, ed. Peter I. Antonelli, The University of Alberta Press, 208

relied on the core of recurring players, drummer Al Foster, percussionist James Mtume and bass player Michael Henderson. If they did what they had done previously it would provide a solid platform for new players. This might be augmented by verbal instructions from Davis and his conducting.

So I would direct, like a conductor, once we started to play, and I would either write down some music for somebody or I would tell him to play different things I was hearing, as the music was growing, coming together.¹⁶⁸ (Miles Davis)

The conducting would range from altering meter to instant orchestration (signalling individual players) within a situation that is already active by itself. Which explains that as listeners we are witnessing something that seems to have a mysterious structure, yet a very living, organic one, thriving between composition and improvisation. Guitarist Reggie Lucas explained the resulting contrast as follows:

We had a very defined compositional basis to start from and then elaborated on it in a very structured way, yet also in a very free way. We would play the same tunes, but the tunes were loosely structured. It allowed a lot of interaction between the rhythmic components to the band. We were improvising a lot more than just the notes that were being played in the solos; we were improvising the entire song as we went along.¹⁶⁹ (Reggie Lucas)

And percussionist James Mtume had to rely on a metaphorical description:

You have to start with the canvas, which is the sheet of sound you're working off. [...] Then you need the brushes. Each musician is a brush with a different colour. When you know what you are going for, after a period of time you know what your painting is, you know what shade of red to use on this particular cut. The bass player knows what shade of blue to play. The band was organic. It wasn't about a bunch of solos. It was the tapestry that really mattered. We had a magnetism, a sort of instantaneous radar, to be able to communicate with each other musically. [...] We all knew what the others were thinking, and as a result,

168 DAVIS, Miles & TROUPE, Quincy, 1989, *Miles, The Autobiography*, Simon & Schuster, 289

169 TINGEN, Paul, 2001, *Miles Beyond, the Electric Explorations of Miles Davis, 1967-1991*, 2001, Billboard Books, 152

there was an inexplicable intimacy and intricacy to the music. It was all very natural and organic because we evolved simple frameworks into changing compositions.¹⁷⁰ (James Mtume)

Comparing the four different versions of the same composition shows a common structural aesthetic. The music is stratified, with the top layers occupied by the drums and the bass, right beneath them we find the percussion and underneath that the harmonic thicket of keyboards, guitars and wind instruments. Every now and then elements of the thicket surface above the top layer, for a brief or a longer period. This surfacing, except for the occasional conscious trumpet signalling, has little or no effect on what is living underneath, although at times there is some call/response happening. As a listener one could compare it with observing a pond with a dense fish population, it is not going anywhere and although it stays the same it is extremely active and because of that constantly changing with unpredictable details. The informed listener knows that the *Ife* theme lives somewhere underneath the pond's surface and is bound to appear sooner or later, but it is unpredictable when this will happen, or how often and what shape it will take.

It starts as a formless, chaotic situation, but it is clear that the intention is to generate an emergent form (or forms), a crystallization. Contrary to free improvisation, the few features required by the “score” do have a very strong impact on that emergent form.

3.4 The right audience

It is remarkable that not only the jazz purists, but also the people who were supposed to be more open to change, remained critical of that period in Davis' oeuvre. Positive reviews were an exception and even an open minded biographer like Jack Chambers was, so many years later, not completely at ease with it, when he agreed with the negative reviews given to the live album *In Concert*. He was positive about a few excerpts, although his appreciation clearly went to the more conventional facets of the record: side 1 (of the double vinyl album) closed with a “lush ballad”, side 2 had “an

¹⁷⁰ TINGEN, Paul, 2001, *Miles Beyond, the Electric Explorations of Miles Davis, 1967-1991*, 2001, Billboard Books, 152-153

interesting melody” and side 4 included a “funeral blues”, but he was very negative about the rest. He wrote the following about *Ife*: “On side 3, Henderson repeats three notes on his bass with scarcely a variation for almost fifteen minutes, which is, as the *Coda* reviewer notes, “pure torpor”.¹⁷¹ The ostinato concept (after all not such an uncommon feature throughout music history) was clearly not appreciated, while it makes perfect sense, offering a beacon in what might otherwise seem very chaotic, granting the listener a glimpse of the structure within which the form is given its shape(s). But there was more than just the bass that was challenging; there was the absence of clear beginning and ending, the harmonic minimalism, the polyrhythmic stratification. As Davis explained it:

I would try exploring one chord with this band, one chord in a tune, trying to get everyone to master these small little simple things like rhythm. We would take a chord and make it work for five minutes with variations, cross rhythms, things like that. Say Al Foster is playing in 4/4, Mtume might be playing in 6/8, or 7/4, and the guitarist might be comping in another time signature, or another rhythm altogether different.¹⁷² (Miles Davis)

Within this very dense, very active environment it seemed like everything could be viable and anything could emerge. And, possibly, the most disconcerting thing to some was the unpredictable, liquid, open form, which had to be witnessed instead of anticipated.

171 CHAMBERS, Jack, 1985, *Milestones, the Music and Times of Miles Davis*, University of Toronto Press, (part II), 248

172 DAVIS, Miles & TROUPE, Quincy, 1989, *Miles, The Autobiography*, Simon & Schuster, 320

Chapter 4

ADAM RUDOLPH - OSTINATOS OF CIRCULARITY

Adam Rudolph's music, as performed under his direction by the Organic Orchestra, can confuse the listener as to how much of it is composed or improvised. The scores do provide part of the answer. They contain the raw materials of the work, without disclosing the end result. The work relies on two levels of extemporization, a major one controlled by the conductor/composer and one on a smaller scale relying on the decision making, within boundaries, of the individual performers in the orchestra. The interaction between both produces a very dynamic drive and a strong sense of unpredictability.

4.1 Chicago – Ghana

For an improviser, form is one of the most difficult elements to master. In order to understand form you must be able to generate phrasing. In order to phrase you must have a grasp of rhythm.¹⁷³ (Adam Rudolph)

Percussionist and composer Adam Rudolph (b. 1955) grew up in Chicago, and although he received what can be considered a formal music education (piano lessons at an early age, a BA from Oberlin College, Ohio and an MFA from the California Institute of the Arts), he considers his main education what was transferred to him by other musicians, whether in formal or informal contexts.

There were a lot of hand drummers in my neighbourhood, in Hyde Park¹⁷⁴, where the AACM was. A lot of them, who had played with the Pharaohs¹⁷⁵, with Phil Cohran¹⁷⁶, with Sun Ra, were just playing out in the park; that is how I started playing, and I was really gifted, at 13, 14.

I was lucky enough to meet a teacher who did start teaching me some Afro-

173 RUDOLPH, Adam, 2005, *Pure Rhythm*, 2005, Advance Music, p.II

174 South Side of Chicago

175 Soul/jazz/funk group (relying heavily on polyrhythmic percussion), whose drummer Maurice White would later form the band Earth, Wind & Fire

176 trumpet player with Sun Ra and the AACM

Haitian and Afro-Cuban rhythms. Later I was able to come to New York and study with Ladji Camara¹⁷⁷ and Daniel Barrahanos¹⁷⁸ and different drummers. I also started studying tabla.

School was OK, I went to Oberlin and studied electronic music there. But the really important thing was playing in Chicago with elders who were very generous, - like Fred Anderson and then in Detroit, with Kenny Cox¹⁷⁹ and Charles Moore¹⁸⁰ of the Contemporary Jazz Quintet - who were participating in the oral tradition. I was lucky to be able to be around musicians like that, it is where I learned the most important things.¹⁸¹ (Adam Rudolph)

By the time he turned 21 Rudolph had saved enough money to go to Ghana for one year.

I went to Ghana, because Juma Santos¹⁸² (who plays on Miles Davis' *Bitches Brew*) told me about the Institute of African Studies in Ghana. But when I got there I never enrolled officially. I did not end up studying the drum patterns per se, it was not the crux of what I did. What I did was living there, attending trance ceremonies, funerals, naming ceremonies, eating the food, having girlfriends. It was where I first clearly could see how the cosmology of a culture is the basis from which the music of everything grows. I had never experienced anything as powerful as when I was going to those trance ceremonies. I am 21 years old; there is a cow and a goat and they sacrifice these animals and then they call in the spirits - very intense beautiful, powerful drumming. You are sitting, talking and the next thing you know the people you are sitting with, their eyes go back in the head and they are totally transformed into some kind of powerful energy. And then there are thirty people like that and you have to dance too. It was the first time I really was crying from music, but not because it was sad, it was just so powerful. What was important for me, that is still important today is that

177 Papa Ladji Camara, Guinean djembe drummer, who emigrated to the USA in 1960 and among many other people performed together with the Nigerian percussionist Babatunde Olatunji and with multi-instrumentalist (in the first place saxophone and flute) Yusef Lateef, who would later regularly team up with Adam Rudolph.

178 Cuban Conga and Haitian Arara drummer

179 pianist

180 trumpet player, Rudolph's improvisation teacher at Oberlin College

181 Conversation with the author, New York, November 2010

182 percussionist, master drummer, played with Miles Davis, Nina Simone, Roy Ayers, David Sanborn, etc.

music has a functionality and purpose in the world that is much more than just entertainment.

Music comes from something greater than music and music can be about something greater than music; it kind of passes through music.¹⁸³ (Adam Rudolph)

This very idea still plays a predominant role in his music, with which he attempts to achieve something greater than the sum of its parts and relies a lot on musical and rhythmic communication.

Form is not related to the idea of theme and development, it is based upon the African idea of time, which has to do with the circularity. Everything is based upon what I call *Ostinatos of Circularity*. There are certain things that move around and around and around. The idea of *Ostinatos of Circularity* has a functionality which relates to the idea of the call: it is a call, through the voice of music, to the transcendent moment.¹⁸⁴ (Adam Rudolph)

Over the years, since his return from Ghana, Rudolph, next to performing and recording as a percussionist with many musicians (e.g. Don Cherry , Jon Hassel , Yusef Lateef , Pharoah Sanders , Foday Musa Suso (The Gambia) , Hassan Hakmoun (Morocco) , Badal Roy (India) , Wadada Leo Smith , Oliver Lake , Lester Bowie , Sibiri Samke (Mali) , Bennie Maupin , Herbie Hancock , Joseph Jarman , Sylvie Courvasier , etc) formed a number of ensembles (e.g. Hu:Vibrational, Moving Pictures, The World at Peace, Vashti, etc) and in 1988 started a collaboration with Yusef Lateef, which so far yielded 14 albums. One of his ensemble projects, which will be the subject of this chapter, is the Organic Orchestra, which began in 2000 in Venice, California.

It started when I was living in Los Angeles. I was on the board of this place called The Electric Lodge and I was working there with a great Butoh dancer named Oguri. He got me involved in the place and a lot of musicians were interested in working with me. I felt it was my turn. I was talking about the oral tradition and I felt like there was something I had to offer. I was trying to think

183 Conversation with the author, New York, November 2010

184 Conversation with the author, New York, November 2010

of a way to involve a lot of people coming from different backgrounds. I put off a call and named it The Organic Orchestra. Don Cherry made a record named The Organic Music Society¹⁸⁵. I always loved that record and Don was the first person who took me on a tour through Europe, so, as a nod to him, I called it the Organic Orchestra. At first I would bring my drums and I had just a few conducting ideas. Sometimes people say it reminds them of Butch Morris, but, though I knew his brother, I had no idea what he was doing. I used to see Muhal Richard Abrams conduct the AACM big band or even Dizzy Gillespie, and I could see they would do gestures.¹⁸⁶ (Adam Rudolph)

Along with developing a specific conducting language, Rudolph also worked on a way to write scores allowing him to implement his musical ideas within very diversified ensembles.

The idea of making a score was something that I had been working with for years. I started out with musicians there [Los Angeles] and we would do it once or twice a year and then I started coming here [New York] and doing it. And now I go all over the world. I teach and I usually spend two or three days with a group of students or professional musicians. I was just in Istanbul working with local musicians. What is great is that musicians, if they are reasonably facile and understand their intervals, folk musicians or traditional musicians, classical or jazz musicians, can all be in the group together and use a similar score. The great thing about the score is you do not have to read Western Music.¹⁸⁷ (Adam Rudolph)

With this last statement Rudolph is referring to his use of grids, or matrices for (most) melodic notation and TUBS¹⁸⁸ (time unit box system) for rhythm parts, although for certain parts he also relies on more conventional notation (depending on the musicians in the group), derived from the matrices. The score is a modular map through which Rudolph guides the musicians by means of elaborate hand signals.

185 CHERRY, Don, 1972, *Organic Music Society*, Caprice Records

186 Conversation with the author, New York, November 2010

187 Conversation with the author, New York, November 2010

188 Adam Rudolph also uses this type of notation in his book *Pure Rhythm*, 2005, Advance Music

I sort of abandoned Western music notation a long time ago, especially regarding writing rhythms. Western notation is a very imperfect and deceptive system of writing rhythm, for example from Africa, India or Indonesia, which are the three big influences for me. It does not work, because there is this idea of multiple downbeats; there is not one dominant so-called time signature.

I started using different symbols for the pitch notation element also. I realized that there is this relationship between process and prototype. You can change the creative process itself, which is how you come to prototypical art. I am always fiddling with and reinventing or reconstructing my own creative process; finding different ways of constructing what I call the syntax. You can speak a sentence forwards, but you cannot speak it backwards and have people understand you. But of course in music we can. There are all these permutations and you can invert intervals. So I was looking for a way where in Western notation....and again, why do we have to use this system? It is good for some things, not good for a lot of things. If you see an E and then an F, and it is a quarter note followed by an eighth note, you are decreed by the god of composers that that is how it must be played, but if you move into a system, where there is an improvisational element and you think about something that moves in half steps and minor thirds - like a symmetric hexatonic scale - E can go up to F, but E can also go down to Eb. All of a sudden there is this possibility. You take a double intervallic system, half step and minor third going up or down and it opens up. E can go down to Eb and up to F, then if you go up to F your next thing is going to be a minor third up or down, you have two options, and so on.¹⁸⁹ (Adam Rudolph)

The score is a supply of materials from which all the music is derived according to the indications of the composer/conductor, at times allowing the performers a lot of freedom, but also allowing the composer to change things on the spot or to generate very specific colours or groupings. It requires the performers to be as familiar as possible with this supply of materials (which is not so huge after all) and with the hand signals.

189 Conversation with the author, New York, November 2010

4.2 *Ostinatos of Circularity*

...feel the triplet, if you don't feel the triplet you are going to be lost in space.¹⁹⁰
(Adam Rudolph)

Although the title of the work, *Ostinatos of Circularity*, could sound like one, it is not a tautology. The circularity in the work is of a concentric kind, combining different rhythmic and melodic ostinatos. There is a clear reference to the Sub-Saharan drumming Rudolph experienced and studied in Ghana:

The drum ensemble consists of two basic concepts - the background ostinato on one hand and the master drum concept on the other. Visualize the background ostinato as consisting of concentric circular rhythms, each with its peculiar orientation to the regulative beat of the time cycle and thus revealing staggered entry relationships astride the regulative beat.

Against this constant ostinato structural framework of the background, the master drum “projects” a succession of intriguing, logically ordered rhythmic manipulations, which are concurrently regulated by the common timing principle of the time cycle.¹⁹¹ (Willie Anku)

The music Rudolph composes for the Organic Orchestra is an abstraction of these concepts, a transposition of the structural essence of a music which is in many ways radically different from what our Western ears are accustomed to. In a way he, as the conductor, can be seen as the master drummer, calling up “ a succession of intriguing, logically ordered rhythmic [and melodic] manipulations.”

Sub-Saharan polyrhythm relies on an implicit pulse, acting as a backbone to complex rhythmic superimpositions:

The pulse is an isochronal standard, which is used by Central African cultures as the unit of reference for the measurement of musical time. It provides a series of

190 Adam Rudolph, during rehearsal, Roulette, New York, November 22 2010

191 ANKU, Willie, 2007, 'Inside a Master Drummer's Mind: A Quantitative Theory of Structures in African Music', *Transcultural Music Review*, #11

(<http://www.sibetrans.com/trans/trans11/indice11.htm>) (accessed on May 15 2010)

regular reference points for ordering rhythmic events. In polyrhythmic music, the pulse is the common regulator of temporal organization for all the parts. (...) In Central Africa, however, the pulse is rarely materialized.¹⁹² (Simha Arom)

This pulse is also what Adam Rudolph requires his performers (and not only the percussionists) to feel, or hear internally:

What I am trying to get everybody into is this way of thinking, ...in African music you hear what sounds like an abstraction, but what it is is that the bell pattern, what Cubans call clave, is going on in the mind of the player. So eventually what I am looking for is that when those rhythms happen you will be able to hear the phraseology of the rhythm that is going on and hear where you are in space.¹⁹³ (Adam Rudolph)

As this music only exists as continuously evolving prototypes, Rudolph's preferred work method is one of successive rehearsals¹⁹⁴ and performances. In November 2010 I had the pleasure to attend two practice sessions and two subsequent performances. These were part of a month long residency of the Organic Orchestra at Roulette in New York City, featuring concerts every Monday night. I did attend the two last ones that month and assumed the musicians - though most of them took part in all the sessions, each night some were absent and new faces would show up - would by then be familiar with the music. This turned out to be only relatively so, as Rudolph would each time bring new materials or try out different approaches of what had been done the previous week(s). Each "rehearsal", or rather "preparation", did feel like an experimental laboratory. New things being tried out, old ones altered, some failing and some succeeding, without ever opting for security. This very challenge would put musicians, audience and Adam Rudolph himself, on the edge of their seats during the entire concert(s), submersing the events in an atmosphere of exhilarating urgency.

On both occasions the orchestra had the support of several (two the first night and three

192 AROM, Simha, 1989, 'Time Structure in the Music of Central Africa: Periodicity, Meter, Rhythm and Polyrythmics', *Leonardo* Vol. 22, No. 1, 'Art and the New Biology: Biological Forms and Patterns', M.I.T. Press, p.92

193 Adam Rudolph, during rehearsal, Roulette, New York, November 22 2010

194 "I do not even call it rehearsal, because you cannot rehearse, you can prepare, which is very different." Conversation with the author, New York, November 2010

the second) percussionists, who were given a completely different role than the melodic instruments. They were in charge of providing either the polyrhythmic frame within which the rest of the music was happening, accentuating downbeats on the above mentioned implicit pulse, or “limiting” themselves to colour and ambience. They had scores/instructions different from those of the other players and were conducted by dedicated signals from Rudolph.

4.3 The Score

The score for *Ostinatos of Circularity* consists of materials ranging from basic (matrices of pitch names, cf. fig. 2 & 3) to more or less fully notated and pictures of specific hand signals. Although limited in quantity these source materials can generate a substantial amount of diversified music.

Hand signals:

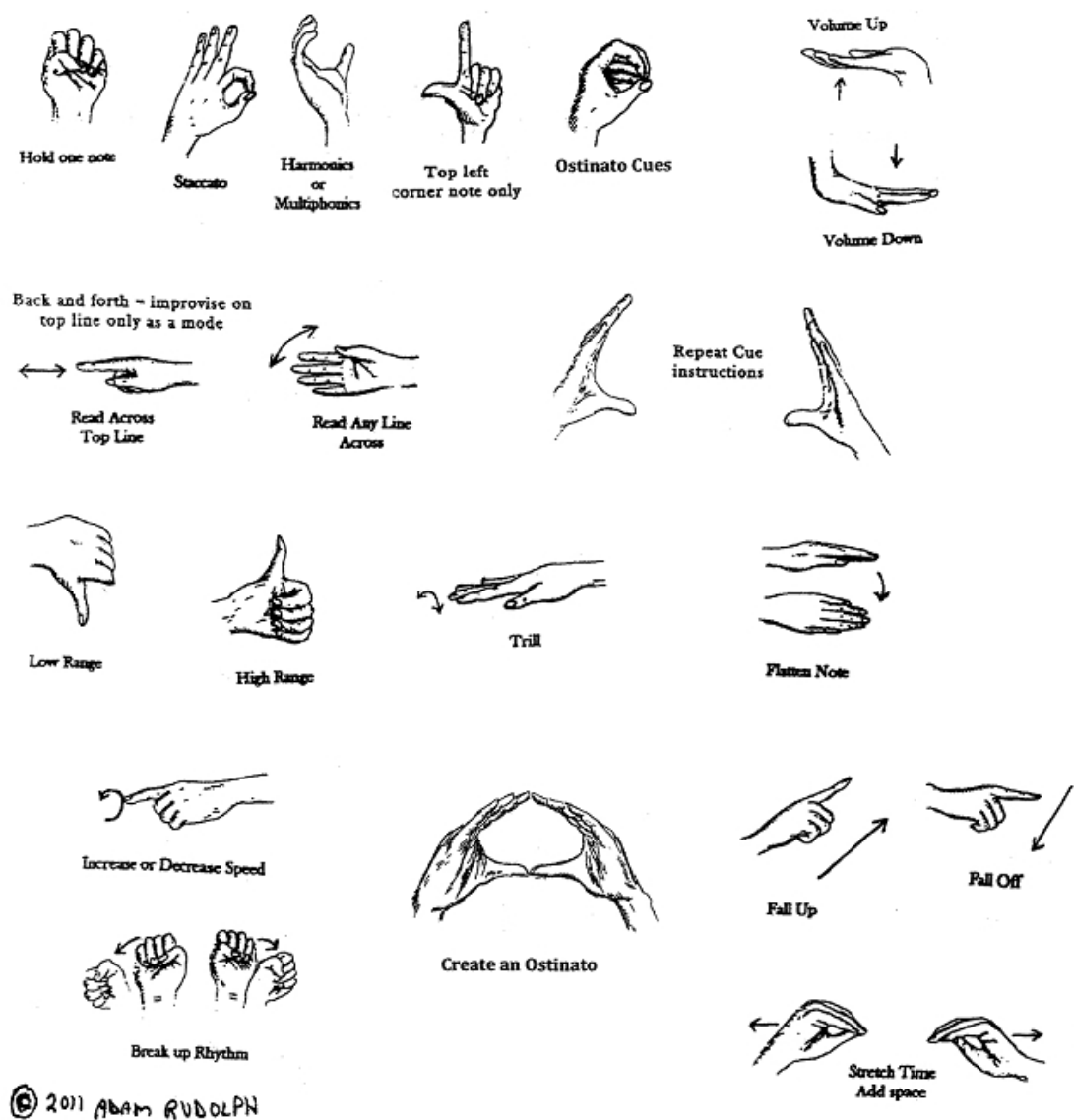


Fig. 17 - hand signals - Adam Rudolph, *Ostinatos of Circularity* (unpublished)

These signals indicate the performers (not necessarily all together) what action to take

and what materials (matrices with pitch collections) to take those actions with. All matrices and orchestrations or cues are called by their numbers. The signals are also used to further conduct the musicians while performing the originally indicated action.

Matrices:

#1 Clustonic						
Eb	A	D	C#	C	Bb	B
Ab	D	G	F#	F	Eb	E
C#	G	C	B	Bb	Ab	A
F#	C	F	E	Eb	C#	D
B	F	Bb	A	Ab	F#	G
E	Bb	Eb	D	C#	B	C

#4 Trec					
Bb	C	Db	E	F#	A
Ab	Bb	B	D	E	G
G	A	Bb	Db	Eb	Gb
E	F#	G	Bb	C	Eb
D	E	F	Ab	Bb	Db
B	Db	D	F	G	Bb

#2 Rotation						
D	Eb	E	Ab	A	C	C#
C#	D	F#	G	Bb	B	C
C	E	F	Ab	A	Bb	B
Ab	A	C	C#	D	Eb	E
G	Bb	B	C	C#	D	F#
E	F	F#	G	Ab	C	C#
Eb	E	F	F#	Bb	B	D

#5 Pentatonic					
F	Eb	C	Bb	Ab	F
C	Bb	G	F	Eb	C
Ab	Gb	Eb	Db	B	Ab
Eb	Db	Bb	Ab	Gb	Eb
Bb	Ab	F	Eb	Db	Bb

#3 Hexatonic					
Ab	G	E	Eb	C	B
Db	C	A	Ab	F	E
Gb	F	D	Db	Bb	A
B	Bb	G	Gb	Eb	D

Fig. 18 – matrices - Adam Rudolph, *Ostinatos of Circularity* (unpublished)

The basic matrices (originally named “grids”) are pitch collection reservoirs. They are used in real time, but have also been used by the composer in sections/motifs/ostinatos that were written out beforehand. As the conductor, Rudolph can indicate which matrix to use as well as in which direction (horizontal or vertical) and which row(s) or column(s). Not all the matrices come in those grid layouts, some, which are named

The matrices can be used on their own, but are often used in conjunction with ostinato cues or orchestrations. They can be combined as well.

Ostinato Cues :

Ostinato Cues
Bass Clef

#1 Play any pitch top or bottom rhythm

#2 Play any pitch top or bottom rhythm

#3 Play first or second bar, top or bottom note

#4 Play first or second bar, top or bottom note

#5 (Dance Drama pt.3)
----- 5 (3 times) -----

----- 7 (3 times) -----

#6 (five against seven) play top or bottom note

The score consists of six numbered cues on a bass clef staff. Cue #1 and #2 are rhythmic patterns of eighth notes. Cue #3 and #4 are melodic phrases. Cue #5 is a rhythmic pattern of eighth notes with a 5/7 time signature and is repeated three times. Cue #6 is a complex rhythmic pattern of eighth notes with a 5/7 time signature and is repeated three times. There are handwritten annotations: a hand signal icon at the top left, and 'A7D C/G' written above cue #4.

Fig. 20 - Ostinato Cues - Adam Rudolph, *Ostinatos of Circularity* (unpublished)

Hand signals, next to telling the player(s) which matrix to get the pitch materials from, can also indicate which “ostinato” to use (the “ostinato” hand signal is given, followed by the cue number).

Next to these elements the conductor can also call upon “personalized” themes (specific instruments can be given beforehand written out themes). These themes are derived from the matrices and can therefore be performed with accompaniments conducted from the same matrices. Other elements could be seen as a “interjections”, independent and contrasting elements such as the *Velocity Matrix* (cf. fig.21).

TRAY AS FAST AS POSSIBLE COUNTERCLOCKWISE OR COUNTERCLOCKWISE
 (each phrase shape can be played backwards as well)

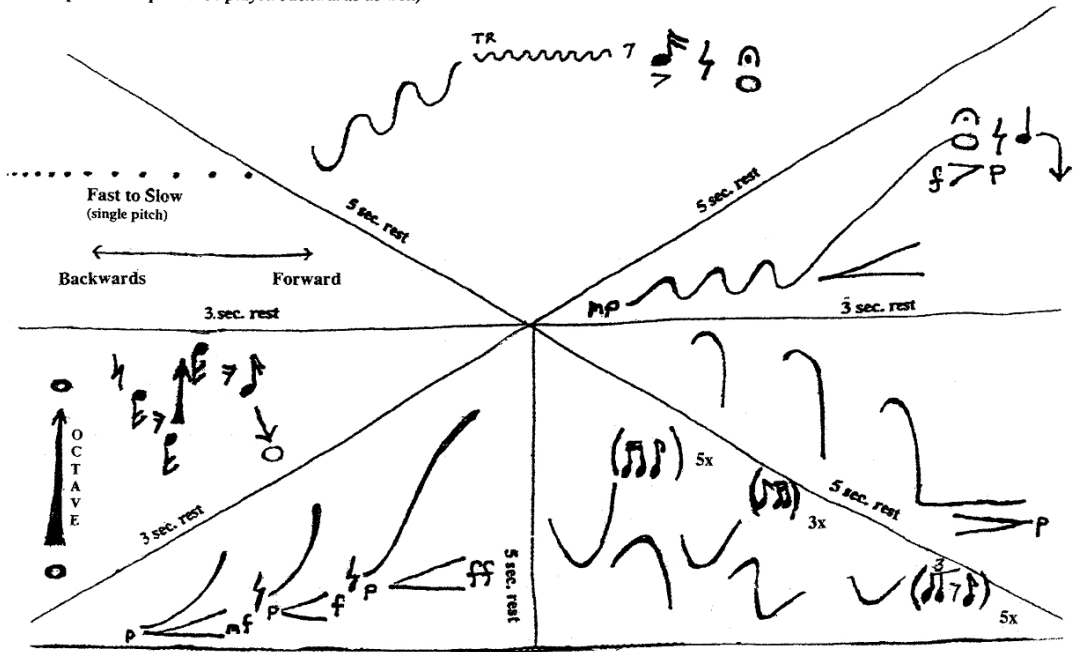


Fig. 21 – Velocity Matrix - Adam Rudolph, *Ostinatos of Circularity* (unpublished)

This matrix (the only graphic notation in the score) when called for has to be played as fast as possible.

I wanted one contrasting cosmogram where nobody has to be thinking about the pitch, but they are just thinking about the shape, and I have used that in two different ways, one way is where I cue an individual, and then the other way is when I cue a section leader. I might have one person improvising in the rotation matrix and then maybe orchestrate some chords from the *Triple Diminished Galaxy* and then have another person, or all the brass, playing the *Velocity Matrix*. All those things can all be combined.¹⁹⁶ (Adam Rudolph)

¹⁹⁶ 196 telephone conversation with the author, March 2011

In addition to these combinable construction elements, there are also written out melodic themes which are either associated with a specific movement or inserted into a larger one. The themes are derived from certain matrices and can thus easily be combined with them.

Strings **Organic Orchestra Melodic Themes Fall 2010** Adam Rudolph

♩ = 228

Fig. 22 - excerpt from Adam Rudolph, *Organic Orchestra Themes*, Fall 2010 (strings) (unpublished)

Twilight is another example of a written out score given to one or more players.

Fig. 23 - excerpt from Adam Rudolph, *Twilight* (unpublished)

It comes with the following performance instructions:

Heartfelt

Rhythms are approximate...

Breath and phrase as you hear and feel it

Dialogue with orchestration

Feel free to apply dynamics, extended techniques

Repeat phrases or notes as you wish

and/or play phrases backwards

...however inspiration requests it

I think I have a dozen compositions at least like that of solos, duo, trios. I keep a list on the stand when I am conducting. I keep track of who has what composition and I try and remember or review it before a concert and what matrix they are based upon. Like I just wrote a new piece for the flute player in Los Angeles that was also based upon the *Tree Matrix*, and then there was an oboe player and I gave the oboe player *Twilight*, which was based on the *Tree Matrix*. I knew who had those pieces and I knew they were based on the *Tree Matrix*, so I can construct that piece in any way I want, I can orchestrate around them with the *Tree Matrix* or not. If there is an experienced improviser, maybe they can improvise in the *Tree Matrix*. If you look at that *Twilight* piece, you see these phrase markings and usually at the end of each phrase there is a rest with a fermata. That means that I usually cue them in and out, or I let them play a phrase, it says they can play a phrase twice, they can play it backwards, I really want them to breathe it. So we kind of do this sort of improvisation, and this is useful for players who are coming into the orchestra from a classical background, because it gives them some freedom to interpret the materials. So I brought them in and out, back and forth and then I had somebody improvising and then I conducted different colours from the *Tree Matrix*. It was a really interesting piece and it will never happen the same way again.¹⁹⁷ (Adam Rudolph)

¹⁹⁷ Telephone conversation with the author, March 2011

4.4 Rhythm

What is this 21 beat cycle of 5 and 7 and 9 moving against seven triplets, how does that work and how do you phrase and work through that? How do you eat that and internalize it so that it becomes part of your language? You have to just play it, there is no other way.¹⁹⁸ (Adam Rudolph)

Rhythm is at the heart of Adam Rudolph's work, it is both frame and backbone of the Organic Orchestra. Often the orchestra is supplemented with a percussion section, subjected to a different score and different instructions. Hand signals can refer to notated sections (cf. fig. 24) or, as numbers, to rhythmic subdivisions (e.g. 3 or 5 or 7).

Ostinato #3 Dance Drama part 3 (A section groove)

X		X		X	X		X		X		X		X	bell pattern
X				X					X					3 quadruplets

Dance Drama part 3 (B section break - played 2 times)

1	2	&	1	2	&	1	2	&	1	2	3	&	1	2	3	&	1	2	3	&
X	X		X	X		X	X		X	X	X		X	X	X		X	X	X	
X			X			X			X			X			X			X		

Dance Drama part 3 (B section groove) quadruplets modulate (Their tempo stays the same) to become the triplets in B section (so bell pattern is slower)

X		X		X	X		X		X		X		X	bell pattern
X			X			X			X					4 triplets

Dance Drama part 3 (B section break - played 2 times)

1	2	&	1	2	&	1	2	&	1	2	3	&	1	2	3	&	1	2	3	&
X	X		X	X		X	X		X	X	X		X	X	X		X	X	X	
X		X		X		X			X			X			X			X		

Fig. 24 - excerpt from the percussion part to Adam Rudolph, *Dance Drama Part 3* (unpublished)

The percussionists are often the rhythmic engine of the orchestra (though performances without percussionists are possible), giving the other players the pulse and accentuating the bell pattern of each piece.

¹⁹⁸ Conversation with the author, New York, November 2010

It is pulse based and it are just the accents that make the pattern. It is just my intuition and my experience if I decide that the rhythm has a natural sort of breath and feel to it or not.

I tell the musicians “don't read, I wrote them down, but don't look, just listen”, if you play it enough, you can count, you can look, if you can sing it you can play it, and also, if you can feel the count in your feet, in your body, you can play it.¹⁹⁹ (Adam Rudolph)

Indeed, although at first sight it can look rhythmically challenging, the rhythms have a natural feel to them, the kind of feel that does not require the player to “count” while playing, but just to feel the flow and go along with it. The pitch instrument players also do not need to see the percussionists' score and vice versa. The Organic Orchestra relies a lot on mutual listening, with the conductor coordinating both parties. Also, during practice/rehearsal great care is taken by Rudolph to have the musicians “feel” the pulse and the rhythm until they are able to forget it.

4.5 Performing the score

This very modular score (of which the above examples are but details) can only be performed with the composer's verbal indications. Practice sessions usually begin with explaining what choice of combinations will be made, how the orchestra will be organized, etc. Many things are tried out, dropped or altered during these sessions.

The materials can roughly be divided into three groups:

- conducted performances of the matrices (e.g. fig. 18 & 19),
- interpretations of the Ostinato Cues (cf. fig. 20)
- conducted performances of written out melodic themes.

These three groups can also be combined.

199 Telephone conversation with the author, March 2011



Create an Ostinato

Fig. 25 - “create an ostinato” - Adam Rudolph, *Ostinatos of Circularity* (unpublished)

Conducted performances of the matrices usually begin with the following gesture sequence: the number of the matrix to be used, which row(s) (horizontal swiping motion) or column(s) (vertical downward swiping motion) and followed by the “create an ostinato” sign (fig. 25). This sequence can be preceded by indicating whom it is addressed to (ranging from the entire orchestra down to a single performer). The performer(s) then receive either a tempo indication (meaning they play the row or column according to the given tempo at an even 8th note rhythm) and a downbeat, or they just receive a “go” signal, without tempo (in which case they make up their own rhythmic phrase). A style indication can also be added to this (e.g. staccato). Once started they keep repeating the row or column until further notice (going back to the start each time they reach the end). Within this playing the conductor can still induce specific alterations, e.g. asking the performer(s) to hold a note, to play staccato, to reduce or augment loudness, etc..

Matrices can also be conducted note by note (especially in the case of the “cosmologies” or “galaxies”), where the phrasing and rhythm is decided upon by the conductor. There are even more possible variations on the use of the matrices: performers can for instance be asked to pick just one note (of their choice) from either an entire matrix or one of its rows or columns. Or they can be asked to improvise or solo within a matrix. These different uses of the matrices can be combined, as can different matrices.



Ostinato Cues

Fig. 26 - “ostinato cues” - Adam Rudolph, *Ostinatos of Circularity* (unpublished)

The “ostinato cues” refer to a specific page of the score (cf. fig. 20), which in November 2010 contained 6 different “Ostinatos”, each of them with, first of all, a very specific rhythmic pattern. They are called for by the gesture shown in fig. 26. Cues #1 and #2 are used in conjunction with the indicated matrix (the instruction on the score should read “play any single pitch from the top row of matrix #5 (the “pentatonic grid”) for ostinato cue #1 and from the second row for ostinato cue #2”). During the November 2010 concerts and rehearsals that I attended, only the top line was used, the bottom line being an indication of the underlying triplet pulse which was supported by the percussionists.

Further requests to the performers from the composer/conductor were to tie certain notes and to add rests (preferably so that the more players were involved in these ostinatos, the more tied notes and rests would be implemented) as well as to vary colour, style or technique. The players were asked to repeat the bar at least two or three times and then to change their phrasing. In the end Ostinato #1 and #2 were to be combined (#2 following #1 at the conductor's cue).

The percussionists meanwhile receive the following instructions:

You guys (the percussionists) are going to do something different from what they (the rest of the orchestra) are going to do. We are trying to get everybody strong in the rhythm here. If I cue 5 you play in 5/4 and so on, but if I give you a tempo, then you are together. If I just say 5 you play your own 5.²⁰⁰ (Adam Rudolph)

200 (5 in this case referring to Ostinato Cue #2) Adam Rudolph, during rehearsal, Roulette, New York, November 29 2010

The other players were told to avoid playing the full pattern at the start before abstracting their rhythms from it, and, if necessary, to play a whole note while singing the rhythm in their head. They were also told to avoid reading altogether: “You don't need to read this any more, you should memorize the pulse, you know your note, you know the pattern.”²⁰¹

In Ostinato Cues #3 and #4 the pitches are given, but players are free to choose the top or bottom note, they are also free to choose whether they play the first or second bar. As for #1 and #2, Rudolph also indicated, during the practice session, that players could tie notes (even through the entire bar or even two bars, in a way contradicting the alternating pitch), to then catch up with the rhythm again.

Ostinato Cue #5 functions as a break in a larger notated piece (Dance Drama). Here again the players can choose any of the three notes given and are asked to match the drummers' playing (cf. fig. 24).

In Ostinato #6, rhythmically structured in 5 against 7, the orchestra is divided up into a group playing the top line (D#, in 7) and another one the bottom one (C, in 5). The notation above and below the staff is a visualization of the rhythmic structure, where the square represents two and the triangle three.

Certain sections are introduced by a bass ostinato, which serves as the audible cue (i.e. Rudolph signals the bass player(s) which bass ostinato to play, which at once also signals the rest of the orchestra what to play).

Rudolph adds:

I wrote those ostinatos just to give them an introduction to starting to be rhythmically more strong. I want to get the pitch players up on the rhythm concept. I am trying to find the best way to notate them; should it be pitched or not pitched. I am really in favour of having all the elements that are in the score to be as multi-use and multi-dimensional as possible.²⁰² (Adam Rudolph)

201 Adam Rudolph, 2010, during rehearsal, Roulette, New York, November 29 2010

202 Telephone conversation with the author, March 2011

To be able to focus on the rhythmic issues the musicians should familiarize themselves as much as possible with the pitch matrices (cf. fig. 18) and their patterns. In 2010 the following instructions were sent to the musicians prior to the performances and their preparations:

ORGANIC ORCHESTRA PRACTICE FOR Grids # 1 – 5

STEP ONE:

Choose the range and inversions you wish (for example 1/2 step up can be Major 7 down if it sounds better on your instrument).

PRACTICE EACH LINE ACROSS LEFT TO RIGHT

Start slow then increase speed to fast as possible

PRACTICE EACH LINE ACROSS RIGHT TO LEFT

Start slow then increase speed to fast as possible

PRACTICE EACH LINE DOWN

Start slow then increase speed to fast as possible

PRACTICE EACH LINE UP

Start slow then increase speed to fast as possible

STEP TWO:

PRACTICE TOP LINE ACROSS LEFT TO RIGHT THEN DOWN

PRACTICE EACH LINE ACROSS RIGHT TO LEFT THEN DOWN

PRACTICE LEFT COLUMN LINE DOWN THEN ACROSS BOTTOM LINE TO RIGHT

PRACTICE RIGHT COLUMN LINE DOWN THEN ACROSS BOTTOM LINE TO LEFT

STEP THREE:

MAKE YOUR OWN COMBINATIONS of RIGHT TO LEFT, LEFT TO RIGHT, UP AND DOWN

EXAMPLE: in Grid # 4 try reading the top line 4 notes across left to right, then down 1 note, right to left 2 notes, then down 2 notes. That would be: Bb, C, Db, E, D, B, Bb, A, F#.

Any inversion is fine, so for example you may want to go UP to F# in this phrase.

Any range - Any inversions

IN YOUR COMBINATIONS:

Please find your themes and your music in them and remember...SIMPLE, clear, thematic, REPEATED patterns work great in dialogue with others.

STEP FOUR:

Use all of your techniques including speed, range and extended techniques. Please get to know these cues grids very very well (like almost memorized), understanding the logic of them, so you can move around them freely.

STEP FIVE:

Look for the INTERVALLIC PATTERNS in the grids:

EXAMPLE: in grid #3 if you play the first 2 notes going left to right of each of the four lines you have major 7ths going in a pattern of 4ths, that is Ab,G, then Db, C, then Gb, F then B, Bb. You can find interesting and musical intervallic patterns of 2 and 3 notes in many places, as you look more²⁰³

It is obvious that Adam Rudolph's main fascination lies in rhythm, but not in rhythm as an unmovable structure, on the contrary. The entire Organic Orchestra concept relies on a humanization of rhythm, turning rhythm into a source of ambiguity, achieving an unstable, or maybe 'organic' kind of stability.

When he allows players to make up their own rhythmic phrase and move it forward at the tempo of their choice, regardless of the tempi and phrasing of the other players in the orchestra, it results in what can sound as something very chaotic. But however chaotic it may sound it is still part of a larger regularity, every now and then coinciding with other circles. It becomes a very lifelike situation, comparable to all the uncoordinated human activities in society, still subjected to recognizable orbits, whether it be circadian rhythms or wider circularities: lunar, seasonal, etc... The listener can be

203 RUDOLPH, Adam, 2010, practice sheet sent along with the score to the musicians prior to rehearsal and performance, November 2010

completely overwhelmed or hang on to a single circle which can then put the others in perspective.

What Simha Arom wrote about Sub Saharan percussion music could very well serve as a description of Rudolph's work:

If one listens closely to a percussion group from Central Africa, one can perceive the basic rhythmic features that prevail in this region:

- Steady, regular motion with no accelerandos, rallentandos or rubatos: Central African music is measured and comprised of strictly proportional durations.
- The predominance of repetitive, uninterrupted formulae, in which similar material reappears at regular intervals, is evidence of strict periodicity.
- The simultaneously performed instrumental parts do not give the impression of being ordered vertically, one above the other, but rather of being placed diagonally, according to a principle of crossing, or interweaving, of individual rhythms.
- Central African music does not use a temporal reference matrix based on the regular alternation of an accented sound with one or more unaccented sounds. Consequently, it uses neither the notion of 'measure' nor the strong beat involved in this notion.

For the listener, the interweaving of accents and tone colours, together with the absence of a reference system of regular accentuation, creates a feeling of uncertainty and of ambiguity regarding how the subdivision of the period is perceived.²⁰⁴ (Simha Arom)

Considering the fact that Rudolph is first of all a percussionist it is not surprising to find a rhythmic primacy in his music. It is also interesting to compare his ideas on the subjects of pitch and rhythm to Earle Brown's. The latter thought it ill advised to allow

204 AROM, Simha, 1989, 'Time Structure in the Music of Central Africa: Periodicity, Meter, Rhythm and Polyrythmics', *Leonardo*, Vol. 22 No.1, 'Art and the New Biology: Biological Forms and Patterns', M.I.T. Press, 91

the performers freedom of choice of pitch, while rhythmic freedom did not seem to bother him too much. This could be explained by Brown's concern to have his music, however free, still fit into the modernistic canon, avoiding consonance or modality and privileging instead a serialist aesthetic (without really applying serialist organization). Rudolph, on the other hand, does not seem to care about fitting into any particular canon. All on the contrary, he has no problem at times blatantly going for the “groove” (“James Brown is one of the greatest composers of rhythm, he knew how to put together these incredible rhythms, and he was a great composer, period.”²⁰⁵). But his is the groove that can be traced back to all cultures (whether African or Asian) that developed rhythm to a very high degree of complexity. Brown and Rudolph fit very well in the contrasting picture drawn by George Lewis²⁰⁶, comparing what he called “Eurological” composers (Brown) to “Afrological” composers (Rudolph). However one thing Adam Rudolph does have in common with Earle Brown is the importance he gives to ambiguity, or mystery and magic. In one of his notebooks Brown wrote:

I have always been drawn primarily to magic and mathematics...in that order. To magic in the sense that everything is and as it is it is magical ---- I don't understand it... the impenetrable infinite complexities and connections of all things.²⁰⁷ (Earle Brown)

While Rudolph states:

The notation for what I am doing invites ambiguity. When you go across the *Rotation Matrix* and you can go up or down, that is ambiguity. Ambiguity to me brings you closer to the spiritual, the mystical in a way. Because that is the nature of the universe. The ambiguity serves mystery. (...) That relates to the whole philosophy about life; it also brings out a quality of surprise and variety in the music. I am always surprised at what comes out, I never know, nobody knows, because it is in the moment of being. Of course there is some general sense of colour, the *Rotation Matrix* does not sound like the *Tree Matrix*, but

205 Conversation with the author, New York, November 2010

206 LEWIS, George, 2004, 'Improvised Music after 1950, Afrological and Eurological Perspectives', in Daniel Fishlin & Ajay Heble, 2004, *The Other Side of Nowhere, jazz, improvisation, and communities in dialogue*, Wesleyan University Press, 131-162

207 BROWN, Earle, 1955, *Writings and thoughts regarding works; 1952-1955*, unpublished, archives of the Earle Brown Music Foundation, Rye, New York

how it is going to be done and who the musicians are, what they bring to it, that is what is so interesting about it. Process, in preparing the score, is very important for that, it is almost like decomposing, rather than composing. It is refining down to elements the process of the right kind of matrices and the right kind of rhythm patterns, containing that ambiguity.²⁰⁸ (Adam Rudolph)

While studying the materials I came to the conclusion that I found some rhythmic essence in the way Rudolph approaches pitch. Directly or indirectly influenced by Joseph Schillinger (whom, as we saw, also played an important role in Earle Brown's career), he makes the conscious choice not to care about keys, scales or modes, but rather just intervallic distances. Pitch, just like rhythm, is being “reduced” to mathematical figures. It moves forward and backward in half steps or multiples of half steps. It is true that most music in a way does that, but it is usually subjected to some hierarchical order going beyond the idea of a pattern. In the case of the *Ostinatos of Circularity* I could not help sensing a rhythm in the intervallic patterns of the matrices. When all of these things come together in the concert it yields an experience unlike any other I have experienced. First of all one cannot properly situate the music into any niche, it is not jazz (for one thing there is a conscious avoidance of the traditional drumset, all percussion instruments are hand drums, and of saxophones, but beyond that it is not just an avoidance of “jazz colours”), it is unlike any other contemporary e-musik (it is often way too groovy to be taken seriously in certain circles), and calling it “World Music” would be superficial condescension as nowhere does it make any attempt at “integrating” traditional musics from other cultures (it would be comparable to calling Bartok's gypsy elements or Ligeti's appropriations of Central African polyrhythms “World Music”). It does not integrate non-Western musics, but rather implements certain non-Western musical concepts to achieve specific musical ambitions. Rather than feeling the need to categorize the music of the Organic Orchestra, my first audition had me wondering about the balance between improvisation and preliminary composition. The music often had the intensity and unbridledness of improvisation, yet seemed mysteriously cohesive. I could feel the heightened awareness of the musicians, as if they were at all time prepared for the unexpected. At times some of them (solo, or in smaller groups) seemed to be freewheeling, yet would sometime later land back into one of the patterns that seemed more controlled. One of

208 Telephone conversation with the author, March 2011

my first sensations was “this could go completely wrong any moment”. Yet it never did, at least not during the concerts. It occasionally went wrong during the preparative sessions, but there it was expected, as Rudolph tried out new ideas (“prototypes”) all the time and while some worked beautifully, others did not (or at least not without readjustments).

4.6 Freedom

A very special dynamic originates from individual freedoms (e.g. the choice of pitch(es) within a matrix) active within the freedom to shape the macro-structure in the hands of the conductor. The extreme flexibility of the score allows for a very creative use of the diversity of the musicians in the orchestra, as they come from different backgrounds, with different baggage and capabilities.

The tension in the Organic Orchestra is that I always try to let it be open for musicians on a lot of different levels. There is this idea of projecting this magic thing, but there is also the process, being process driven, opening doors. Everybody in the Organic Orchestra is not improvising on the same level, that is part of it. They also bring in really different kinds of experiences and I am trying to really find the context in which each person can shine, express themselves, contribute to the overall lift of the moment. (...) When we were preparing I was not really thinking about my aesthetic; my aesthetic radar was not on, I just wanted them to work with the process of what they were doing and I did not care if it did not sound so great. The process of what I do with the orchestra is to break down, give them new elements, pure elements to deal with. I always tell them “I am not looking for you guys to solo”. I am not thinking about solos. I am thinking about: there is room, there are ways of interpreting this music, we are trying to break it open. You are in a place of danger as a performer because you are not in your area. You are in terra incognita...and yet there is something.²⁰⁹ (Adam Rudolph)

209 Conversation with the author, New York, November 2010

This danger, this exploration of unknown territory is very tangible to the audience, like watching acrobats performing without safety net. One can feel the urgency to reach a destination that will only be known once it is reached. This applies to both the musicians and the audience who are sharing a moment of beautifully intense unpredictability.

Chapter 5

PETER ZUMMO - *EXPERIMENTING WITH HOUSEHOLD CHEMICALS*

Peter Zummo's *Experimenting with Household Chemicals* is a suite of six movements, for an unspecified number of unspecified instruments, except for the trombone, not specified yet quintessentially instilled. It is puzzling to the listener (cf. CD²¹⁰) as it is equally inhabited by anarchy and organization. It suggests some sort of improvised orchestration, without hinting at possible rules or instructions. All performers seem most of the time to play closely related or even identical materials, be it in often slightly different ways, different times and different places.

5.1 Biographical Situation

I was introduced to Phill Niblock after one of the concerts and I said “are you a musician?” and he said “no, I’m a composer” and I sort of fell over backwards, because I didn't know there was such a thing, and I'd been doing it for five years it turns out.²¹¹ (Peter Zummo)

Trombonist and composer Peter Zummo (b. 1948, Cleveland, Ohio) grew up in a musical family with a piano playing father and an amateur opera singing mother. He started playing trumpet when he was in fifth grade. He played in concert bands, marching bands, orchestras, sang in an adult choir as a child and was member of a hand bell choir (which he considers to be great sight reading training).

His musical horizon - which had already been expanded by John Coltrane's sixties experiments and the free jazz he had heard on his radio as a teenager - vastly opened up when he moved from Cleveland to Wesleyan University. There he enrolled in the world music program (although his original intention was to be a physics major), exposing him not only to music from all over the world, but also to the works of the avant-garde.

210 ZUMMO, Peter, 1995, *Experimenting with Household Chemicals*, CD XI 116, Experimental Intermedia Foundation

211 Conversation with the author, New York, December 2009

He took Alvin Lucier's electronic music course, studied traditional history of Western music and performed it, as well as jazz with Ken McIntyre.

As his first exposure to experimental music at Wesleyan he remembers a Fluxus-like performance:

The first instance I remember very clearly was a a concert by a Japanese composer and the piece was a cellist poised to play a note with a flood light in front of her and a huge silhouette projected on a very large piece of paper. The composer then very slowly began to cut out with scissors the outline of the cellist on this piece of paper, which took a very long time. When he finished he began to eat the paper. That was the piece and I distinctly remember my reaction being, "OK". The realization that I found it perfectly normal was a very large shock but I remember accepting that.²¹² (Peter Zummo)

He graduated from college in 1970 and took a "fluidly" defined teaching position at a private high school near Hartford, Connecticut, where one of his students requested trombone lessons. He accepted the challenge and started teaching trombone based on his knowledge of the trumpet and got hooked on the instrument. Afterwards, when doing his MA at Wesleyan he was introduced to Carmine Caruso's theories ("Musical Calisthenics for Brass") by James Fulkerson and started taking private classes with Caruso in New York, which he continued after his MA. Around 1977 he also started taking private lessons (which are still going on to this day) from another trombone great, Roswell Rudd.

His [Rudd's] approach is intervallic and Carmine's was too, both of them were very strong intervallic approaches to the instrument, which heavily influenced my sense of playing and composition.²¹³ (Peter Zummo)

After obtaining his MA at Wesleyan, he moved to New York City in 1975, where he worked as a session musician in all kinds of musical situations, rock, jazz, contemporary classical and experimental (he has performed and recorded works by

212 Conversation with the author, New York, December 2009

213 Conversation with the author, New York, December 2009

David Behrman, Rhys Chatham, Jon Gibson, David First, Daniel Goode, Annea Lockwood, William Hellerman, Annea Lockwood, Phill Niblock, Larry Polansky and many other, mostly “downtown” colleagues), while at the same developing his own music and leading his own projects and ensembles, exploring the fuzzy area between composition and improvisation. One very influential encounter would turn out to be cellist and composer Arthur Russell.

At that time I was working with Arthur Russell and his whole thing was about finding people. It didn't really matter that they shared a common musical training, or sensibility, or experience, or ability. The innovation in his music was the social structure of the ensemble, which is to me what had to change, because to look at a Philip Glass presentation reminded me more of 18th or 19th century Germany than the society I was living in. The idea is that you would have gifted musicians who can do a lot more than render the notes on the page and many who could not render the notes on the page and you would want them to do what they do best and that the notion of having to end the piece was no longer relevant.²¹⁴ (Peter Zummo)

Since the mid seventies his music found a very creative outlet in collaborations with different choreographers, beginning with his wife, dancer Stephanie Woodard, with whom he started collaborating in 1969 and eventually lead him to win a Bessie Award in 1985 for the score for Trisha Brown's *Lateral Pass*.

214 Conversation with the author, New York, December 2009

5.2 "...all it is is Bb to B and C# to D..."

I do not know what exactly got me started on it, but I could tell you several motivations. One is to find a way to improvise that does not fall back on habit, or at least different traditional habits; create new habits for improvisation, so that by engaging in the activity some music that I have not heard will result.²¹⁵ (Peter Zummo)

2ND MOVEMENT P. 1

7 *legato*

B16 SLIDE VIB.; SLO-mo

HEAR # SING # PLAY #

beb.

legato

3

p SLIDE VIB.

²¹⁵ Conversation with the author, New York, October 2007

The image shows a handwritten musical score for a trombone, consisting of seven staves. The notation includes various musical symbols and annotations:

- Staff 1:** A single note with a fermata, followed by a series of notes with fingerings: 5, 4, 5, 4, 3, 4, 3, 4, 5, 4, 3, 4, 3, 4.
- Staff 2:** A sequence of notes with a fermata, followed by notes with a '7' above them, indicating a specific fingering or technique.
- Staff 3:** A series of eighth notes, some grouped with brackets, indicating a rhythmic pattern.
- Staff 4:** Similar to Staff 3, with eighth notes and brackets, and the word 'legato' written below.
- Staff 5:** A sequence of notes with a fermata, followed by notes with a 'sforz. f' (sforzando forte) marking below. An 'INSERT' bracket is above a section of notes with fingerings 2, 3, 4, 5, 6.
- Staff 6:** A sequence of notes with a fermata, followed by notes with a 'PIN' marking below.
- Staff 7:** A sequence of notes with a fermata, followed by notes with a '3x' marking above, indicating a triplet or repeat.

At the bottom right of the score, there is a handwritten instruction: "REPEAT INSERT, REPEAT 1st BAR, END".

Fig. 27/28 – Peter Zummo, *Includes Free Information*
 2nd movement of *Experimenting with Household Chemicals* (unpublished)

The trombone starts playing a three note repetitive melody. It is gradually joined by the marimba, double bass and soprano saxophone playing fragments of the same melody. They seem synchronized at first but then each seems to move at a different speed, some paying more attention to different parts of the melody than others. Percussion accents are heard and after a while the marimba plays three ascending pitches, unrelated to the

first melody. Then a voice says “includes free information”. The clarinet and the cello also play the three pitches of the marimba while the trombone starts playing the original melody again, only to move a bit later to a faster staccato-like new repetitive melody which is played by no one else. After some time they all join forces playing unison drones. But then again they take off, some in common and some in different directions. It is a strange combination of separation and cohesion.

Trying to understand the underlying concept of the work, I asked Zummo about its origins:

On the CD *Zummo with an X*²¹⁶ there is a piece called *Song VI*. It is trombone based; it is two-hands trombone based (one hand sliding, the other muting). It gave me something to do with the left hand and I would move the hands in opposition, out of phase. The task was precisely notatable and the result being curvilinear both pitch-wise and in terms of timbre, I thought it would go very well with dance. But next I thought "what am I going to do with the rest of the instruments in the band?", because I had Guy [Klucevsek, accordion] and Arthur [Russell, cello] and Bill [Ruyle, marimba] and Mustafa [Ahmed, percussion]. So I bought all of this big score music paper and I wrote the whole thing and took it to the rehearsal space. And as I walked into the studio I knew I did not have the heart to show them all that music and never did - or we may have rehearsed it and I realized that there was no hope in it. So I said "OK," and I showed them my own score and said "here are the notes and all it is is Bb to B and C# to D in three octaves; find a way to render this on your instrument". It was in 1985, but that piece is definitely on the way of this one [Experimenting With Household Chemicals].²¹⁷ (Peter Zummo)

Constructions like the above mentioned Bb to B and C# to D directly refer to trombone specificities, which in turn form the core of Zummo's work:

Sometimes while I get deep into the process of inventing these things I might write down the diagram (cf. fig 29 & 30). I think the writing is all probably chronological, it is like a diary: today I experimented and I came up with this X

216 ZUMMO, Peter, 2006, *Zummo with an X*, CD 80656-2, New World Records

217 Conversation with the author, New York, October 2007

pattern based upon that C#, or today I did something and it is a big X pattern with G in the middle and the Bb series, and also notes like “beginning of the slide, middle and end”. Sometimes while playing these things, I would work the system, follow the rules and hear myself play a melody, so I wrote the melody down; or specific rhythmic aspects came - I was also experimenting with rhythmic values, dotted rhythms, reversed dotted rhythms, it's just a normal way to play at this, and going around, trying to race around the diagram clockwise or counter clockwise and reversing at different points to see if this made an interesting melody, or made the music more interesting and also just developing that facility with the instrument.

I cannot say exactly how I got into doing the diagrams, except I must have had the idea of looking from the side so that I could conceive of it diagrammatically which then made sense of these motions - in and up, up and in and up, in and down, down and out, out and up - to make a diamond. As I pursued it I found that I was picking centre points for the X or the diamond with the slide and moving by the definition of a position on the trombone. That is different from notes in the scale because of the way the harmonic series works and because of anomalies in every trombone - in all trombones and also in each trombone. Those positions are humoured²¹⁸ to get the right pitches for different scales, for instance the 5th position could be a number of places in the slide depending on what note you are playing. I would put it in 5th position and then play what normally would be C# above middle C, which normally you would flatten. I took that and then that becomes the centre pitch and then move by the definition of a position. You get all these wonderful microtonal intervals, and I like that. And the other thing I found when I pursued this was that every time I went to do it and play around with it motion developed and I thought, 'well, motion is an accepted part of music so this is good if when I start playing this game I find forward momentum or motion happening'²¹⁹. (Peter Zummo)

Zummo presents 'diagrammatic playing' as a circular motion around a series of pitches, going in either a diamond or an X shape (cf. fig. 29 & 30), often dotting the rhythm and suddenly reversing direction. Thus Fig. 29 could become C – C# - B – Bb – C – C# - B

218 Humouring: correcting intonation irregularities common to most wind instruments

219 Conversation with the author, New York, October 2007

– Bb, etc., and at any moment the direction of the loop could be reversed.

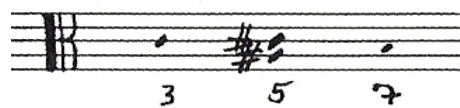


Fig. 29

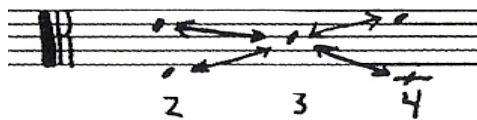


Fig. 30

These diagrams combine a side view of the slide (the numbers underneath are slide positions), its inward and outward movement represented by the horizontal axis of the diagram, with embouchure movements (lipping), upward and downward through the partials of the harmonic series, on the vertical axis. Thus the slide motion, in order to obtain a diamond loop in fig. 29 is 3-5-7-5-3, etc.

As said before, this information remains a bit hermetic to non-trombonists, especially in terms of performance, and the diagrams do not appear very often as such in the score. Most of the time they appear in an unfolded version, as axial melody lines, in between mostly very simple melodic spin-offs and, here and there a series of partials with graphic indications suggesting microtonal adjustments.

The concept of the diagrams does explain more or less the origins of the melodic content of the piece. Melodic segments almost always are derived from these looping slide movements. Rather than literal unfoldings of the looping sequences they are elaborations and extrapolations of them. We can retrace part of a diagram in a melody, from where it moves into another diagram or expands the first.

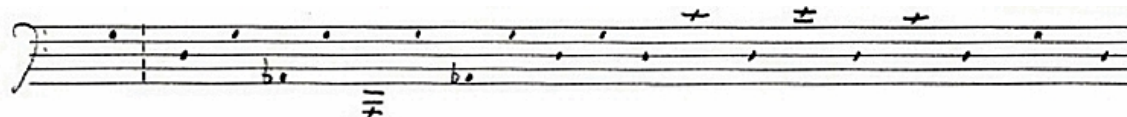


Fig. 31

In this example (fig. 31) two diagrams (fig. 32) can be assumed moving around two

itches (D and G) to be played in 4th position (where they are the third and fourth partial).

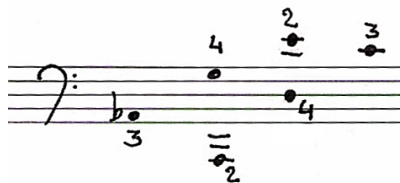


Fig. 32 (numbers refer to slide positions)

The two recurring pitches act as a central axis or centre of gravity around which the melody moves. Writing out the melodic spin-offs allows Zummo to add rhythm to them, for himself and, possibly as a suggestion, for the other performers.

Nevertheless, the diagrams do not explain what sounds as some sort of controlled/directed improvisation. When one looks at the score, it is quite unclear how to go about it. The pages offer disjuncted collections of musical segments; providing no information as to how to connect the segments. The notation ranges from 'standard', with bar lines and all (though this is fairly rare), through rhythmic notation without bar lines, to stemless notes, with or without fairly unconventional graphic or even, often mysterious, verbal indications. In the CD liner notes marimba player Bill Ruyle states, "a lot of the notation Peter gave us to play was written without any specific rhythmic values; there were also lines you could play forward or backward or even diagonally across the page."²²⁰

What is more is that every player gets the same score, which is in fact, just like in the above mentioned *Song VI*, the composer's own trombone part - or should we say his scratch pad?

When asked about how to perform, let alone read the score, Zummo offers a very clarifying metaphor:

You all proceed as a herd – more or less together. No jumping ahead; maybe you can refer back to a previous item, but there is very little need for that. When I

²²⁰ ZUMMO, Peter, 1995, *Experimenting with Household Chemicals*, CD XI 116, Experimental Intermedia Foundation

performed the piece as a trombone solo, I thought of 'rampage'; just racing headlong through the material. I don't know if that would be a useful image for a larger ensemble. There certainly should be points of seeming stasis, or no hurry to get anywhere. Maybe they could contrast with running sections. One of the boundaries to the field is that if you get ahead of most people then you should know where you are in relation to them, and to foster that kind of listening.²²¹
(Peter Zummo)

The image of the herd with its behavioural characteristics, within the field that is the score, in the end explains the seeming contradiction between anarchy and organization. Everybody is going in the same direction, sharing common ground, but each has his or her own speed and most of all his or her own centres of interest. As everything in the score is trombone specific, certain parts of the terrain might make more sense on one instrument rather than another. Each is also reacting more or less differently to the rest of the herd. Standard characteristics of herd behaviour like separation (steer to avoid crowding), alignment (steer towards average heading) or cohesion (steer toward average position of 'flockmates') can be heard in performances of the work. One could even discern 'scroungers' and 'producers'²²², with the first repeating finds of the latter, though without any competitiveness, rather an exchange of information. Hearing one of the fellow performers working his or her way through an element ahead of one's position could for instance influence the speed at which one finishes an earlier section, or the way in which one will deal with the section just 'discovered' by the 'producer'. One of the results of these unsynchronized readings of an identical score is a strong stretto-feeling, with players playing what co-performers started earlier on. These re-lectures of passages provide the listener's 'objective memory' with plenty of handles and different perspectives of the field.

The lack of synchronization between performers is reminiscent of some of works by

221 Correspondence with the author, 1998

222 "Living in a group is widely assumed to be advantageous for animals. One of two major benefits is an increased efficiency of foraging (the other one, being lower predator hazard, does not apply to our research). This benefit is not necessarily shared equally among all group members. One way in which benefits can be spread unevenly among group members is when some animals in the group parasitically exploit the food findings of others. Using food discovered by others can be described as a producer-scrounger frequency-dependent game. In the game, scroungers do better than producers when scroungers are rare in the group, but they do worse when scroungers are common." (BARTA Z., Flynn R. & GIRALDAU L.A., 1997, 'Geometry for a selfish foraging group: a genetic algorithm approach', *Proceedings: Biological Sciences*, Vol. 264, No. 1385, pp. 1233-1238)

Morton Feldman (e.g. *Durations*). In the case of *Durations* the instructions read “The first sound [is played by] all instruments simultaneously. The duration of each sound is chosen by the performer.” Boguslaw Schaffer described this as 'asynchronous temporal process'²²³. *Experimenting with Household Chemicals* can also be described as subjected to an 'asynchronous temporal process', but it presents major differences to Feldman's work: each instrument in *Durations* has its own distinct part, while in Zummo's case the same score is shared by all performers. Feldman's general musical concept could be considered harmonic rather than melodic (or 'intervalic'), and, less obvious, the notation is radically different. In Feldman's work one is still presented with a linear notation. There are no bar lines, but there is a synchronized onset and from there on the flow is visually controlled, as if on rails. Feldman himself as well as colleagues and performers who analysed the works, used the 'race track' metaphor (even though race track speeds are nowhere in the picture): “start together, move independently, stop when you reach the finish line”. The temporal field is more or less left open (though, according to composer Frank Denyer's personal recollection, Feldman “was anxious that individual players should never get too far ahead or behind each other”²²⁴, while Zummo with his “more or less together” seems less anxious), but the spatial one is fairly delimited, not allowing any lateral moves, or stalling, in order to keep some control over the harmonic image. Both metaphors, the herd vs. the race track are very efficient and eloquent when one compares the musical result of both styles. Both the herd and the race horses share a common direction but have a different method/style of reaching it. The respective scores also have a visual appearance matching the requested style. Looking at any of the *Durations* scores one can see the race track in the parallel staves, while Zummo's disjointed notation could suggest a not very limited terrain with heterogeneous vegetation, one that does not really suggest discipline or hierarchy. This visual aspect in the latter's case has a clear influence on the performer's motion and discipline (or, in a way, lack thereof). When segments are not visually connected they can cause flow interruptions, moments of reflection and a certain freedom as to how to go from A to B. They suggest a different Time/Space. They allow or incite a musical notation reading different from the traditional one. As marimba player Bill Ruyle wrote:

223 SCHAFFER, Boguslaw, 1976, Introduction to Composition, Krakow, Polskie Wydawnictwo Muzyczne, as quoted in SANI, F., 'Feldman's "Durations I": a discussion', <http://www.cnvill.net/mfsani1.htm> (accessed 12 January 2009)

224 FELDMAN, Morton, 2004, The Barton Workshop, *Ecstasy of the Moment*, CD Et'Cetera KTC3003

Playing a series of notes forward and backward gave me a different spatial sense of music as it was happening. Usually you read music in a certain direction. You have a sense of notes in space in a particular order. What Peter asked us to do was like retrograde, I suppose, except that conventional retrograde is written out in the same direction you've been reading. As a musician playing it you might not even know it's a retrograde. In *Experimenting With Household Chemicals* you're performing a retrograde function physically, so it gives a different sense of it. (...) Reading backward is not the same as reading forward something that has been reversed.²²⁵ (Bill Ruyle)

It is in this view interesting to compare the various movements of *Experimenting With Household Chemicals* as they all have their notational/visual peculiarities. Next to the seeming lack of cohesion between the segments, their respective functions differ, both within each movement and within the compositional conceptualization of the entire work.

5.3 *Fresh Batteries*

The first movement can be seen as exemplary for the rest of the work. It is based upon a seven note row (Bb-A-Eb-G-C#-G-B), spanning 3 octaves, all partials derived from seven consecutive slide positions. This row of seven notes appears at the end of the page after being preceded by melodic spin-offs (mainly making sense as spin-offs from a trombonist's perspective). In contrast to the melodic fragments the interpretation of the collection of seven notes can only be free as it does not relate to physical aspects of instruments other than the trombone, but, when played alongside a trombone they offer the necessary information for an improvised accompaniment or support. The listener of course does not have any of this information.

The movement, usually, begins with a single tone (B) ostinato, possibly slightly preceded by a low E-drone (the G#, at the start, could also suggest an E major chord²²⁶)

225 ZUMMO, Peter, 1995, *Experimenting with Household Chemicals*, CD XI 116, Experimental Intermedia Foundation

226 Though this seems to be purely accidental as the absence of harmonic signatures is a constant characteristic of the piece, allowing free overlapping or connection of different parts.

and /or accompanied by an axial melody (around B). It is completely left to the discretion of the performer which of those three voices to play, and also whether to rhythmically synchronise with the other players. Zummo says, about the rhythmic interpretation in *Zummo with and X*, a predecessor to *Household Chemicals*: “they tended to play together rhythmically, although I was encouraging them to play in separate rhythms... so they could play out of time with one another but also tended to go as a herd into a rhythm, then I deliberately went against that rhythm”²²⁷.

In the second and third section of this first movement performers again get to choose (or not, they can play all of it if they so wish) between curvilinear melodies (mostly with small step intervals) or more drone-like sequences, all in the end leading to the 7 note row (cf. fig. 33) it all originated from. This series of tones is the actual 'generator'²²⁸ of the movement (the numerals underneath the notes indicate slide positions). It starts with pedal Bb and in the treble key another Bb could suggest that the entire movement is about finding the long road from Bb to Bb. It is unclear whether this part should be played or whether it should be seen as some sort of legend or formula to the movement. Though nowhere it is said that it should not be played and this could thus be seen as an invitation to derive ones own improvisation from it.

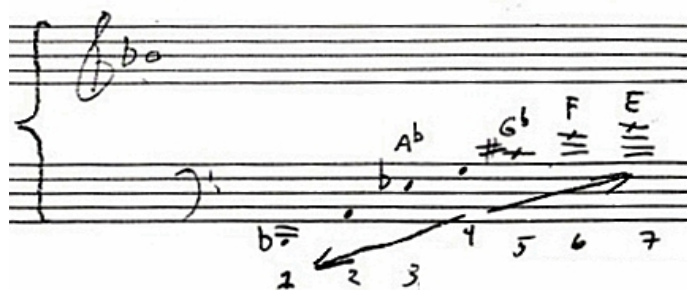


Fig. 33 – excerpt of Peter Zummo, *Fresh Batteries*
 Peter Zummo, *Experimenting with Household Chemicals* (unpublished)

In the following movements, again fragmented melodies, will alternate with the diagrams they were derived from. Those melodies are almost narrative events (horizontal and linear) as opposed to the informative/descriptive diagrams (dealing more with depth than with direction and sequence).

227 Conversation with the author, New York, October 2007

228 One could also separate the different elements as 'structural' vs. 'structuring'

5.4 Includes Free Information

Includes Free Information is basically a collection of drones, each one with melodic extrapolation (performers are free to choose between each drone or its melodic counterpart, or play both sequentially or simultaneously, if possible on their instrument). To the listener one obvious figure is the opening melody (without drone) which is repeated twice later on. As each time it reappears on top of another drone (and once is even granted a drone modulation), the piece could be seen as a kind of minimalistic fugue.

Half way through the movement an odd (except for trombone players) harmonic series appears (over a G drone) starting from D (with G, D, G, B, D, etc. matching the drone) up to a plateau of what can be read as microtonal modulations (trombone tone humourings) (cf. fig.34).

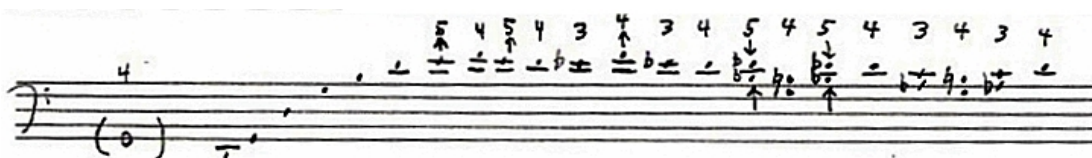


Fig. 34 - excerpt of *Includes Free Information*

Peter Zummo, *Experimenting with Household Chemicals* (unpublished)

At the very end, just before a closing repetitive motif, two connected “diamond” shapes occur (cf. fig. 35), featuring D (cf. the above mentioned harmonic series) as a central pitch, which could be seen as the 'generator' for this movement.

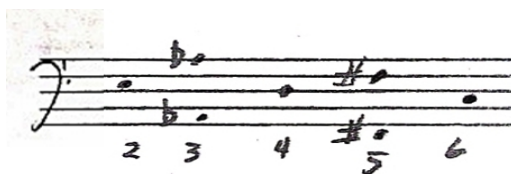


Fig. 35 - excerpt of *Includes Free Information*

Peter Zummo, *Experimenting with Household Chemicals* (unpublished)

5.5 *Sung, Played, Heard*

The third movement could be seen as consisting mostly of 'generators'. The first one (cf. fig 36) looks like an intriguing construction, until one realizes it can be read as a trombone matrix, both horizontally or vertically. The horizontal axis representing the seven slide positions and the vertical one the different embouchures. The use of both 'b' and '#' for what would normally be read as enharmonic pitches refers to the trombone humouring.

Within this matrix there are two dynamic cells (cf. fig. 37 & 38) adding a third dimension to the matrix as they read as in-depth explorations of specific positions. The arrows underneath are suggesting looping slide sequences.

The image shows a musical score for trombone, organized as a grid. The grid has 7 columns and 8 rows of staves. The notes are arranged in a way that suggests a matrix of slide positions (horizontal axis) and embouchures (vertical axis). The notes are written in various clefs (soprano, alto, tenor, bass) and include accidentals (sharps and flats). Two specific cells are highlighted with arrows, suggesting looping slide sequences. The bottom two staves show a sequence of notes with arrows indicating a looping sequence.

Fig. 36 - excerpt of *Sung, Played, Heard*

Peter Zummo, *Experimenting with Household Chemicals* (unpublished)



Fig. 37- excerpt of *Sung, Played, Heard*
Peter Zummo, *Experimenting with Household Chemicals* (unpublished)

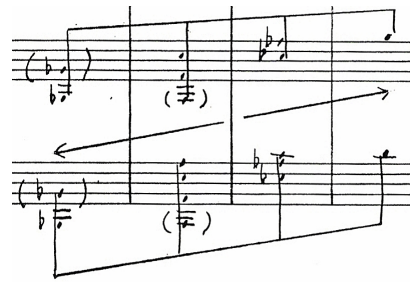


Fig. 38 - excerpt of *Sung, Played, Heard*
Peter Zummo, *Experimenting with Household Chemicals* (unpublished)

This section is followed by three more 'generators' (cf. fig. 39, 40, 41). The first one explores close embouchure changes over a linear slide position sequence (in an early version of the score this bears the indication “as a criss cross”, suggesting that it should not be played in a linear fashion), the second one provides an explanation for the title of the movement and could indicate simultaneous singing and playing of two different pitches (B and Bb), possibly resulting in a differential Eb. The third one is again a looping slide sequence.

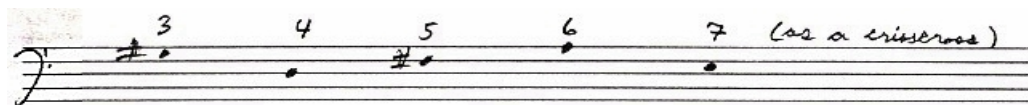


Fig. 39 - excerpt of *Sung, Played, Heard*
Peter Zummo, *Experimenting with Household Chemicals* (unpublished)

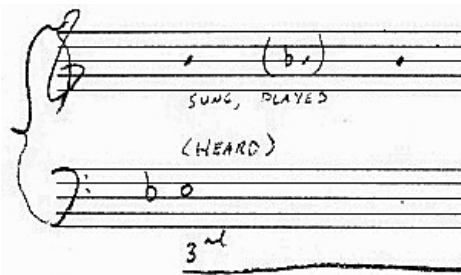


fig. 40 - excerpt of *Sung, Played, Heard*
Peter Zummo, *Experimenting with Household Chemicals* (unpublished)

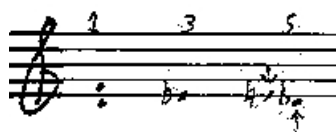


fig. 41 - excerpt of *Sung, Played, Heard*
Peter Zummo, *Experimenting with Household Chemicals* (unpublished)

This all leads to the final, and more precisely notated section, with again a repeated motif. This section sounds as if it were the result of the explorations preceding it (cf. fig.42).

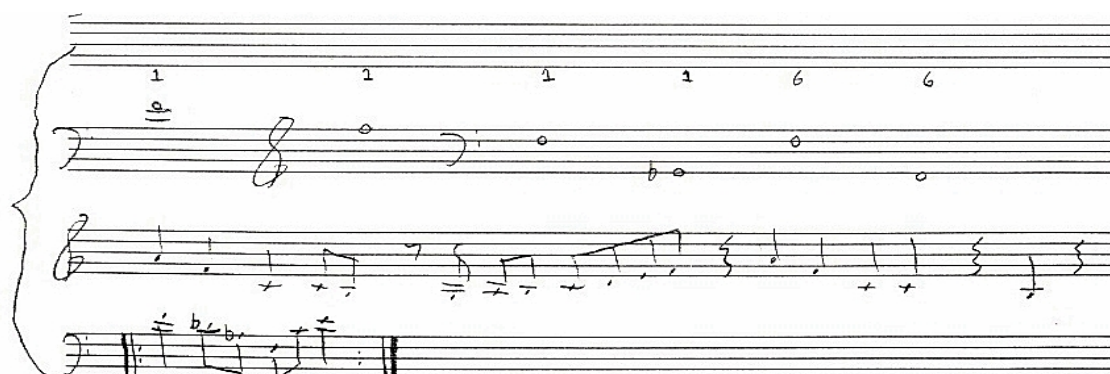


Fig. 42 - excerpt of *Sung, Played, Heard*

Peter Zummo, *Experimenting with Household Chemicals* (unpublished)

Of all the movements this is the most trombone specific and thus the most challenging one for performers playing other instruments.

5.6 *Rocket Scientist*

Rocket Scientist begins with a fully notated diatonic (Bb) three-voice section (or two-voice depending on the version of the score, in which case the 3rd voice in fig. 43 is omitted), with a strong continuously descending motion. In performances led by the composer these voices are often performed asynchronously, although notated in a synchronous manner.



Fig. 43 - excerpt of *Rocket Scientist*

Peter Zummo, *Experimenting with Household Chemicals* (unpublished)

This is followed by two of what Zummo describes as slide sequences (notated as stemless notes), oscillating about a central pitch (G followed by D) suggesting jumps of more than two octaves, contrasting with the much closer intervals of the opening sequence (cf. fig.44).



Fig. 44 - excerpt of *Rocket Scientist*

Peter Zummo, *Experimenting with Household Chemicals* (unpublished)

These sequences are followed by shorter, but related sequences (except maybe for the last one which has a different central pitch (F#)) between repetition marks. And at the end of this middle section we find two 'X' structures, one with D as a central pitch and the other one with G (cf. fig. 45). It is tempting to see them as generators of the preceding sequences (cf. fig. 44).



Fig. 45 - excerpt of *Rocket Scientist*

Peter Zummo, *Experimenting with Household Chemicals* (unpublished)

The final section of this movement consists of more or less fully notated melodies. One of them is to be repeated and again presents a slide loop from position 2 through 3, 4, 5, 4, 3 back to 2, etc., with pitches never more than a major second apart, eventually leading into a closing, unusually lush, slow curvilinear chromatic melody.

5.7 In Three Movements

The fifth movement resolutely opts for microtonality: playing the trombone notes which normally require 'humouring' without this correction, i.e. more or less sharp or flat

according to the slide position. A brief opening leads to a large packed diamond of notes (cf. fig 46); the largest interval between them being a fifth.

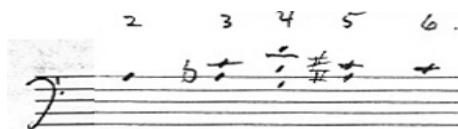


Fig. 46 - excerpt of *In Three Movements*

Peter Zummo, *Experimenting with Household Chemicals* (unpublished)

This is followed by further microtonal slide position explorations leading to arced melodic constructs without any rhythmic indications, but with directional ones, suggesting to play the sequences back and forth. Again the movement ends with a repeated diatonic sequence, this time in Eb, moving in axial manner around G (cf. fig 47).



Fig. 47 - Fig. 46 - excerpt of *In Three Movements*

Peter Zummo, *Experimenting with Household Chemicals* (unpublished)

5.8 Peaceful Transportation

The last movement is probably the most abstract one, almost metaphysically so, certainly as far as notation goes. It is subtitled “Trombone glissandi with changing reverberation and chordal punctuations” and is accompanied by the following instructions: “Glissando is continuous, reversing at the first and seventh positions of the slide, i.e. using the entire tritone length of the slide. Movement upward to the next partial is accomplished by 'lipping up' during a downward glissando; movement downward to the next partial by 'lipping down' during an upward glissando. Speed of the glissando is steady and may be changed at the reversal points. The chords played by the other instruments are derived from the first five movements.” This time the score (ten pages long) is solely a generator as it consists exclusively of slide sequences. What

at first looks like chords are the possible partials of specific positions. It is unclear what is meant by “the chords played by the other instruments” referring to earlier chords from the other movements, except maybe that indeed in this last movement the trombone plays sequences which appeared earlier on. The general feeling is one of liquefaction - amplified by the use of digital reverberation in performance - of everything that has been constructed, or attempted in the preceding movements.

5.9 Transposability

Once again, all this is very much from a trombonist's point of view. How does it translate or how can it be transposed to other instruments? *Experimenting with Household Chemicals* was first conceived as a trombone solo and later expanded (though with the same score) to a work for undefined ensemble geometry constructed around the trombone. Which is when from something personal it became a 'scored composition'. Important at this stage is that Zummo never was concerned with performances that would not include him (hence the lack of verbal performance indications in the score), and he normally would involve musicians he was familiar with. He thus had a fair idea about the potentials those performers would add to the piece. This use of human resources as a compositional parameter is recurring in all the case studies of this thesis. Another obvious comparison would be the ensembles working with Miles Davis in the 70s (cf. Chapter 3). The compositional content in Davis' case usually was limited to one or two riffs and a couple of chords, yet they would on average yield pieces lasting half an hour. All of these, in their various incarnations, would be recognizable and the interpretative differences would be determined by the performers involved. Coincidentally, a remark by trumpet player Leo Smith about that period in the work of Miles Davis could, although quite different, very well be transposed to Peter Zummo's work:

(...) Probably the most brilliant part of it is that the notion of phrasing changed completely. No longer were long arced phrases sought after. In his music there was the notion of using short nuclei of notes as a basis for improvisation, as opposed to the language of harmonic progression. It is a whole other conceptual design where the actual material that is being used is as short as your five

fingers, while the piece of music may be quite long.²²⁹ (Leo Smith)

Regarding the 'language of harmonic progression', or its conscious absence in his music, Zummo says:

It is more a random juxtaposition of notes. I thought if everyone were playing one of those patterns more or less - it could be as simple as only three notes or four sounding - not knowing which one would be the root at any moment (that could be described as modal), but the possibility was there for lines to combine, in which case harmonies could occur that I would not have predicted.

That's a response to jazz where people go through all the chord patterns and usually arpeggiations and scales, and then the music ends up sounding like that. So I never pursued that way to learn jazz. My studies with Roswell [Rudd] were intervallic rather than chord based. Both the callisthenics I got from Carmine Caruso and the more creative work from Roswell Rudd had put me in a long term frame of mind of exploring the way the trombone works. Moving around intervallically, which involved choices like moving the slide in the same direction, but going up in the harmonics in order to get the same note you might get by moving the slide in and staying on the same harmonic. Another motivation would be to try to make improvised music with harmonic change that does not rely on chord changes.²³⁰ (Peter Zummo)

Another interesting fact is that, as could be deduced from different performances of the work, the average length ratios of the different movements are always similar, as if a general pace for the entire piece is intuitively chosen and the amount of material in each movement then determines the length. Even more remarkable is the fact that this also occurred in performances (rehearsals in which I was involved) in which Peter Zummo did not take part, possibly meaning that in a certain way the different movements are self-regulating when it comes to time.

It is very challenging to attempt tromboneless versions of the piece and to find relevant transpositions of the trombone specificity to other instruments. This is happening in the

229 TINGEN, Paul, 2001, *Miles Beyond*, Billboard Books, 266

230 Conversation with the author, New York, October 2007

ensemble performances so far, but removing the trombone could mean losing a specific cohesion, both sonic and compositional. Transposition therefore should compensate this by including instrument specificity, because, especially to the audience, many elements make perfect sense when performed on the trombone, and without it that information would be lost. Transposition requires more than instrumental physicality, but might also call for more radical compositional translation. Essential structuring characteristics of the work should however be maintained. At the core are the diagrams; they are both the seminal and determining factors of the piece. They generate motion, momentum. The fact that they don't offer means for resolution allows for almost limitless constructions, with closure only coming from silence.

5.10 The Listener

This brings us to the listener. How does one listen to a work like *Experimenting with Household Chemicals*? How does one make musical sense out of it? One could raise the question whether the work really is a composition or rather a “guided improvisation”? Peter Zummo himself indirectly answered that question when he said: “Much of what is correctly considered composition is how long it takes to set up the sublime.”²³¹ Maybe it was when I had the urge to “see” the score, that it left Zummo's very personal world and begot the potentiality which usually can make the difference between a scored composition and “performance notes/instructions” that a band leader passes onto the band. So it does exist as a score and can be performed and perceived by an audience as a work of music that may have an improvisational dimension, but clearly goes beyond that. Could that audience sense the self-regulating hierarchy that is specific to herds? Or is this only relevant to the performers?

Trombonist Bob Brookmeyer stated in a recent interview that, “The listener doesn't have to like the process, but he needs to be in the process, to make the trip with you.”²³² But isn't travelling along an invitation to the listener contained in most works of music?

231 ZUMMO, Peter, 2006, *Zummo with an X*, CD 80656-2, New World Records

232 RATLIFF, Ben, 2009, *Bob Brookmeyer: Raging, and Writing, Against the Jazz Machine*, New York Times, May 12 2009

Chapter 6

Anne La Berge – Guided Improvisation

Improvisation does not necessarily imply that you can do everything and anything, it is still a social and musical event. But you have to keep in mind that you can do everything, otherwise you shut your head down and you shut down your fantasy, so it is sort of a delicate jumping back and forth.²³³ (Anne La Berge)

In a way most open form works are examples of structured improvisation. They provide boundaries, guidelines, instructions, but most of them rely on the performer's creativity to fill in the blanks consciously left in the score by the composer. This is certainly the case in Anne La Berge's recent works. Of all the composers discussed in this thesis, she is the only one openly using the word improvisation.

6.1 Anne La Berge

Flutist and composer Anne La Berge grew up in Minnesota and was given classical training as a flute player from an early age on, eventually ending up at the University of California in San Diego, by way of Northwestern University in Evanston, the University of New Mexico (BA) and the University of Illinois (MA). During that trajectory she was exposed to and involved in a lot of new music, making it her area of predilection. She would further develop her expertise to extended flute techniques, microtonality and eventually technological applications. She has performed on international stages both as a soloist and with various ensembles and orchestras.

Beside being a performer of other composers' works, in the mid eighties Anne La Berge became active as a composer as well. Invited by composer Larry Polansky she published her first scores with Frog Peak Music. Improvisation, on the other hand, had always been present one way or the other on her educational journey:

²³³ Conversation with the author, September 2011

I did some improvisation when I was 18, 19. It was based more on Karlheinz Stockhausen's *Aus den Sieben Tagen*. I was just kind of doing it with colleagues and friends, schoolmates and then in 1978, when I went to the University of Illinois, I was in an improvisation group with Larry Polansky and a couple of others, maybe 4 or 5 of us, and we rehearsed and played, so that was actually real improvisation.

I had teachers from early on, say when I was eight or ten years old, who had me improvise a bit to chords and harmonic sequences. My piano teacher had me improvise melodies with chord sequences and my first flute teacher made me develop technical exercises for myself without notating or writing them down. So I actually grew up with the concept that, as a classically trained musician, I could improvise and that improvisation was not dependent on jazz. It was not avant garde free improvisation, it was playing your instrument. And then, as far as really being able to improvise in a way that made sense to me, I think I can contribute much of the credit to my fruitful young years in the seventies. We played the music of composers like John Cage and Earle Brown who were still very active as makers and they were coming up with new stuff of their own in those years.²³⁴ (Anne La Berge)

In 1989 she left the U.S.A. to establish herself in Amsterdam which offered a thriving improvised music scene as well as platforms for technological experimentation (e.g. STEIM). In order to “stand her ground” on the mostly male and very assertive Dutch improvising scene she soon became very proficient at implementing flute-specific amplification and processing. This use and control of amplification together with her virtuosity and mastery of a wide range of extended techniques, turned her flute into a new and impressively powerful instrument. Combining improvisation and technology made her aware that the Dutch music scene was missing one type of venue: “(...) namely a setting where musicians could develop their improvisation skills in electroacoustic music in a laboratory-like setting.”²³⁵ This led her, in 1999, to start (along with Cor Fuhler and Steve Heather) the by now legendary 'Kraakgeluiden' series, an open platform where free improvisation and technology are combined.

234 Conversation with the author, September 2011

235 METZELAAR, Heleen, 2004, 'Women and 'Kraakgeluiden': the participation of women improvisers in the Dutch electronic music scene', *Organised Sound* 9(2), Cambridge University Press, 199

Technology would also give her autonomy, as Jacqueline Oskamp wrote about La Berge's composition *Drive*:

It is technology that allows her to perform such a layered composition, consisting of text, samples and live flute music, on her own. Thus she integrates without any difficulty two musical worlds which are equally dear to her: the adventurousness of improvised music and the precision and discipline of contemporary chamber music.²³⁶

6.2 Guided Improvisation

Already very active as a “free improviser”, in the mid-nineties La Berge developed what she calls “guided improvisation”, making her able to combine composition with improvisation and to have works performed not exclusively by people from the classical field. Guided improvisation combines digital technology with written out performance instructions.

I have been doing guided improvisation since I have been making pieces that I can play with other people. I like free improvisation, but not for my pieces, because they have to sound like me, or sound like something I want them to sound like. It started in the mid nineties and the basic reason was that I wanted to be able to utilize improvising musicians. So that they can play my work, but it still has an identity and a structure. The reason I did not want to say “structured” improvisation is because I find that less clear and less friendly.²³⁷ (Anne La Berge)

This guidance is a way to steer other players in specific directions of musical behaviour while still granting them substantial creative freedom.

I want to guide them into musical territories rather than telling them what they

236 OSKAMP, Jacqueline, 2011, *Onder stroom, geschiedenis van de elektronische muziek in Nederland*, Ambo, 216 (transl. Guy De Bièvre)

237 Conversation with the author, September 2011

have to do. First, as a fellow player, I sort of trusted that as long as I was playing with them, I could steer the musical language, I could steer them into musical environments. I could guide the structure of the piece by steering them with my own playing and also with certain recorded material being played back or manipulated. I wouldn't say that the players were truly dependent, but they were led by this other "stuff" that is playing with them, even if I was not playing with them live and only the computer was playing sound files. In these cases they were being led purely sonically. At some point I realized that it would also be good to have timelines or instructions for what I would like them, in general, to play. That way they would have an idea of how the piece, not necessarily is supposed to sound, but what it is supposed to mean.²³⁸ (Anne La Berge)

Originally she would try to communicate her ideas just verbally, not seeing the need of "scoring" them. But it turned out to be necessary and that necessity was twofold, half of which became apparent during the very first try outs.

I was asked to lead a workshop for an improvisation group in Rotterdam that got together and rehearsed improvisations and they brought guests in like me to make a project. I went in and simply told them how I improvise. And they looked at me with expectant faces. I went home to David [Dramm - Anne La Berge's husband, a composer and guitarist] and I said, "I think they want me to tell them what to do." And David said, "People are like that, Anne." Then I made a set of pieces for them that I've used in all kinds of settings since that time. They're notated in the sense that they are scores with sets of instructions. I've been able to use them in workshops and courses and festivals where I am asked to work with improvisers.²³⁹ (Anne La Berge)

The second reason had to do with publishers' requests.

They are paid commissions, which means that I am required to turn in a score to the funding organization and I felt like I should make a score that an evaluation

238 Conversation with the author, September 2011

239 LA BERGE, Anne, 2005, interview with Bob Gilmore,

<http://www.paristransatlantic.com/magazine/interviews/laberge.html> (accessed August 24, 2011)

committee could understand. After that Donemus [publisher] wanted to start publishing works with electronic scores and computer patches and they asked if they could publish *Drive*²⁴⁰ as one of their beta test scores in that field. I was the beta. How do you publish an electronic score? They put me through the wringer with “What is this?” and “What is that?” and “How could you describe that to someone who actually doesn’t even know how to turn something on?”. After working with Donemus and learning what kind of detail a score should have, a portion of the instructions in all my scores are almost a copy and paste job from *Drive*. There is always a section that reads “Load it. Turn it on. Try this and this and this. Make sure it works and then here is the timeline to guide you through the piece or here is what the patch will play and what should happen in the various events in the piece.”²⁴¹ (Anne La Berge)

The decision to put the works on paper, rather than communicating them orally, has also to do with the symbolic power of paper.

(...) because I find oral communication too fleeting and also too commanding. It doesn’t allow them enough room for their own fantasy, because I am telling them what they have to do. I think paper is a sort of God, but it can be disregarded because one can always take a distance from God. But if a person is telling someone what to do, there is a more personal relationship that they have to respond to. In other words, a flesh and blood person telling someone what to do is much more demanding than the written word (God) telling someone what to do because one can always put God in his place and get on with making music.²⁴² (Anne La Berge)

The guidance is layered. A first layer is the score, on paper. It gives the general content of the work; it situates the idea behind the piece by means of metaphorical descriptions; it explains the technology and how to use it; it gives a schematic survey of the different “scenes” (usually paralleled with software presets) and the requested musical behaviour within each of them and also provides the texts that are used, if any. The technology is a

240 A composition by Anne La Berge from 2003-09, a version of which was published on the CD LA BERGE, Anne, 2011, *Speak*, New World Records, 80717-2

241 Conversation with the author, September 2011

242 Conversation with the author, September 2011

second layer. It consists of computer hardware and software (usually a combination of Max/MSP and Ableton Live), which will either act automatically on a pre-programmed base or be triggered by the performer(s). It plays back samples and/or processes the output of the players. The text materials, if present, act as a third layer, they give an idea of where one is in the piece and they also offer the players what could be considered a reliable respondent.

6.3 *Swamp*

Swamp (2011) was commissioned by the Field of Ears Band, an ensemble, including Anne La Berge herself, dedicated to blurring the borders between composed and improvised music. *Swamp* is written for flute, trombone/lap steel, double bass, cimbalom and sampler. The general setting of the piece, and in a way its first guidance is given in the opening paragraph of the score followed by an excerpt of a poem by Rita Dove which concentrates the idea:

When I was young we lived near a swamp. My parents told us that we could be sucked into the swamp if we stepped too close to the soggy muck. The swamp supported the ducks, the bugs, the grassy bogs, the reeds and whatever we threw into it. Every winter the swamp froze over and we skated on it for hours and hours a day from November to March. Our swamp became a metaphor for both danger and pleasure mixed into one. It was a place that overwhelmed us with possibilities and kept us occupied during all four seasons.²⁴³ (Anne La Berge)

Swamp she born from, swamp
she swallow, swamp she got to sink again.²⁴⁴ (Rita Dove)

The swamp as a metaphor makes perfect sense: the idea of having a multi-functional liquid environment in which both submersion and emergence are possible perfectly befits musical improvisation. When discussing how to introduce players at large with improvisation, La Berge refers to using text to feed the imagination:

243 LA BERGE, Anne, 2011, *Swamp*, unpublished

244 DOVE, Rita, 1986, 'The Great Palaces of Versailles', in *Thomas and Beulah*, Carnegie Mellon University Press, as quoted in LA BERGE, Anne, 2011, *Swamp* (score)

(...) or there is something that they can mull over and find a way to give expression to, like *Aus den Sieben Tagen*. The text stimulates a different kind of inspiration and is somehow random or chaotic enough that it enables surprises but also some predictability that steers them towards a form or structure.²⁴⁵

(Anne La Berge)

The score then proceeds with the description of the general technical set up:

The audio samples for *Swamp* are recordings of 8mm film projectors and are processed through Max/MSP and Ableton Live. They are played through six Monacor 45 loudspeakers that surround the performers and some of the audience (cable length permitting). (...) An Arduino²⁴⁶ controlled electrical switch controls the turning on and off of an 8mm film projector and an informal household lamp. This projector functions as a member of the musical ensemble both sonically and theatrically.²⁴⁷

It then gives full details about the technical requirements and how to operate hard and software, making performance very realistic.

Of the three works we will look at in this chapter *Swamp* is the only one which does not rely on text materials in the performance. It does however have one autonomous “foreign body”: a filmless 8mm film projector, triggered on and off from within the software. The projector also has a ghostlike counterpart in the projector sound samples (also software-triggered). La Berge welcomes the fact that this could confuse listeners: “I like that idea that certain things happen and you are not sure if the musicians are triggering them or if they are in the patch somewhere.”²⁴⁸ The projector events are set, they are a steady reliable structure within which the performers intervene.

The piece begins with a solo, which carries a major responsibility: that of setting the tone for the piece. This solo also cues the performer in charge of starting the software,

245 Conversation with the author, September 2011

246 The Arduino is a programmable microcontroller.

247 LA BERGE, Anne, 2011, *Swamp*, unpublished

248 Conversation with the author, September 2011

which from there on will guide the players through the twelve scenes/presets of the piece. Each scene also has specific processing of the projector sound samples.

preset 1:

high spectral processing

preset 2:

like preset 1 with more rhythmic ticks from the projectors

preset 3:

tacet. This is a projector solo. The projector plays at a random, slow tempo.

preset 4:

This plays samples with high filters and plays an extended just intonation sinetones from Max/MSP.

preset 5:

This is similar to 4 but with some changes in the filtering and sinetones.

preset 6:

This is similar to 4 and 5 but with some changes in the filtering and sinetones.

preset 7:

This is a projector solo where it begins very slowly and increases to 20 ms and then sustains.

preset 8:

This uses gating on the samples to give the result of clicks.

preset 9:

This uses the click gating with an EQ that boosts the high frequencies and a fast random pattern for the projector.

preset 10:

This uses an EQ that boosts the high frequencies.

preset 11:

This plays the dry samples, without EQ.

preset 12:

This is a projector solo where the projector plays very quickly and gradually slows down.²⁴⁹

Parallel to these presets the performers are given improvisational cues for the twelve

249 LA BERGE, Anne, 2011, *Swamp*, unpublished

sections (referring by first names to the musicians who performed the original version: Anne La Berge, flute; Joost Buis, lap steel and trombone; Rozemarie Heggen, double bass; Nora Mulder, cimbalom; Huib Emmer, sampler) :

section 1 Rozemarie solo cues Anne for samples

section 2 band enters with same material until projector comes in

section 3 Rozemarie cues Anne - projector solo cuts band off

section 4 sinetones, Anne melody, Rozemarie & Joost sustain

section 5 Huib solo, Rozemarie, Anne, Joost long tones

section 6 Nora & Huib duo

section 7 Nora solo as transition for projector solo

section 8 clicks with interjections from band using noise sounds

section 9 Anne duo with projector, others tacet

section 10 projector stops, Anne cues band, busy material

section 11 Joost solo -> Nora solo interlude with section 1 material -> tutti

section 12 projector comes on, we make an end and the projector has the last word²⁵⁰

As said earlier on, the tone for the piece is set by the very first solo, which is given no further indications or restrictions, except for the metaphorical suggestion of the title and the introductory text and poem. From there on, section after section, musicians are given very general indications as to who is playing and the expected envelope or profile of the sounds (e.g. melody, sustain, long tones, noise, busy). This organization is very apparent in the performance²⁵¹ of the work which has clear sectional differences, making it quite different from the typical free improvisation flow. Although the individual sections each perfectly match the free improvisation profile.

250 LA BERGE, Anne, 2011, *Swamp*, unpublished

251 The performances of the three works referred to in this chapter can be heard at <http://vimeo.com/22797776> (accessed on August 28, 2011)

6.4 Treads

Treads (2011) was composed for 7090, a Dutch ensemble (violin, trombone, cimbalom/piano, with or without electronics) specializing in the combination of composition and improvisation. Again the score begins with a metaphorical situation of the composer's intention.

Treads is a work about the space between our feet and the earth that we walk on. Sometimes we are able to physically communicate directly with the earth and most of the time the communication is complicated by characteristics of the earth such as mud and snow or by man-made obstacles such as concrete and leather shoes.²⁵²

This is followed by three short poems, *dirt*, *pavement*, *snow*, by Anne La Berge, suggesting three different surfaces. Recordings of these poems will be played back, both in their entirety and fragmented throughout the piece.

The nine different sections have different processing presets, different uses of the poems and different indications as to who is playing and what the general envelope of the sounds has to be (scratchy, staccato, low, high, melody,...).

Settings for the processing and Max/MSP patch:

preset	music	processing	computer
<u>preset 1</u>	scratchy sounds mp	rough	words sparse
<u>preset 2</u>	scratchy sounds building		Dirt phrases sparse
<u>preset 3</u>	tacet		Dirt poem
<u>preset 4</u>	very high staccato	high pitch	
<u>preset 5</u>	trombone solo	pitch	Pavement poem
<u>preset 6</u>	cimbalom solo	buzzy	Pavement & snow
	words		
<u>preset 7</u>	trombone low, violin high	ring modulation	Snow phrases
<u>preset 8</u>	violin melody	gates & clicks	Snow poem
<u>preset 9</u>	tutti humming	gates & clicks	words busy

252 LA BERGE, Anne, 2011, *Treads*, unpublished

end²⁵³

The performers rely mostly on the materials from the poems to situate themselves in the course of events. The score suggests they should gradually get accustomed to the samples and the processing and can eventually make different musical choices.

The performance of *Treads* by 7090 over all gives a less improvised sensation than that of *Swamp* by the Field of Ears Band. This can have different reasons. The recited poems give it a structured flavour and the musicians sound like they have a different background (although both ensembles have one performer in common), closer to the composed than the improvised domain. It is interesting that neither inclination is in any way detrimental to the music.

6.5 *Lumps*

Lumps (2011) was composed for Trio Scordatura, augmented with the composer. It is built around an odd idea:

I set out looking for a subject that would draw Trio Scordatura together and still let each musician tell their own musical story. I chose lumps, and specifically the ganglion cyst, as our common ground. Surprisingly, two of us have had ganglion cysts and one of us knew someone who was afflicted with a chronic "lump in the throat" condition. These various tales are woven through the piece as fragmented voice samples while the musicians are asked to improvise to create specific musical situations.²⁵⁴

Like *Treads*, *Lumps* uses text materials (personal stories, medical descriptions, related words and poems). But in this case they play a more important part, for different reasons. They are recorded beforehand by the performers themselves or recited live in performance (by the vocalist of the trio). Having musicians play to their own recorded voices is something La Berge finds very fruitful.

253 LA BERGE, Anne, 2011, *Treads*, unpublished

254 LA BERGE, Anne, 2011, *Lumps*, unpublished

I find that when people hear their own voices they are touched in a very sweet way. Last week, in a new project, I recorded the performers' voices and made a patch that played back them randomly within structured sections of the performance and the performers got all warm and glowing when they were improvising music as they were listening to their own voices. They really enjoyed "playing around" with their own voices.²⁵⁵

Although La Berge is maybe a bit too optimistic as to the performers enjoying the sound of their own voice; not all agree.

I've never liked the timbre of my own voice (even though I'm quite used to hearing it by now) so I kind of squirm every time I hear it. This was a challenging aspect of Anne's piece for me. I had no objections to the idea conceptually, in fact it's a very nice and interesting idea to weave the sound of the speaking voices of the performers into the piece - I just had an instinctive mild revulsion every time I heard myself. I didn't like the ending poem in this context because it was me reading it and I tried almost to block it out of my mind when I played the concluding solo.²⁵⁶ (Bob Gilmore)

The personal stories also add an element of theatre to the piece, along with the gestures required by the used technology. In *Lumps* the performers are in charge of controlling the implementation of the technology themselves rather than having it automated. The keyboard player triggers the preset sequence and the three other players (voice, viola and flute) can alter their own processing. This is done very theatrically (but for practical reasons) by hitting the forehead with a button on the back of the hand, a gesture reminiscent of imminent fainting.

The two following lists give the sections from the electronic point of view and from the performers' point of view:

preset 1: This is the introduction. In this preset a Max/MPS object plays voice

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and noise samples. The recorded voices are Alfrun Schmid, Elisabeth Smalt, Bob Gilmore and Anne La Berge reading information about Ganglion cysts and poetry. In preset 1 the samples are clipped to the extent that they cannot be understood. They sound like clicks.

preset 2: In this preset a Max/MPS object continues to play voice and noise samples and the sample lengths gradually increase so that the information about the cysts can be comprehended.

The acoustic players can change the character of their audio processing by pressing their buttons connected to the Arduino. The live processing objects are gates and noise that relate directly to the character of the voice sample playback. It is the intention that the buttons are placed on the back of the hands and that the players need to stop playing and press the back of their hands to their foreheads to change the presets in the processing.

preset 3: In this preset a Max/MPS object plays sinetones from a 3 octave 31_TET (31 Equal Temperament per octave). The object receives MIDI note information from the keyboard player and can learn up to 20 harmonic and volume settings as continuous responses to the last 5 notes played by the keyboard. The learning patch responds automatically while the keyboard is being played. These settings are part of the nnLists learning patch.

preset 4: In this preset the singer has been asked to tell a story and the flute and viola have the liberty to change the timing of the gates with their button switches. In the first performances this preset has a theatrical role.

preset 5: In this preset a Max/MPS object plays sinetones from a 3 octave 31_TET that eventually resolve to a simple just intonation harmony based on A 440. The text samples played are only excerpts from poetry and don't include any technical information or stories as they did in earlier presets. The keyboard player begins with a solo and the flute and viola enter with the same material.

preset 6: This preset is a transition to the coda. It ensures that the texts for playback are properly scheduled and the rest are turned off.

coda: After nine seconds the WILLIAM BUTLER YEATS poem excerpt read by Bob Gilmore is played as a coda.²⁵⁷

preset 1 intro

257 LA BERGE, Anne, 2011, *Lumps*, unpublished

Max/MSP: extreme clipped text playback, textpreset 1

Play very tiny, dry, scratchy sounds. Sparse, close miked. Keyboard tacet.

preset 2

Max/MSP: lumptextpresets 2 - 10 play fast clipping samples with comprehensible words: text and noise. Ends with Elisabeth describing a ganglion cyst.

The 'grit' processing is on. Players can change processing presets by pressing their buttons. Viola and flute play fast spitty passages. Vocalist whispers text extremely quickly. Keyboard plays short fragments.

preset 3

Max/MSP learns the melodies played by the keyboard player and applies the data to influence a sine-tone harmony and envelope. Texts are sung on single pitches recitative style. Viola and flute play broken melodies. The musicians play from 31_TET harmonic basis. The processing is off.

preset 4

The vocalist tells a story about lumps. After each event he or she presses the trigger button to change the gating preset and the other two players do the same and play one long note before the vocalist continues with his or her story. This section is intended to be theatrical and needs to be worked out for each performing situation.

preset 5 and 6

Max/MSP plays samples of entire sentences of poetry. The 31_TET sinetones enter later and resolve to just intonation sinetones. This section begins with a keyboard solo. The other players play fragments that are text-like in timing and inflection and are taken from the keyboard player's material. The voice is tacet or makes small clicking sounds similar to those in preset 1.

preset 7

The sample of the excerpt from the WILLIAM BUTLER YEATS poem is the end. The patch will turn the sinetones off a few seconds after the poem has finished.²⁵⁸

The first quarter of the piece is very chaotic, very busy and nervous with unintelligible text fragments, eventually ending in a contrasting passage only featuring the recording

258 LA BERGE, Anne, 2011, *Lumps*, unpublished

of a personal story of the viola player. After a little more than a minute a slow, microtonal melodic passage follows, segueing into the next story, recited live by the singer. Until the end a gentle, quite impressionistic instrumental setting is maintained. The last quarter of the piece only features the poems as text materials, providing a kind of closure after the original chaos and odd ganglion recollections. Except for the beginning, the piece never gives the impression of being improvised. This has to do with La Berge's approach to having the members of Trio Scordatura improvise, something that is not really a habit for them.

In our rehearsals I referred to composed music they already play and also to familiar the sound worlds and musical environments. For instance, I did not want Alfrun [Schmid, the singer] to have to sing in a way that was uncomfortable for her, plus I wanted her to feel like she was being adventuresome in a way that she would respect herself. I wanted her role to relate pretty directly to the text mainly because she was the singer. I did not want her to be a “singer singer” who would sing material that was unrelated to speaking. I wanted her singing to be directly related to spoken word. And with Elisabeth [Smalt, the viola player], we just talked about various composers that she had played and that she could directly relate to. We also talked about other musical experiences that she has had that would relate to the music environments in Lumps. So it was more just talking about the enormous library in her head and saying “alright, we’ll just take this one and that one and combine them and there you go”. That way of working was very clear for her. The tricky part for her was keeping track of where we were in the piece because it wasn’t actually written in music notation. There was no reading from left to right as a way to proceed through the piece. After she oriented herself she did a fantastic job. And then Bob [Gilmore, the keyboard player] really enjoys improvising and I could simply give him specific and less specific things to do, like creating melodic material that would work microtonally and could be used to accompany his own voice.²⁵⁹

Although, talking to the musicians gives a slightly different impression, that not everything was that easy to performers with relatively little improvising experience. The

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singer, Alfrun Schmid, describes her experience as follows:

In *Lumps* it was convenient to have a rigid form. Indications like: recitative, 'Pierrot Lunaire'-style, were very helpful. In the end I did not have the impression that I was improvising in *Lumps*. I had the impression that our lack of improvising experience caused Anne to tighten the reins so that the boundaries were made very clear.

The fact that the subject was "lumps" was not really inspiring, but some of the text passages were. As a singer I am always very happy with text; very often you are just treated as a "sound source" (which can also work), but words address the imagination on a different level. On the other hand the danger is that words can dominate the other performers or become one dimensional. But it is your responsibility as a singer to avoid that.

I do not find improvisation difficult, but I do believe that experience helps. When improvising I feel but little expressive freedom because I also have to make up the contents. This sometime causes me to feel more shallow than when I perform written music. One could think that in improvisation one shows more personality, but this is not really the case for me. I find it hard not to give in to clichés; luckily I can spot them. It does help to work with experienced improvisers, but at times I also have found that to be inhibiting.

I do enjoy the fact that improvisation requires you to be extremely aware. The fact that you have to listen so attentively to and are dependent of everyone else can both be enjoyable and frustrating.²⁶⁰ (Alfrun Schmid)

Keyboard player Bob Gilmore, in a way underestimating a more than adequate performance in *Lumps*, is less nuanced about his discomfort with improvisation.

I used to improvise in my teens, but decided I had no talent for it so I stopped. Occasionally I do these days but after about thirty seconds find my attempts so banal that I stop and play some Scarlatti instead. So no, I can't say I enjoy it exactly because I feel I don't know what I'm doing. If anything half-decent emerges it's purely by accident. I keep vaguely hoping I might "get it" someday but it hasn't happened yet.

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I think it's tied to the fact that I find myself a very uncreative person, and need to be given a subject to work on. I think this is why I'm a musicologist rather than a fiction writer or poet. This is why I found *Blue Light Red Light*²⁶¹ an easier thing to tackle than *Lumps*, because more precise information is given up front. But as regards improvisation, the keyboard part of *Lumps* is only partly free, in that we decided on the sort of material I'd play early on in the process of working with Anne and I've tended to stick within those general parameters. We worked out in rehearsal what we would all do, and apart from the timings of things, i.e. how long certain material was allowed to continue (which in this piece the keyboard player controls) much of the material was quite similar, at least in character, from performance to performance.

The nuance level of what I played was always influenced by what the others were doing, particularly in terms of overall dynamics and texture.

I'd say the texts don't have an influence on what I play, other than in a very general sense - chopped up text equals short, nervous, phrases, slow, clear text (like the Yeats at the end) equals slow, sustained phrases. I feel constrained by my lack of improvising "chops" from responding in a more sophisticated way.²⁶²
(Bob Gilmore)

It is interesting to compare these remarks to those of Nora Mulder, the cimbalom player in 7090 and the Field of Ears Band, who is an experienced improviser.

I play in various groups where improvisation is combined with composition. Some are jazz oriented, others contemporary/composed. Next to this I also improvise without composition, together with other musicians, dancers, actors, visual artists and with an art philosopher. The big difference, between composition and improvisation, which makes everything easier and more complicated at the same time, is that with improvisation you are on your own. It is easier because you can decide which way to go and harder because you have to decide which way to go.

Compositions within which improvisation plays a part, where you deal with

261 *Blue Light/Red Light* is a composition by the author that is discussed in Chapter 7.

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both, are again different, because with them you enter in a dialogue with the composition.

Anne's guidelines function as an inspiration, just like the text materials and the way Anne controls them, so that you never know ahead when and how what will sound. With different texts I would play differently.²⁶³

6.6 Spitty and Scratchy

Although they deal with a similar concept – guided improvisation – the three pieces could not have been more different. Each of them approaches improvisation and the freedom it entails, from a very different angle; one (*Swamp*) evolves around the mechanical sounds of a film projector; another one (*Treads*) accompanies and is accompanied by a series of poems; the third one (*Lumps*) completely integrates texts and poems as the frame of the piece. These are different types of “assistance” or “guidance” leading the performers where the composer wants them to be without demonstratively imposing anything on them. Although the composer's instructions (giving a metaphorical situation, explaining the technical set up and procedure and giving the very reduced playing indications) are of a similar kind in the three compositions, the results sound very different, ranging from clear improvisation to almost notated (even though it is just as improvised).

What is most apparent is the richness that can be obtained from a very tolerant approach to the diversity of players' backgrounds. It is a richness that disposes of qualitative comparisons, making it impossible to say “this interpretation is the better one”, because this would come down to saying “this background/education/culture is the better one”. But it does make one curious as to how the pieces would sound if we would interchange the players (although each of the works was composed for specific performers).

When a composer uses conventional music notation the ambiguity is reduced to a minimum, the note (usually) stands for a specific pitch and a specific duration, often the dynamics are given as well as the tempo. Although this still leaves space for

²⁶³ Correspondence with the author, September 2011

interpretation, the differences between faithful lectures are of a subtle kind. When on the other hand the composer describes what has to be played as “very tiny, dry, scratchy sounds”, or “fast, spitty passages”, or “melody”, we are dealing with the subjectivity of language. We can all imagine something that would match those descriptions, yet it will most likely sound different to each of us. Therefore it can be assumed that these descriptions are sound pictures or gestures, abstractions that have to be seen in the totality of the work. They are precise enough not to yield inappropriate gestures: “tiny, dry, scratchy sounds” exclude a lot of other sounds, so in the end we do not end up that far away from a precisely notated score where there are still many ways to sound a specific note while respecting pitch, duration, tempo and dynamics. We could even turn this around and state that in certain very complex notations the expression “very tiny, dry, scratchy sounds” instead of the painstakingly written collection of notes might yield a similar, or just as appropriate result.

Chapter 7

GUY DE BIEVRE - WORKS 2007-2011

7.1 Origins

“Our idea was there might be blind alleys that modernism had left behind which we could develop.” Rem Koolhaas²⁶⁴

Arriving at composition by way of free improvisation I have always been interested in “open form”. Although my first compositions were fully notated, in 1988 I delegated decision making to the performer for the first time with two works: *Who Framed Milton Babbitt?* for unspecified instrumentation and *Playing Solitaire*, for piano. The former work provided the performer with fully notated “cells”, each one bar long, on a sequence of 5 pages, to be played chronologically. For each page the performer was given the number of bars to play, but the choice as to which and the order was free. *Playing Solitaire* was fully notated in a linear fashion, but each bar, except for the first and last, could be skipped or repeated at will. Thus the shortest possible version would consist only of the first and last bar.

I did not repeat the experiment, because it failed to induce the sense of spontaneity I was looking for. I also realized that regardless of the shared responsibility, to the audience a poor performance equals a poor composition.

After those two revealing experiences I stuck to fully notated works, for which I applied indeterminate methods during the elaboration, prior to handing the scores over to the performers. A work like *The Many Gypsies in Me* (composed in 1990 for Zivatar Trio) was conceived as a walk through a virtual building (using architectural drawings) which had different musical materials in each room. The final score was a single “walk” through the building, out of many possibilities. For other works I would use oceanographic maps (e.g. *Biedermeyer Hillbillies* (1991, composed for Annette Sachs and Françoise Van Hecke) or *Station Positions and Profile Numbers* (1994, composed

264 SEABROOK, John, 2009, 'The Abstractionist, Zaha Hadid's Unfettered Invention', *The New Yorker*, December 21 & 28, 2009, p87

for Anne La Berge and Gene Carl) and the final score would be one out of many possible navigations. Although I was always satisfied with the result I always found it a bit frustrating to know that all the other possibilities could have been (maybe even more) interesting in their own way.

Ten years later I had arrived at a point where I was not sure I wanted to continue producing scores that way, as I was feeling uncomfortable with the restrictions and was missing performance spontaneity. Still, I did not see any immediate alternative and quit composing altogether.

During that compositional sabbatical I paid extra attention to works by other composers that seemed to achieve the spontaneity I was after. One of the works that had already attracted my attention when it was released on CD in 1996, was Peter Zummo's *Experimenting With Household Chemicals*. The music seemed to combine composed and improvised qualities in a way that was beyond my imagination. I became so obsessed with the work that I ended up asking Peter Zummo for the score of the work, if there was such a thing. Once I obtained the score I put an ensemble together to attempt performing the work, which we only managed satisfactorily in 2000 after inviting the composer over to join us.

Taking part in the performance of *Experimenting with Household Chemicals*, and the process leading up to it, was a revelatory experience (especially Peter Zummo's metaphor of moving through the score like a herd, not necessarily at the same speed or with the same attention for certain details, but in the same direction). It managed to successfully combine notation and spontaneity. What became clear was the importance of choosing the right people, because what they bring to the work is at least as important as the work itself. After this experience I started producing new works, each time with specific performers (next to myself) in mind. Originally those works (e.g. *Bending the Tonic* (2004), *Very Slow Disco Suite* (2006)) required my presence/participation (due to the customized electronics), but from there on I started once again considering works which could be performed without my participation.

The six works²⁶⁵ discussed in this chapter were all conceived between 2007 and 2011 and all explore “open form”. They were either composed on my own initiative or commissioned and as much as possible tailor made for the commissioning musicians/ensembles.

7.2 *And Above All*

And Above All (2007) was the first work in the series. It was composed for myself in view of upcoming concerts and also as a test case for new ideas. It is meant for a soloist and can be performed with optional electronics. These electronics are a set of about ten different effects which are to be changed and altered at random by a microcontroller or other autonomous controlling device. More than half of the effects are reverberation effects, ranging from very large room simulations to gated (where the reverberation is only present with loud sounds) and ducking (the opposite of gated) as well as backward reverberation. The other effects are ring modulators and simulations of analogue tape manipulations. Apart from the switching between effects, the microcontroller also sends so called continuous controller data, which alters effect parameters. All these sound manipulations are intended to provide unpredictability, so as not to lapse into routine.

The score consists of 44 small cells, to be read from the upper left corner to the lower right one. In between these two corners the performer is free to proceed vertically and horizontally from cell to cell, with permission to go back or to spend much more time on certain cells than others (not all the cells have to be played). Each cell allows “free interpretation”, i.e. the stemless pitches can (but do not have to) yield more than their representation. E.g. a single pitch can be seen as the fundamental to a chord, which in turn could become a scale; but it could also produce a relative chord to that chord. In the end a given pitch could result in a different pitch being played. The only demand to the performer is literally one of responsibility. In the imaginary case that at any given point during the performance the performer is being asked why she/he made this or that decision he/she should be able to respond.

265 The scores for these works are all to be found in the appendix and recordings of different performances can be heard on the accompanying CD.

The piece should evolve at a slow pace and rhythmic features are left entirely to the performer's discretion. The performer is free to pause between (or during) cells to consider how to proceed next. These moments of reflection are very important and should ideally be sensed by the audience as well.

The score should be seen as a field through which the performer roams, whether like an animal or an explorer. Different areas have different flavours. So does the bottom half of the page offer a more chromatic colouration. When divided into quarters certain pitch dominances, or gravitations, can be heard (e.g. E in the upper left quarter or A in the lower left quarter). But again, this depends largely on the interpretation, which could ignore those dominances. The six whole notes in the score could suggest moments of stasis, but they could just as well function as attraction points in the field. Two of the cells do contain an 8th rest in between the series of pitches, giving a rhythmic phrasing suggestion.

As with all the works in this series each performance, including practice or rehearsal, should be unique. The duration should be spontaneous rather than measured. Practice did show that *And Above All* has a “natural life span” of about 25 minutes. Although this should not exclude either shorter or much longer performances. The electronics used in *And Above All* and two other works in this series are optional, i.e. the work can be performed without them. As said above they are intended to add an element of extra unpredictability, surprising the performer at least as much as the audience and preventing routine or planning ahead, which would be contrary to the idea behind the work.

So far *And Above All* has only been performed by myself, about five times, of which only two were recorded. The accompanying recordings are of the first two performances of the piece, seven days apart. The main difference between them is that the second version is more relaxed and I take longer pauses between cells. In both versions I seem to follow a more or less similar route (which I only noticed when I compared the recordings afterwards).

The first performance was at a venue named *The Velvet Lounge*, in Washington D.C.. The least I can say is that the name of the venue is a bit of a misnomer; there is no

velvet to be seen nor is it a lounge. My performance was part of an informal festival of very experimental music tending more toward the “indie”, at times rock edged scene. I had not expected this but realized that *And Above All* allows for adaptation to specific situations, making it possible to play a version that would be more pleasing to a Darmstadt audience, or a rougher version to suit an “indie” audience. Not that the first version would have accommodated headbangers, but it did make a subtle move toward the audience that night, which was quite different from the audience in a Brooklyn art gallery that I provided with a more laid back version one week later.

And Above All was first performed (on lap steel) at the Velvet Lounge in Washington D.C. on October 21 2007.

7.3 *Blue Light/Red Light*

Blue Light/Red Light (2007) implemented the ideas of *And Above All* in a work for two (or more) performers. I wrote it with very specific musicians in mind (flutist Anne La Berge, trombonist Peter Zummo, and myself), musicians I knew could be trusted with as little as a single note on a piece of paper. I could, compared to *And Above All*, allow myself to simplify the musical contents of the score even more. The entire piece is in G, with an emphasis on the fifth, D, which also ends the piece.

It is to be played according to instructions identical to those of *And Above All*, and can also use randomly controlled electronic effects (one set per performer, controlled individually), which is what happened in all performances I was directly involved in. When performing with Anne La Berge or Peter Zummo, I let them choose their own effect device and selection of effects, while my micro controller provided the random data and I would use the set up I use in *And Above All*. Peter mostly favoured reverberation, while Anne went for the more complex effects (of her Nord Modular device). I was particularly interested in the performers' behaviour, roaming through a common field. Again, the performance should have a “spontaneous” duration, with the possibility to “hear” when one of the performers is somewhere near the end, because of the D7 chord two cells away from the final D (although, once again, the freedom would make it possible for any player to play a D7 chord basically anywhere else in the piece

and not to play it at all at the end). The permission (and encouragement) to pause between cells allows to lay out and listen to the other performer's proceedings and possibly adapt one's own to it...or not.

A musician, with whom I once was playing the piece in a private setting, asked me, after I had explained the concept and the idea of freedom based upon responsibility, “So, I can play anything I want?” To which I could only answer “Yes and no”.

Comparing four different recordings of *Blue Light/Red Light*, two of which I did not take part in (those versions did not use electronic processing), it is remarkable how much likeness there is between them, even though there are huge differences as well. This is partly due to the gravitation around D, but it also seems due to the layout of the cells. The different versions can perfectly well be superimposed in a multitrack editor and sound like a larger ensemble playing the same work. The three longer versions, for instance, present a more than three minutes long quiet and peaceful drony passage about 3/5 of the way. It is centred on D and could sound like the ending of the piece, but instead the different performances then intensify again for what seems to be a long coda (which is very different for all four versions). The main differences have to do with typical instrumental characteristics and also with the musical backgrounds and preferences of the performers. In the two versions involving Anne La Berge, the flutist leads the other performers (be it myself or Trio Scordatura) into fairly abstract experimental territories, finding there materials subsequently explored in a contrasting less abstract manner (one of these turnarounds can be heard after about 10 minutes into the Karnatic Lab concert, lasting about three and a half minutes to then leave trodden paths again). The influence of a single (and assertive) performer is also clear when we compare the two versions by Trio Scordatura. The very short version (under 5 minutes, which is fine, because the score does not give any duration restrictions) without Anne La Berge has a clear flavour of European (late) 20th century music, with a leading role for the soprano, while in the version with La Berge she clearly is a very unpredictable element, causing the other performers to reach for tools they might be much less familiar with. The concert with trombonist Peter Zummo sounds more like a sonification of the visual appearance of the score, fairly sparse, with moments of stasis, not reminding of any specific genre, nor overly experimental. I do consider all four performances as perfectly legitimate versions of the work. Less differences between

them would go against my intentions as a composer.

Blue Light/Red Light was first performed (by Peter Zummo on trombone and myself on lap steel), at Diapason Gallery, Brooklyn, New York on October 24, 2007.

7.4 3 Pack

3 Pack (2008) was commissioned by Ensemble Intégrales (specifically for violin, saxophone and double bass) and gave me an opportunity to try the concept of the two other works of this series in a situation in which I am not taking part as a performer. The score consists of three different pages, one per instrument. The instructions are the same as those of the previous two works: moving at will, vertically or horizontally (with the possibility of going back and forth) from the upper left to the lower right corner. Not all cells have to be played. Given pitches can be “interpreted”. There should be no prior agreements between the players as to how they will roam through their field and interpret the materials.

For this work I developed and built (during a residency at STEIM in Amsterdam) a device that would randomly change the pitch of two ring modulators (processing the violin and the saxophone separately) and produce a MIDI signal altering the size and balance of a digital reverb common to all three instruments, guaranteeing subtle unpredictable changes. For instance about two minutes and thirty seconds into the recording of the Hamburg concert the saxophone reacts to a slow gradual reverb swell. Moments with longer reverberation seem to intensify players' activity.

The general harmonic feel of the score is F minor and a diagonal movement from the upper left to the lower right corner goes from relatively more to less chromatic material. Although whether this will be the musical result depends entirely on the interpretation given to the score by the players.

The first performance of *3 Pack* (with a cello substituting for the absent double bass) is a very eloquent reading of the piece infused with gestures typical for the contemporary music which populates most of the ensemble's repertoire, with moments of very German

drama alternating with more tongue in cheek phrases, all infused with a minor mood. The performers took stage positions quite distant from one another, which reflected their very individual roaming through a common situation.

3 Pack was first performed by Ensemble Intégrales during an Opera Stabile concert in Hamburg, Germany in January 2008.

7.5 *Stare Into the Light*

Stare Into the Light (2008) was commissioned by pianist Heleen Van Haegenborgh. It no longer gives the performer the extreme freedom of the three works that preceded it and uses more notational detail. But it does use a similar metaphor of the performer roaming through a field. This field consists of five pages to be kept in their numerical order. Four of the five pages are composed of “cells” of notated materials, each worth one bar of a 4/4 meter. But again the performer is encouraged to “interpret” the material, especially the left hand part, which always only consists of a single chord.

The performer moves vertically or horizontally from cell to cell, starting at a slow tempo (as mentioned in the instructions “to get acquainted with the terrain”) gradually accelerating. She can pause between cells to reflect upon how to proceed next. The third page is different from all the others and should be seen as a “pond” which has to be waded through to the last two pages of the score. This “pond” is fully notated but the pianist does not have to play it in its entirety. She should enter the pond at the level of the last cell she played on page 2 (though she is free to play through the cells to the top one, or any other, before entering the “pond”). From there she has to play at least one entire line to the other side, but she can play more lines downward, as far as the bottom one. Once she leaves the pond, onto page 4, she cannot re-enter it, but, gradually slowing down she has to proceed toward page 5, where the piece will end, with any chosen cell along the right edge.

Pages 1, 2, 4 and 5 are also randomly covered with rectangular coloured shapes. These have to be considered as areas of low visibility, where the pianist has to improvise with the left hand material she was using when entering it. These coloured rectangles can

vertically connect different cells and their colours can serve as a sensory input to the interpretation.

The indeterminate quality of the piece can optionally further be enhanced with a CD containing short bits of harmonically related electronic materials, to be played in shuffle mode.

More directly than the other works discussed in this chapter, *Stare Into the Light* calls upon improvisation by means of the un-notated coloured patches, within which the pianist is completely left to her own devices.

The only recorded performance was realized at the University of Surrey. Heleen, the pianist, seems more comfortable taking liberties than she was when she first performed the piece, still she remains reserved as far as the improvisation suggestions go in the coloured patches. She enters the pond in the upper left corner and leaves it at the end of the third line, not playing the final chords and entering page 4 at the bottom. Both the skipping of the chords and the entrance one line below are liberties, which within the nice flow of the performance are legitimate. The flexibility of the concept allows for appropriative interpretation, especially in the case of the dedicated performer. This version ends with an almost obnoxious last “comment” from the CD part, which as intended did not give too much consideration to the delicacy of the performance, but acted as a series of sonic events happening within the field regardless of who is roaming through it.

Stare Into the Light was first performed by Heleen Van Haegenborgh, during Gentse Vleugels in Gent, Belgium, in July 2008.

7.6 *The Relative Probability of Forming a Knot I*

The Relative Probability of Forming a Knot I (2009) was commissioned by Trio Scordatura. It is again different from the previous works, especially in its visual lay out. Each instrument has three pages, one of which is common to all three performers. The idea behind the common page is to have identical figures re-occurring at times in all

three parts as a beacon for the audience.

The lay out of the score is different in that it consists of cells containing different bits of material with different degrees of notational precision. Those cells are connected by lines which have to be followed by the player. Each performer is free to choose the order in which to play the pages. This order should each time be different and not be discussed with the other performers. The performers can move back and forth between cells and stay in them as long as they want. They can leave the page from any cell to go to another page.

The instructions call for a “high riff-coefficient”, meaning certain bits of material should be looped. Certain cells show a repeat symbol (||: :||) meaning that in those cells looping is compulsory. Cells containing a fermata symbol call for pitches to be held for a longer time. Cells with a + or - $\frac{1}{4}$ require a quarter tone pitch change, to, accommodate Trio Scordatura's experience with microtonality. Performers can pause between or within cells to reflect upon how to proceed, based or not upon what the others are doing.

The Relative Probability of Forming a Knot I has not yet been performed.

7.7 *The Relative Probability of Forming a Knot II*

The Relative Probability of Forming a Knot II (2009) was composed on my own initiative and is an adaptation of the work written for Trio Scordatura. I had become very curious of the possibilities of the concept (among other things the combination of specific and common materials) and wanted to try working out a version in which the materials inside the cells would be more open.

This second version is intended to last longer than the first and therefore the performers are asked to choose three pages each of a collection of six as well as the common page. Because everybody is choosing pages from the same collection, even more common pages can occur. At the same time, because the contents are much free-er, identical materials will most likely yield different readings, possibly providing the listeners with uncertain familiarities.

The lay out is identical to the Scordatura version and so is the manner of proceeding. Again looping of fragments and holding single pitches for a longer time are encouraged. Ideally the piece (which again is supposed to have a slow pace) should last between thirty and sixty minutes. Performances so far have shown that performers rarely had to use all four pages.

The Relative Probability of Forming a Knot II was performed twice so far, each time with different performers beside myself. Both performances used the same backdrop of pre-recorded quiet environmental sounds (sounds of a construction site, recorded from a distance, which I had been hearing during the entire period that I was working on the score), an optional possibility. The performers involved in both events all shared the fact that they were composers and seasoned improvisers themselves. The first performance, involving flutist Anne La Berge, electric bass player Xavier Verhelst and myself on lap steel, had had only a preliminary sound check as first very brief common try out of the piece. It starts very slowly and quietly, as if indeed all three players have to figure out the situation. The first intensification occurs only after about seven minutes. There are moments where similar materials are clearly explored commonly, after which roads separate again. After sixteen minutes begins a new, eight minutes long quieter and slower passage, as if the performers needed re-orientation before being led by the flute, in a long improvised elaboration, eventually leading, through an F minor chord to the closing and commonly sustained Ab. This performance lasted a bit over 30 minutes (which was requested by the organizers).

The second performance involved next to myself, trombonist Peter Zummo, reed and flute player JD Parran and accordionist Guy Klucevsek. It was performed against the same backdrop of environmental sounds. As expected the performance is very different from the first one, due to the different performers and their backgrounds. It clearly has some jazz flavours and tends to indulge in lush consonance at times. It evolves at a slow pace, but although much longer (over fifty minutes) it does not have the very slow start of the first performance (we had a chance to give the piece a more substantial try out before the concert). From there one it gently flows further without major climaxes, sustaining the setting created at the start. It is only toward the end that the stream becomes agitated with eddies caused by the different instrumental voices all of a sudden

jumping over and diving under each other before gradually achieving the droning closure.

What I find most successful about both performances is that they show a high level of spontaneous self-organization. The performers join to weave a fabric out of which every now and then they can emerge with a shorter or longer solo elaboration, which by repetition can then become accompaniment to someone else's solo, in a continuous shift between back and foreground. The parts that happen to be common between two or more players allow them to locate one another at times and act upon those chance encounters. There are recurring motifs played by different players (or by the same player) at different times, something I did hope would happen and intended as a handle to the audience. The resulting image is one that holds the confusing middle between composed and improvised, which is definitely something I was after.

The Relative Probability of Forming a Knot II was first performed (by a trio consisting of flutist Anne La Berge, bass player Xavier Verhelst and myself on lap steel) on November 10 2009 in the Karnatic Lab series in Amsterdam.

7.8 *Poker Test*

Poker Test (2011) was commissioned by guitar quartet Zwerm. The concept of the work bears most resemblance to *Stare Into the Light*, as players have to move through cells each one bar long. But it is different in every other aspect. It is specifically conceived as guitar music. The contents of the cells are a distant reference to bluegrass flatpicking style, limiting itself to the first position on the guitar neck and using open strings whenever possible. But contrary to bluegrass the tempo is very slow (between MM15 and 30) and though some sections are in 4/4, others have an un-bluegrass meter (5/4 or 7/4).

The score consists of three pages plus an extra page to be used by the bass player (it is up to the ensemble to play as either four guitars or three guitars and one bass guitar). The guitarists each receive the same three pages, but the decision which pages to use (from one to three) or in what order is an individual one which should not be shared

with the other performers. Performers are allowed to use electronic guitar effects of their choice, also without informing the other players beforehand.

The pages can be entered anywhere along the edges. The cell areas on each page are divided into two sections, separated by different Gb chords. Performers move vertically or horizontally from cell to cell and are asked to repeat cells at least once, but preferably more often. It is up to the individual performers to decide whether at times they want to synchronize what they do with any of the other players. Performers can pause between cells, to reflect upon how to proceed next. Moving from cell to cell they can either reach an edge of the page again and move to another page or cross through the chords. The chords can be rhythmically deconstructed at wish but can only be played once, followed by a seven second rest (to be timed mentally) before playing the same chord again or the next chord or before moving into “cell territory” again.

The performance should ideally last between ten and sixty minutes and it should end with all the players (except the bass, if present) in a chord section.

A first version was recorded during a private try out in Antwerp. It opens with all four players working their way steadily through the material, in a quite similar way, quietening down together after about two minutes. It does sound like a cautious first exploration of uncharted territory. Only after four minutes, when for the first time one of the players starts playing chords, the scene intensifies and hoquet-like interaction occurs (accidentally or not). The chord territory is again abandoned after seven minutes for a more gentle return to the melodic cells, including some nice accidental simultaneity, followed by a final minute of chords, quieter than their previous occurrence. ending after nine minutes and thirty seconds.

A second recording was made during a concert the quartet gave at Brunel University, almost one month after the first try out. This version is very different, clearly showing more familiarity with the materials and more boldness, among other things expressed with a subtle use of effects. A quiet start lasts until half way through the performance, when all four players join in a distorted climax, before ebbing away gradually, one by one, into the final chord section, lasting more than two minutes. The performance ends thus after about eight minutes, two minutes short of the instructed minimal duration (ten

minutes), a risk one takes when performers are asked to estimate duration without timer, but in itself no major shortcoming to the piece.

A third performance took place early September 2011 during New Music Ostrava in the Czech Republic. In this version all four players operate in a relatively more synchronized manner. During the first half they seem to follow the pulse of the bass guitar player. This is less obvious in the second half (which has more chord passages), but there still is a certain beat feeling to it as well, which dissolves in the last minute. At seven minutes this is a shorter version than the previous ones.

Finally, so far, Zwerm performed *Poker Test* on October 13 2011 at the Logos Foundation in Ghent, Belgium. In this, even shorter version (6'30"), the quartet is even more synchronized and takes more liberties (e.g. ending with a single guitar playing a melodic cell rather than chords). But the general feeling is that by now they have completely assimilated the work and made it their own in a very sensible and appropriate way, which is the ideal outcome I hoped for. Both composer and performers share equal responsibilities in the success of the final result.

Poker Test was first publicly performed by Zwerm at Cafe Oto, in London, on May 2 2011.

7.9 Composed vs. improvised

These six works all have a common concept: the creation of a situation that can yield an almost infinite number of musical results, all bearing the specific flavour of the scored materials. That flavour can be primarily harmonic (as is the case for *And Above All*, *Blue Light/Red Light* and *3 Pack*), melodic (e.g. *Stare Into the Light*) or both, in combination with gestural elements (*The Relative Probability of Forming a Knot* and *Poker Test*, with their requests for repetition or looping).

The three first pieces (*And Above All*, *Blue Light/Red Light* and *3 Pack*) are highly dependent on the chosen orientation on the terrain that is the score. E.g. *And Above All* can either start with the contents of or materials derived from an A9 chord, or with the

suggestions found in a D-B-D (minor third/sixth) interval. These are two quite different openings which will probably play a determinant role in how the journey will proceed. Each cell, like a chess move, will in turn offer new possibilities which might, or might not, be influenced by the opening move. The permission to pause between cells, or even inside cells allows the performer(s) to survey the score and spot possible connections between what happened so far, what is happening then and what could happen later.

Where the works for multiple performers are concerned, a comparison with chess strategy can again be made. A performer could plan moves ahead according to what other performers are doing and a guess at what they might do later, but has no control over future events except his or her own. Similar challenges can occur in *Poker Test*, but due to the stricter notation they take a different form and are more likely to be expressed in choices of dynamics, tempo or timbre (effects).

This game-like situation is less present in *The Relative Probability of Forming a Knot*, where most of the decision making happens inside the (larger) cells. The aim, especially in version II, is for each player (and there are no real limitations as to their number) to add to the common fabric, something that seems to happen spontaneously.

However open or free, the score, the piece of paper, is what makes the difference with pure improvisation. The performers are not left to their own devices only, although they have to call upon them extensively. What the score wants to achieve in the first place is reflection, as to how to interpret materials that are not precise. A cell containing a single note without further signifiers has that single note as a major difference with free improvisation, even if the performer is free to play any other note that he or she could relate to that given note. This external musical input, however vague, makes all the difference, more so than graphic notation would do. Graphic notation can (but does not have to) be applied as a purely sensory visual input, rather than an input addressing some elementary musical knowledge or sensibility. The score also provides not so much a safety net, but some sort of refuge where the improviser can at times find repose and time to think before continuing the journey.

The choice of using very simple musical materials is totally intentional. It allows for easier decisions and does not distract from the decision making process. It is important

that the performers can approach the materials in a relaxed manner, without any technical apprehension. Technical complexity would require practising specific gestures, which would bias decision making. The virtuosity has to be of a creative kind. The final complexity should be an (ideally irreducible) emerging phenomenon rather than a pre-existing one.

Chapter 8

CODA

(...) I don't really concern myself too much about form. And the reason I don't is because I know it's there. I'm always surprised to find out how it's there.²⁶⁶ (Cecil Taylor)

(...) free improvisation moves beyond matters of expressive detail to matters of collective structure; it is not formless music making but form-making music.²⁶⁷ (David Borgo)

Leaving things “open” in a musical score means leaving certain decisions or even initiatives to the performer(s) discretion. All the works and practices addressed in this thesis rely on the creativity the performers can add to the composer's. When we compare the works by Brown, Davis, Rudolph, Zummo, La Berge and myself, we realize they all have very distinct identities. One of the more obvious conclusions we can draw is that open, mobile or indeterminate form is not a music genre or style. It is a technique yielding very different kinds of music. One of the common features between all of them is that the works cannot necessarily be recognized by the listener as being composed or not, or improvised or not, or to what degree they are either of those two. What they also have in common is that they provide or require a specific (social) situation which has to be dealt with, if not inhabited, by the performers, with a relative degree of independence and responsibility. On the other hand, the differences between them in the first place have to do with the different backgrounds of the composers showing up in details of the materials: there is an unmistakable serialist flavour in Brown's, blues and jazz in Davis', sub-Saharan and other non-Western music in Rudolph's, free-improvisation in La Berge's and a harder to pinpoint eclecticism in Zummo's and mine. These specific influences also play a part in the way “freedom” is being shaped and to what parts of the music it is applied.

266 FUNKHOUSER, Chris, 1994, *being matter ignited, an interview with Cecil Taylor*, <http://epc.buffalo.edu/authors/funkhouser/ceciltaylor.html> (accessed on September 10, 2011)

267 BORGO, David, 2002, 'Negotiating Freedom: Values and Practices in Contemporary Improvised Music', *Black Music Research Journal*, Vol. 22, No. 2 (Autumn, 2002), 167

More generally one could say that the discussed compositions are not as preprocessed as the average, fully notated, fixed score. In “open form” composition the range of the amount of “preprocessedness” goes from very much (e.g. Pierre Boulez' *Third Piano Sonata*) to very little (e.g. Earle Brown's *December 1952*). At the outer edge of zero preprocessedness we find the territories of free improvisation. Bruno Nettl, in one of his essays on improvisation²⁶⁸, referring to Ernest Ferand's 1938 book *Die Improvisation in der Musik*²⁶⁹, deduces that in Ferand's view “improvisation ends where notation begins.” Where the examples in this thesis are concerned, the opposite makes more sense: improvisation begins where notation ends.

Within my own work the notation is situated at a stage prior to the completion of a “conventional” score. It contains the ideas or seeds that earlier on in my career as a composer would have yielded a fully notated score. With the open notation I rely on the performer(s) to use the materials to produce a work that I might not have thought of, possibly achieving a degree of complexity beyond my notational capabilities. It allows me to integrate the strengths of improvisation (flexibility, spontaneity, adaptability, unpredictability, renewal) within a compositional idea. It allows me to benefit from the creativity of very talented performers, from the knowledge they have of their instrument and from their willingness to let themselves be surprised. I can very well identify with what saxophonist Steve Lacy had to say about improvisation and its use in combination with notation:

I am attracted to improvisation because of something I value. That is a freshness, a certain quality, which can only be obtained by improvisation, something you cannot possibly get from writing. It is something to do with the 'edge'. Always being on the brink of the unknown and being prepared for the leap. (...) If through that leap you find something then it has a value which I don't think can be found any other way. I place a higher value on that than on what you can prepare. But I am also hooked on what you can prepare, especially in the way that it can take you to the edge. What I write is to take you to the edge safely so that you can go on out there and find this other stuff.²⁷⁰ (Steve Lacy)

268 NETTL, Bruno, 1974, 'Thoughts on Improvisation: a Comparative Approach', *The Musical Quarterly*, Vol. 60, No. 1 (Jan., 1974), pp. 1-19

269 FERAND, Ernest, 1938, *Die Improvisation in der Musik* (Zurich)

270 LACY, Steve, quoted in BAILEY, Derek, 1993, *Improvisation, its Nature and Practice in Music*, 1993, Da Capo Press, 57-58

Leading the performers to the edge is certainly what Peter Zummo, Anne La Berge and myself try to do, each in our very own way, or to our very own edges. Adam Rudolph's music is different, in that it deals with another kind or combination of edges: the conductor/composer's edge, the more challenging one, the one that could lead to disaster, and the performers' micro-edges, which are a bit safer, as they can be snapped out of danger at any moment by the conductor. Miles Davis' world in a work like *Ife* is again something else, it is so blurred that it would be hard to find out where or what the edge is. All rely to a greater or lesser extent on improvisation, yet rarely in a manner that is usually understood as "improvisation".

Often, these days, improvisation is associated with jazz (usually limited to a specific period, approximately 1940-1965), especially when it is approached from an extra-musical angle. This might have to do with convenience and clarity. This type of improvisation happens within boundaries (16 or 32 bars), quite well organized in heads, choruses and bridges, on a distinctive support (chord changes, in a way comparable to figured bass – another form of relatively indeterminate composition), making it fairly easy to analyse, explain and discuss. As stated in chapter 3, the absence of the boundaries and the support is one of the things that caused purists not to consider Miles Davis' music after 1968 as jazz. Yet it was clearly improvised, even more so than what was accepted as "proper" jazz, probably too much so.

The works discussed in the case studies all deal with different approaches to improvisation, different degrees of freedom. In Adam Rudolph's work the main improvisation lies in the hands of the conductor, but the decisions he makes are likely to be influenced by the decisions made by his performers. Here various levels of improvisation interact within concentric circles. In Peter Zummo's music the improvisation hides in the possibilities to go "beyond" the score, in the interpretations of ambiguous notations and into individual decisions to join or not to join the rest or parts of the "herd" and at what speed to do so. In his case the ambiguity did cause me to wonder how much was composed and how much was improvised when I first heard the music (I had a similar reaction when I first heard the music of Rudolph's Organic Orchestra). Anne La Berge, because of the total absence of music notation, relies almost exclusively on improvisation, though within verbal restrictions (in the sense that

suggesting what one should play entails what one should not play) and within the preset structure of the software she uses. Just like improvisation vs. conventional composition, the performances of the works are presentations rather than representations.

My work relies (in different ways for almost each piece) on an approach to improvisation which also differs from something that is usually associated with it. “One of the things we most expect of improvisers is spontaneity, the ability to make split-second choices in the heat of the moment.”²⁷¹ While I insist that the performers take their time to consider their next move. Comparing my concept to Carla Bley's when she states “I write pieces that are like drawings in a crayon book and the musicians color them themselves.”²⁷², I do require the performers to slowly and reflectively connect the dots I give them (though in some pieces I also provide “sketches”) to obtain a drawing - which is not necessarily (preferably not) one I had in mind - and to take all the time they need to pick the colours. I could add that I give them permission to colour outside of the lines as well (but only if they can justify it). This granting the performer(s) time to reflect is in a way a licence to compose, something that is closer to traditional composition than to instant composition (as free improvisation has sometimes been called).

What the five case studies and my own works also have in common is that the music they result in totally depends on who the performers are. Performers with different backgrounds, histories, preferences, etc., will produce very different musical results. None of the works require a high level of virtuosity (unless we are talking about the virtuosity of creative imagination); they are not about reading dense or complicated notation either. One could say that “open” composition is way more socially committed than its fully notated and determined cousin and only succeeds in an interesting way if it is tolerant and open to diversity. It relies on this added human dimension to reveal the power of what is not written in the score. Because what is not written in the score is what is being heard when the work is performed. In a way, what the discussed compositions, whether consciously or unconsciously, are attempting to do is to get rid of the score, or to reduce it to a strict minimum, as if it is the notation that gets in the way

271 BENSON, Bruce Ellis, 2003, *The Improvisation of Musical Dialogue, a Phenomenology of Music*, 2003, Cambridge University Press, 141

272 BLEY, Carla, quoted in BENSON, Bruce Ellis, 2003, *The Improvisation of Musical Dialogue, a Phenomenology of Music*, 2003, Cambridge University Press, 135

of openness.

Of course, musical notation is of an inconceivable stupidity. Ever since classicism a whole mystique has been made of it, condensing all of music into exact notation. It should be taken only as a code, a mechanism, allowing to communicate ideas that are way below the reality aimed for.²⁷³ (Luc Ferrari)

²⁷³ FERRARI, Luc, quoted in LEVAILLANT, Dennis, 1981, *L'improvisation musicale, essai sur la puissance du jeu*, Jean-Claude Lattès, 124 (transl. Guy De Bièvre)

Recordings of my works on CD 1 (as mp3).

1. *And Above All* (2007) October 21 2007 (28'12")
Guy De Bièvre, lap steel – Velvet Lounge, Washington D.C.
2. *And Above All* (2007) October 28 2007 (28'43")
Guy De Bièvre, lap steel – Safe T Gallery, Brooklyn, New York
3. *Blue Light/Red Light* (2007) October 24 2007 (34'43")
Peter Zummo, trombone; Guy De Bièvre, lap steel – Diapason, Brooklyn, New York
4. *Blue Light/Red Light* (2007) February 12 2008 (29'45")
Anne La Berge, flute; Guy De Bièvre, lap steel – Karnatic Lab, Amsterdam
5. *Blue Light/Red Light* (2007) August 3 2008 (21'01")
Trio Scordatura (voice, viola, keyboard); Anne La Berge, flute – Uilenburger Synagoge, Amsterdam
6. *Blue Light/Red Light* (2007) May 12 2009 (4'21")
Trio Scordatura (voice, viola, keyboard) – Sonorities Festival, Belfast
7. *3 Pack* (2008) January 25 2008 (13'19")
Ensemble Intégrales (violin, saxophone, cello) – Opera Stabile, Hamburg
8. *Stare Into the Light* (2008) November 7 2008 (5'36")
Heleen Van Haegenborgh, piano – University of Surrey, Guildford
9. *The Relative Probability of Forming a Knot II* (2009) November 10 2009 (32'49")
Anne La Berge, flute; Xavier Verhelst, electric bass; Guy De Bièvre, lap steel - Karnatic Lab, Amsterdam
10. *The Relative Probability of Forming a Knot II* (2009) December 18 2009 (52'43")
Guy Klucevsek, accordion; Peter Zummo, trombone; JD Parran, flute and reeds; Guy De Bièvre, lap steel – Experimental Intermedia Foundation, New York
11. *Poker Test* (2011) April 10 2011 (9'36")
Zwerm (guitar quartet) – De Singel, Antwerp
12. *Poker Test* (2011) May 3 2011 (8'14")
Zwerm (guitar quartet) – Brunel University, London
13. *Poker Test* (2011) September 2 2011 (7'08")
Zwerm (guitar quartet) – New Music Ostrava

These recordings can also be downloaded here:

[http://www.archive.org/search.php?query=Guy De Bievre](http://www.archive.org/search.php?query=Guy+De+Bievre)

REFERENCES

Primary Sources

Interviews conducted by the author

Peter Zummo, October 2007, December 2009

Adam Rudolph, November 2010, March 2011

Anne La Berge, August 2011

Private Correspondence with the author

Peter Zummo, 1998

Alfrun Schmid, 2011

Bob Gilmore, 2011

Nora Mulder, 2011

Archival Collections

Earle Brown Music Foundation, Rye, NY

Secondary sources

ADORNO, T., 2006, *Philosophy of New Music*, Minneapolis, MN: University of Minnesota Press

ANKU, W., 2007, 'Inside a Master Drummer's Mind: A Quantitative Theory of Structures in African Music', *Transcultural Music Review*, #11

(<http://www.sibetrans.com/trans/trans11/indice11.htm>) (accessed on May 15 2010)

AROM, S., 1989, 'Time Structure in the Music of Central Africa: Periodicity, Meter, Rhythm and Polyrythmics', *Leonardo*, Vol. 22 No.1, Art and the New Biology: Biological Forms and Patterns, Boston, MA: M.I.T. Press

BAILEY, D., 1993, *Improvisation, its Nature and Practice in Music*, 1993,

- Cambridge, MA: Da Capo Press
- BARTA Z., Flynn R. & GIRALDAU L.A., 1997, 'Geometry for a selfish foraging group: a genetic algorithm approach', *Proceedings: Biological Sciences*, Vol. 264, No. 1385
- BATTCKOCK, G., 1981, *Breaking the Sound Barrier, a critical anthology of the new music*, New York: E.P. Dutton
- BEAL, AMY C., 2006, *New Music, New Allies – American Experimental Music in West Germany from the Zero Hour to Reunification*, Berkeley, CA: University of California Press
- BEHRMAN, D., 1965, 'What Indeterminate Notation Determines', *Perspectives of New Music*, Vol3, No.2 (Spring-Summer 1965)
- BENSON, B. E., 2003, *The Improvisation of Musical Dialogue, a Phenomenology of Music*, 2003, Cambridge: Cambridge University Press
- BOEHMER, K., 1997, 'Chance as Ideology', *October*, Vol.82 (Autumn, 1997), Boston, MA: MIT Press
- BORGO, D., 2002, 'Negotiating Freedom: Values and Practices in Contemporary Improvised Music', *Black Music Research Journal*, Vol. 22, No. 2 (Autumn, 2002)
- BOSSEUR, D. & J-Y., 1979, *Révolutions Musicales, la musique contemporaine depuis 1945*, Paris: Editions Le Sycomore
- BOULEZ, P., 1966, *Relevés d'apprenti*, Paris: Editions du Seuil
- , 1975, *Par volonté et par hasard, entretiens avec Célestin Deliège*, Paris: Editions du Seuil
- , 1986, *Orientations*, London: Faber and Faber Ltd
- BOULEZ, P. & CAGE, J., 1993, *The Boulez-Cage Correspondence, (1949-1954)*, Cambridge: Cambridge University Press
- BROWN, C., 2007, *Chance and Circumstance, Twenty Years with Cage and Cunningham*, New York, NY: Alfred A. Knopf
- BROWN, E., 1961, *Folio and 4 Systems (1952/54)*, New York, NY: Associated Music Publishers
- , 1972, 'Notes on Some Works: 1952-1971', *Contemporary Music Newsletter*, Volume VI, Number 1
- , 1981, 'Serial Music Today', in BATTCKOCK, G., *Breaking the Sound Barrier, a critical anthology of the new music*, 1981, New York, NY: E.P. Dutton

- , 2002, interviewed by Cornelius Duffalo and Gregg Bendian on May 5 2002, <http://musicmavericks.publicradio.org/programs/program7.html> (accessed on July 1 2010)
- , 2008, 'On December 1952', *Journal of American Music*, Volume 26, Number 1
- CAGE, J., 1973, *Silence*, Middletown, CT: Wesleyan University Press
- CHAMBERS, J., 1985, *Milestones, the Music and Times of Miles Davis*, Toronto: University of Toronto Press
- COPE, D., 1989, *New Directions in Music*, (1971), Dubuque, IA: WM. C. Brown Publishers
- COTT, J., 1974, *Stockhausen: Conversations with the Composer*, London: Pan Books Ltd
- COWELL, H., 2002, *Essential Cowell, Selected Writings on Music by Henry Cowell 1921-1964*, Kingston, NY: McPherson & Company
- CROUCH, S., 1990, 'Play the Right Thing', *The New Republic*, February 12 1990
- DAVIS, M. & TROUPE, Q., 1989, *Miles, The Autobiography*, New York: Simon & Schuster
- DECROUPET, P., 1994, *Développements et ramifications de la pensée sérielle. Recherches et oeuvres musicales de P. Boulez, H. Pousseur et K. Stockhausen de 1951 à 1958*, unpublished thesis, Université de Tours, quoted in DELIEGE, C., 2003, *Cinquante ans de modernité musicale: de Darmstadt à l'IRCAM*, Sprimont, Belgium: Mardaga
- DELIO, T., 1984, *Circumscribing the Open Universe*, Lanham, MD: University Press of America
- ECO, U., 1965, *L'oeuvre ouverte*, Paris: Editions du Seuil
- ELLIS, D., 1961, liner notes, *New Ideas*, LP, Prestige NJ8257
- FELDMAN, M., 1963, liner notes for *Morton Feldman-Earle Brown*, TIME #58007, Time Records, Inc.
- FISHLIN, D. & HEBLE, A., 2004, *The Other Side of Nowhere, jazz, improvisation, and communities in dialogue*, Middletown, CT: Wesleyan University Press
- FUNKHOUSER, Chris, 1994, *being matter ignited, an interview with Cecil Taylor*, <http://epc.buffalo.edu/authors/funkhouser/ceciltaylor.html> (accessed on September 10, 2011)

- GOODWIN, B.C., 1985, 'Developing Organisms as Self-organizing Fields', in *Mathematical Essays on Growth and the Emergence of Form*, ed. Peter I. Antonelli, Edmonton, Alberta: The University of Alberta Press
- GRAINGER, P., 1915, 'The Impress of Personality in Unwritten Music', *The Musical Quarterly* 1915 1/3, 432
- HEISENBERG W., 1958, *Physics and Philosophy*, London: Penguin Books
- KENDALL, M.G. & BABINGTON SMITH, B., 1938, 'Randomness and Random Sampling Numbers', *Journal of the Royal Statistical Society*, Vol. 101, No 1
- , 1971, *Tracts for Computers XXIV, Tables of Random Sampling Numbers*, Cambridge: Cambridge University Press
- KLOSTY, J., 1986, *Merce Cunningham*, New York, NY: Limelight
- KOSTELANETZ, R., 1988, *Conversing with Cage*, London: Omnibus Press
- LEVAILLANT, Dennis, 1981, *L'improvisation musicale, essai sur la puissance du jeu*, Paris: Jean-Claude Lattès
- LEWIS, G., 2004, 'Improvised Music after 1950, Afrological and Eurological Perspectives', in FISHLIN, D. & HEBLE, A., *The Other Side of Nowhere, jazz, improvisation, and communities in dialogue*, Middletown, CT: Wesleyan University Press
- LOCK, G., 1988, *Forces in Motion, The Music and Thoughts of Anthony Braxton*, Cambridge, MA: Da Capo Press
- MARTIN, H., 1997, 'The Nature of Recomposition: Miles Davis and "Stella by Starlight"', *Annual Review of Jazz Studies* 9 (1997-1998)
- MERCER M., 2007, *Footprints: The Life and Work of Wayne Shorter*, New York: Tarcher/Penguin
- METZELAAR, H., 2004, 'Women and 'Kraakgeluiden': the participation of women improvisers in the Dutch electronic music scene', *Organised Sound* 9(2), Cambridge: Cambridge University Press
- NETTL, Bruno, 1974, 'Thoughts on Improvisation: a Comparative Approach', *The Musical Quarterly*, Vol. 60, No. 1 (Jan., 1974)
- NETTL, B., RUSSELL, M., 1998, *In the Course of Performance, Studies in the World of Musical Improvisation*, Chicago: The University of Chicago Press
- OSKAMP, Jacqueline, 2011, *Onder stroom, geschiedenis van de elektronische muziek in Nederland*, Amsterdam: Ambo, 216
- PERLA, Gene, 1974, 'Dave Liebman talks with Gene Perla', *Coda*, January 1974,

- PEYSER, J., 1976, *Boulez*, New York: Schirmer Books
- POUSSEUR, H., 2004, *Ecrits Théoriques 1954-1967, choisis et présentés par Pascal Decroupet*, Sprimont, Belgium: Mardaga
- RATLIFF, B., 2009, 'Bob Brookmeyer: Raging, and Writing, Against the Jazz Machine', *New York Times*, May 12 2009
- ROSEN, C., 1971, *The Classical Style*, London: Faber and Faber Ltd.
- RUDOLPH, A., *Pure Rhythm*, 2005, Rottenburg, Germany: Advance Music
- RZEWSKI, F., 1999, 'Little Bangs: A Nihilist Theory of Improvisation', *Current Musicology*: Fall 1999; 67/68
- SABBE, H., 1977, *Het muzikale serialisme als techniek en als denkmethode*, unpublished thesis, Rijksuniversiteit Gent, Belgium
- SANI, F., 'Feldman's "Durations I": a discussion',
<http://www.cnvill.net/mfsani1.htm> (accessed on January 12 2009)
- SCHERER, J., 1957, *Le "Livre" de Mallarmé*, Paris: Gallimard
- SCHOENBERG, A., 1967, *Fundamentals of Music Composition*, London: Faber and Faber Ltd
- , 1984, *Style and Idea*, Berkeley, CA: University of California Press
- SCHONBERG, H.C., 1964, 'Bernstein et al Conduct 5th Avant-Garde Bill', *The New York Times*, February 7 1964
- SEABROOK, J., 2009, 'The Abstractionist, Zaha Hadid's Unfettered Invention', *The New Yorker*, December 21 & 28, 2009
- SMITH, C., 1998, 'A Sense of the Possible: Miles Davis and the Semiotics of Improvisation', in NETTL, B., RUSSELL, M., 1998, *In the Course of Performance, Studies in the World of Musical Improvisation*, Chicago: The University of Chicago Press
- SMITH, L., 1975, liner notes to Marion Brown, *Duets*, Arista Freedom 1904
- TENNEY, J., 1986, *Meta / Hodos and META Meta / Hodos*, Oakland, CA: Frog Peak Music
- TINGEN, P., 2001, *Miles Beyond*, New York: Billboard Books
- VALERY, P., 1965, 'Monsieur Teste' [1896], *Oeuvres (vol.2)*, Paris: La Pléiade, Gallimard
- , 1965, 'Le coup de dés, lettre au directeur des Marges' [1920], *Oeuvres*

- (vol.1), Paris: La Pléiade, Gallimard
- VILLARS, C., 2006, *Morton Feldman Says, Selected Interviews and Lectures 1964-1997*, London: Hyphen Press
- WHITTALL, A., "Form." In *Grove Music Online. Oxford Music Online*,
<http://www.oxfordmusiconline.com/subscriber/article/grove/music/09981>
 (accessed on April 12 2008)
- WOLFF, C., 1962, liner notes for *John Cage-Christian Wolff*, TIME #58009, Time Records, Inc.
- , 1998, *Cues, Writings and Conversations*, Cologne: Edition MusikTexte
- WOLPE, S., 1984, 'On New (and not-so-new) Music in America' (1956), *Journal of Music Theory*, Vol. 28, No.1 (Spring 1984)
- WOOD MASSI, R., 2006, 'Captain Cook's First Voyage, An Interview with Morton Feldman', (1987), in VILLARS, C., *Morton Feldman Says, Selected Interviews and Lectures 1964-1997*, London: Hyphen Press
- YAFFE, J., 2007, 'An Interview with Composer Earle Brown', *Contemporary Music Review*, Vol. 26, Nos 3-4, June/August 2007
- ZUMMO, P., 1995, *Experimenting with Household Chemicals*, CD XI 116, Experimental Intermedia Foundation
- , 2006, *Zummo with an X*, CD 80656-2, New World Records

Appendix: portfolio of scores

- *And Above All*
- *Blue Light/Red Light*
- *3 Pack*
- *Stare Into the Light*
- *The Relative Probability of Forming a Knot I*
- *The Relative Probability of Forming a Knot II*
- *Poker Test*

And Above All - Guy De Bièvre for solo instrument

When you turn the corner
And you run into *yourself*
Then you know that you have turned
All the corners the are left.

Langston Hughes (*Final Curve*)

Instructions:

The score is to be read from the upper left to the lower right corner. Moving from one "cell" to the next can only happen vertically or horizontally. It is permitted to go back to the previous cell. Not all the cells have to be played, the only thing that matters is reaching the lower right corner in the end.

The performer should regard the score as a field through which she or he roams on the way to the exit. Extra attention can be paid to certain cells or very little or none at all.

The cells represent very basic material and what to do with that material is left to the discretion and responsibility the performer. E.g. if a cell contains a single pitch, that pitch can be played as such, staccato or held for a long time, or repeated; but it can also be seen as a fundamental to a certain chord and that chord can be played (arpeggiated, or made into a phrase of some kind, or...). But the performer can also take the responsibility of going beyond the given pitch as long as any kind of musical sense can be made for that decision. When more than one note is given in a cell the notes can be read as a phrase (in any order), as a number of separate single pitches (and the performer can decide to play all or only some of them) or again as a series of fundamentals to certain chords.

The performer is allowed and even encouraged to take rests between the cells to take time to decide upon what to do next, but cells can also be played without any break between them. Cells including a rest suggest a possible rhythmic phrasing.

The general idea of the piece is one of renewed reflection. Each performance should be different. Therefore the piece cannot be rehearsed, it can only be performed; meaning that try-outs are not to be repeated in concert or vice versa. Try-outs are meant to get a feel of the materials and to explore possibilities.

The general tempo of the piece should be slow (although this does not exclude temporary fast actions). Accidentals only apply within the cell and on the line on which they appear. All parts are notated in concert pitch (no transpositions).

The (optional) electronics are meant to add to the unpredictability. A microcontroller (or any other device capable of achieving a similar result) randomly changes patches and settings of an effects processor.

And Above All - Guy De Bièvre
for solo instrument

The musical score is written for a solo instrument in G major (one sharp). It consists of 10 staves of music. The notation includes treble clefs, key signatures with one sharp (F#), and various rhythmic values such as quarter notes, eighth notes, and half notes. The music features several melodic lines and harmonic accompaniment, with some staves containing rests. The overall style is contemporary and expressive.

Blue Light / Red Light - Guy De Bièvre for two or more instruments

Instructions:

The score is to be read from the upper left to the lower right corner. Moving from one "cell" to the next can only happen vertically or horizontally. It is permitted to go back to the previous cell. Not all the cells have to be played, the only thing that matters is reaching the lower right corner in the end.

The performers all play the same score (it is only one page). They should regard the score as a field through which they roam, each to their own taste, on the way to the exit. Extra attention can be paid to certain cells or very little or none at all. The performers can ignore each other or react to one another.

The cells represent very basic material and what to do with that material is left to the discretion and responsibility the performers. E.g. if a cell contains a single pitch, that pitch can be played as such, staccato or held for a long time, or repeated; but it can also be seen as a fundamental to a certain chord and that chord can be played (arpeggiated, or made into a phrase of some kind, or...). But the performers can also take the responsibility of going beyond the given pitch as long as any kind of musical sense can be made for that decision. When more than one note is given in a cell the notes can be read as a phrase (in any order), as a number of separate single pitches (and the performers can decide to play all or only some of them) or again as a series of fundamentals to certain chords.

The performers are allowed and even encouraged to take rests between the cells to take time to decide upon what to do next, but cells can also be played without any break between them.

The general idea of the piece is one of renewed reflection. Each performance should be different. Therefore the piece cannot be rehearsed, it can only be performed; meaning that try-outs are not to be repeated in concert or vice versa. Try-outs are meant to get a feel of the materials and to explore possibilities. Performers should not make any preliminary agreements with each other, except maybe about the possible length of the performance. A length which should preferably be estimated rather than timed.

The general tempo of the piece should be slow (although this does not exclude temporary fast actions). Accidentals only apply within the cell and on the line on which they appear. All parts are notated in concert pitch (no transpositions).

The (optional) electronics are meant to add to the unpredictability. A microcontroller (or any other device capable of achieving a similar result) randomly changes patches and settings of one effects processor per performer.

Blue Light / Red Light - Guy De Bièvre
for two or more instruments



A grid of musical staves containing notes for two or more instruments. The grid consists of 5 rows and 5 columns of staves. Each staff contains a few notes, mostly in the lower register. The notes are arranged in a way that suggests a simple harmonic exercise or a short piece for multiple instruments. The notes are black dots on the lines of the staves, with some stems and beams. The first row starts with a treble clef. The notes are arranged in a way that suggests a simple harmonic exercise or a short piece for multiple instruments.

3 Pack (2007)
for Ensemble Intégrales

for violin, saxophone, double bass and (optional) active electronics

Guy De Bièvre

Instructions:

The score is to be read from the upper left to the lower right corner. Moving from one “cell” to the next can only happen vertically or horizontally. It is permitted to go back to the previous cell. Not all the cells have to be played, the only thing that matters is reaching the lower right corner in the end.

The performers should regard the score as a common field through which they move like a herd (or in this case, like three stray dogs). They can pay extra attention to certain cells or let themselves be attracted to other cells according to what other players are doing, but they can just as well ignore what the other players are doing.

The cells represent very basic material and what to do with that material is left to the discretion and responsibility of each player. E.g. if a cell contains a single pitch, that pitch can be played as such, staccato or held for a long time, or repeated; but it can also be seen as a fundamental to a certain chord and that chord can be played (arpeggiated, or made into a phrase of some kind, or...). But the performers can also take the responsibility of going beyond the given pitch as long as for themselves they can make harmonic sense of their decision. When more than one note is given in a cell the notes can be read as a phrase, as a number of separate single pitches (and the performer can decide to play all or only some of them) or again as a series of fundamentals to certain chords.

When a chord is given (which happens a lot in the saxophone part), a reverse interpretation can be given: the chord can be broken up into all or some of its constituents (not necessarily its fundamental), or a relative chord can be invoked. The string instruments can, if possible and desired, play combinations in chords or single pitch collections as double stops.

Rhythmic indications are relative, and in the case of the patterns indicated above certain cells, they are mere suggestions. The order of the given notes in one cell can be disregarded and re-arranged. The performers are allowed and even encouraged to take rests between the cells to take time to decide upon what to do next, but they may also play through a number of cells without breaks in between. Cells with a rest mean that the cells before and after the rest cannot be linked without a clear break in between.

The general idea of the piece is one of renewed reflection. Each performance should be different. Therefore the piece cannot be rehearsed, it can only be performed; meaning that try-outs are not to be repeated in concert or vice versa. Try-outs are meant to get a feel of the materials and to explore possibilities. The performers should not make preliminary agreements, except as to the approximate length of the performance (and for this try-outs will be useful, as after a while everybody will know how long it approximately takes to reach the end). All interpretative decisions should be made during the performance.

The general tempo of the piece should be slow (although this does not exclude temporary fast actions).

Accidentals only apply within the cell and on the line on which they appear.

All parts are notated in concert pitch (no transpositions).

The saxophone can either be alto or tenor (or both).

The (optional) electronics (provided by the composer) are meant to add to the unpredictability. The violin and the saxophone will each run through an individual “moderate” ring modulator, the pitch of which is randomly decided upon by a microcontroller. This controller also will decide upon reverberation lengths for all three instruments (reverb is common).

- the general setup is:

VIOLIN > RING MODULATION A > REVERB > PA

SAXOPHONE > RING MODULATION B > REVERB > PA

DOUBLE BASS > REVERB > PA

The image shows a musical score for violin. It consists of a single melodic line on a treble clef staff and a multi-measure rest on a bass clef staff. The key signature has one flat (B-flat), and the time signature is 4/4. The melodic line begins with a treble clef and a key signature change to one flat. It features a series of eighth and sixteenth notes, including a triplet of eighth notes. The multi-measure rest is for 12 measures. The score concludes with a repeat sign and a first ending bracket.

violin

3 Pack – Guy De Bièvre

The image displays a musical score for bass guitar, organized into five systems. Each system consists of a bass clef staff and a guitar staff. The bass staff contains the melodic line with notes and rests, while the guitar staff shows chord diagrams. The key signature has one flat (B-flat), and the time signature is 4/4. The notation includes eighth and quarter notes, rests, and various chord diagrams for guitar.

stare into the light

for piano (and optional electronic accompaniment)

Guy De Bièvre

for Heleen Van Haegenborg [and Sofia]

instructions:

Place sheets 1, 2, 3, 4, 5 next to one another. Enter the "field" in the upper left corner and move from cell to cell vertically or horizontally. The entering tempo should be fairly slow (get acquainted with the terrain) and should increase gradually when nearing page 3. The cells can be freely interpreted, especially the left hand which provides harmonic information to be "explored" in a way not necessarily related to the right hand.

When entering a coloured patch consider yourself in a spot with very low visibility and move through it using the harmonic information (left hand) you were using when entering it. You are allowed to go back on your steps or to remain in a specific cell as long as you please.

Eventually you will reach page 3, which could be seen as a pond in the middle of the field. You have to wade through it to the opposite side. You should do so by playing at least one entire "line", but you can play more; if for instance you enter the pond in the upper left corner (assuming you ended up there on page 2) you could very well choose to play the entire section.

The tempo of the middle section can be anything between MM45 and 120.

You can only leave the "pond" by entering page 4 and cannot go back into it. You proceed through pages 4 and 5 in the same way as pages 1 and 2, slowing down the further you are from the "pond".

The optional electronic accompaniment is presented as a CD containing a large number of sounds and silences, to be played in shuffle mode (as unpredictable events in the field). The sound level should match that of the piano. Ideally the loudspeakers should be positioned under the piano (or at least behind the pianist, not in front between piano and audience).

HEROIC SCULPTURE

We join the animals

not when we fuck

or shit

not when tear falls

but when

staring into the light

we think

(Frank O'Hara)

A musical score in 4/4 time, featuring a treble and bass staff. The score is divided into measures, with several measures obscured by colored rectangular redaction boxes. The boxes are colored as follows: a large red box covers the right side of the first two rows; a yellow box covers the middle of the third row; a green box covers the middle of the fourth row; a magenta box covers the left side of the fifth row; a blue box covers the right side of the fifth row; a cyan box covers the right side of the sixth row; a pink box covers the left side of the seventh row; a light green box covers the right side of the eighth row; an orange box covers the middle of the ninth row; a purple box covers the middle of the tenth row; and a dark orange box covers the right side of the tenth row.

The first system of musical notation consists of two staves. The upper staff is in treble clef and the lower staff is in bass clef. The key signature has two flats (B-flat and E-flat), and the time signature is common time (C). The music features a complex rhythmic pattern with many sixteenth and thirty-second notes, including some triplets. The melody in the treble clef is more melodic, with some longer note values and rests.

The second system of musical notation continues the piece. It maintains the same two-staff structure. The bass clef part shows a dense texture with many sixteenth notes and some chords. The treble clef part has a more flowing melody with some slurs and ties.

The third system of musical notation shows further development of the piece. The bass clef part features some chords and rhythmic patterns. The treble clef part has a melodic line with some grace notes and slurs.

The fourth and final system of musical notation on this page. It concludes the piece with a final cadence in the bass clef and a melodic phrase in the treble clef. The notation includes various ornaments and complex rhythmic figures.

A musical score in 4/4 time, featuring a treble and bass clef. The score is divided into several systems. Various sections of the music are obscured by large, solid-colored rectangular blocks. The colors used are blue, magenta, yellow, green, orange, cyan, pink, purple, and red. Some systems include a '3' above the staff, indicating a triplet. The notation includes eighth and sixteenth notes, rests, and chordal structures in the bass line.

A musical score consisting of 12 systems of two staves each. The score includes various musical notations such as treble and bass clefs, time signatures, notes, rests, and triplets. Several sections of the score are obscured by colored rectangular redaction boxes. The redactions are as follows:

- Red box: Top-left system, covering the first staff.
- Yellow box: Top-right system, covering the second staff.
- Green box: Second system, covering the second staff.
- Cyan box: Third system, covering the second staff.
- Blue box: Fifth system, covering the second staff.
- Magenta box: Sixth system, covering the second staff.
- Orange box: Seventh system, covering the second staff.
- Light blue box: Eighth system, covering the second staff.

Triplet markings (the number '3') are present above the first staff of the first, third, fourth, sixth, seventh, and eighth systems.

The Relative Probability of Forming a Knot (2009) - Guy De Bièvre for Trio Scordatura

performance instructions:

Each instrument has 3 pages, labelled 1, 2 and 'common'. The pages 1 and 2 are unique to the specific instrument, while the 'common' page is common to all three.

The performers can freely choose the order in which they will perform the pages, preferably without prior agreement and differently from the last performance/rehearsal.

Each page should be started with the cell in the upper left corner and ended with the cell in the lower right corner. Between these two cells the performer can move to any other 'connected' one. These movements can happen in both directions (and cells can be performed more than once).

Within a cell any or all elements can be performed in any sequence.

There are three types of elements:

- 'rhythmic' notation indicates relative length of the pitches
- notation without rhythmic specification can be interpreted freely
- chords can be played as chords, if the instrument allows it, or can be interpreted in any other way (e.g. arpeggiated, fragmented, elaborated into any kind of melodic form).

The work is conceived with a high 'riff-coefficient' in mind, i.e. phrases can be looped. In cells containing the ||: :|| symbol, looping is compulsory (while just suggested in all other cells). The general tempo is slow, with pitches held for longer times (though this does not exclude faster gestures). Again, in cells containing a fermata symbol the holding of at least one pitch for a long time is compulsory (while just suggested in other cells).

Cells containing $-1/4$ or $+1/4$ are to be played a quarter tone lower or higher (the entire contents).

Specific parts:

- Voice: pages 1 and 2 provide double lyric lines and the singer can freely choose between them or combine them. The chords do not come with lyrics, when using them the singer can hum or use words of her own choice or 'recycle' some of the other text materials in the piece.
- Keyboard: keyboard materials on pages 1 and 2 are written on contiguous staves but they can be fragmented, any part of them can be looped. The left hand should be read independently from the right (the vertical relation doesn't have to be respected). The performer can feel free to for instance loop segments of one staff while moving forward on the other. He can jump back and forth between discretionary chosen segments. On the 'common' page the same rules apply as for the two other instruments.
- Performers should feel free to skip any cell (in so far as the connections between them allow it) or any element of a cell they feel like. They can at any time stop playing to make decisions concerning directions or interpretation.

The general tempo should be slow (but again, this does not exclude the possibility of faster gestures). Dynamics can be varied and are left to the discretion of the performers.

Accidentals apply only to the note they immediately precede (except for the keyboard part, which should respect the given key).

No prior performance agreements should be made (except maybe necessary ones regarding the general length of the work and how to agree on when to stop – though it is not a problem if one or more performer(s) is/are 'done' earlier than the others). They should move through the piece like a herd in a common field (each with a personal appreciation of it).

Each performance should be different from the last and rehearsals should focus on the possibilities of the piece rather than on a 'final' performance.

(April 2009)

Voice 1

the relative probability of forming a knot

tor-pid be - ne - diction
si - mi-lar round flat cap

swindle
ba - sin

su-pply
sen-ses

a practice of sacred rites
give up a - ban-don re - sign

sanc - ti - mo - ni - ous-ness
four wheel covered carriage

re - sult
mo-ney

e - motion
sham a-ttack

to
help

num-ber
complete

compli --ance, wi-llingness
for-mu - la for star-ting

non me-ta - llic
white do-mes - tic

in
of

as person
on mo-del

each in - di-vi-du - al part a-ffects
procure by effort or con-trivance

dish
tilt

awkward thing or business
ri - bbon - like part of brain

This block contains two musical examples. The first shows a treble clef with a B-flat key signature and a single note on the second line (D4). The second shows a bass clef with a B-flat key signature and a whole chord of B-flat, D-flat, and F (Bb2, Db3, F3). The third shows a bass clef with a B-flat key signature and a whole chord of B-flat, D-flat, and F (Bb2, Db3, F3). The fourth shows a bass clef with a B-flat key signature and a whole chord of B-flat, D-flat, and F (Bb2, Db3, F3). The fifth shows a bass clef with a B-flat key signature and a whole chord of B-flat, D-flat, and F (Bb2, Db3, F3). The second example shows a treble clef with a B-flat key signature and a melody: B-flat (quarter), D-flat (quarter), E-flat (quarter), F (quarter), G (quarter), A-flat (quarter), B-flat (quarter).

game played
hea - ven

dea-ler
ve-ssel

grip
way

This block contains two musical examples. The first shows a treble clef with a B-flat key signature and a melody: B-flat (quarter), D-flat (quarter), E-flat (quarter), F (quarter), G (quarter), A-flat (quarter), B-flat (quarter). The second shows a bass clef with a B-flat key signature and a whole chord of B-flat, D-flat, and F (Bb2, Db3, F3). The third shows a bass clef with a B-flat key signature and a whole chord of B-flat, D-flat, and F (Bb2, Db3, F3). The fourth shows a bass clef with a B-flat key signature and a whole chord of B-flat, D-flat, and F (Bb2, Db3, F3). The fifth shows a bass clef with a B-flat key signature and a whole chord of B-flat, D-flat, and F (Bb2, Db3, F3).

in - clu - sion
in - ter - nal

This block contains two musical examples. The first shows a treble clef with a B-flat key signature and a melody: B-flat (quarter), D-flat (quarter), E-flat (quarter), F (quarter), G (quarter), A-flat (quarter), B-flat (quarter). The second shows a bass clef with a B-flat key signature and a whole chord of B-flat, D-flat, and F (Bb2, Db3, F3).

pro - jec - tion
more than eight

This block contains two musical examples. The first shows a treble clef with a B-flat key signature and a melody: B-flat (quarter), D-flat (quarter), E-flat (quarter), F (quarter), G (quarter), A-flat (quarter), B-flat (quarter). The second shows a bass clef with a B-flat key signature and a whole chord of B-flat, D-flat, and F (Bb2, Db3, F3). The third shows a bass clef with a B-flat key signature and a whole chord of B-flat, D-flat, and F (Bb2, Db3, F3).

-1/4

recognized means
unea - si - ness

This block contains two musical examples. The first shows a treble clef with a B-flat key signature and a whole chord of B-flat, D-flat, and F (Bb2, Db3, F3). The second shows a bass clef with a B-flat key signature and a melody: B-flat (quarter), D-flat (quarter), E-flat (quarter), F (quarter), G (quarter), A-flat (quarter), B-flat (quarter).

so
from

for de - fi - nite time
joint of two pie - ces

This block contains two musical examples. The first shows a treble clef with a B-flat key signature and a melody: B-flat (quarter), D-flat (quarter), E-flat (quarter), F (quarter), G (quarter), A-flat (quarter), B-flat (quarter). The second shows a bass clef with a B-flat key signature and a whole chord of B-flat, D-flat, and F (Bb2, Db3, F3). The third shows a bass clef with a B-flat key signature and a melody: B-flat (quarter), D-flat (quarter), E-flat (quarter), F (quarter), G (quarter), A-flat (quarter), B-flat (quarter).

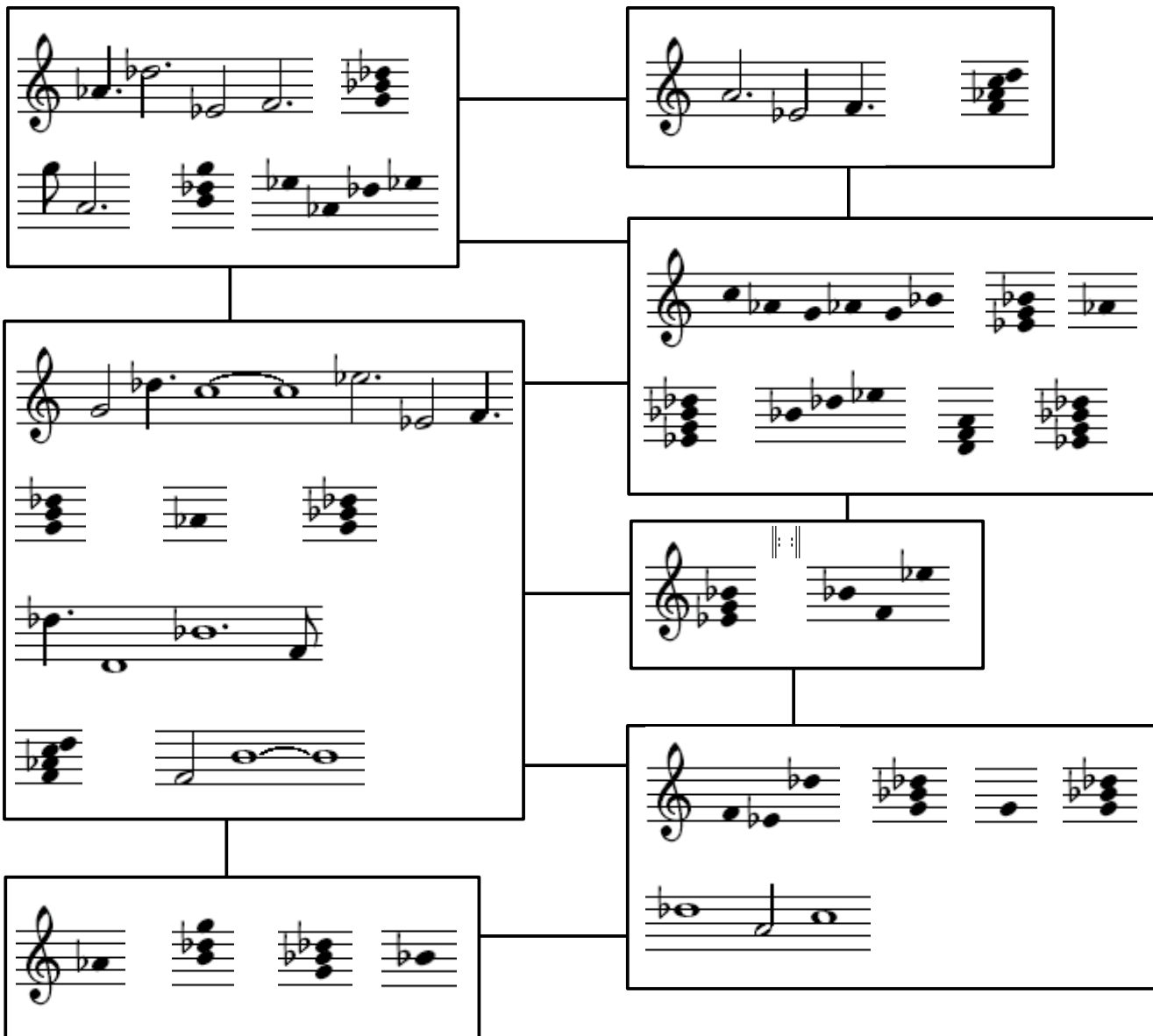
Voice (common)

the relative probability of forming a knot

- 1/4

Viola 1

the relative probability of forming a knot



Two staves of musical notation. The top staff is in treble clef with a key signature of one flat (B-flat). It contains a quarter note G4, a quarter note A4, and a quarter note B-flat4. The bottom staff is in bass clef and contains a half note G3, a half note A3, and a quarter note B-flat3.

Three staves of musical notation. The top staff is in treble clef with a key signature of two flats (B-flat, E-flat). It contains a quarter note G4, a quarter note A4, and a quarter note B-flat4. The middle staff is in bass clef and contains a half note G3, a half note A3, and a quarter note B-flat3. The bottom staff is in bass clef and contains a quarter note G3, a quarter note A3, and a quarter note B-flat3.

- 1/4

Two staves of musical notation. The top staff is in treble clef with a key signature of one flat (B-flat). It contains a quarter note G4, a quarter note A4, and a quarter note B-flat4. The bottom staff is in bass clef and contains a half note G3, a half note A3, and a quarter note B-flat3.

Two staves of musical notation. The top staff is in treble clef with a key signature of two flats (B-flat, E-flat). It contains a half note G4, a half note A4, and a quarter note B-flat4. The bottom staff is in bass clef and contains a half note G3, a half note A3, and a quarter note B-flat3.

Two staves of musical notation. The top staff is in treble clef with a key signature of two flats (B-flat, E-flat). It contains a half note G4, a half note A4, and a quarter note B-flat4. The bottom staff is in bass clef and contains a half note G3, a half note A3, and a quarter note B-flat3.

Two staves of musical notation. The top staff is in treble clef with a key signature of two flats (B-flat, E-flat). It contains a half note G4, a half note A4, and a quarter note B-flat4. The bottom staff is in bass clef and contains a half note G3, a half note A3, and a quarter note B-flat3.

Viola (common)

the relative probability of forming a knot

Five chords in treble clef, key of B-flat major, showing various voicings of the first five notes of the scale.

-1/4

Two staves of music in treble clef, key of B-flat major, showing a sequence of notes and chords with a -1/4 annotation.

A single staff of music in treble clef, key of B-flat major, showing a melodic line with a repeat sign and a final chord.

- 1/4

Two staves of music in treble clef, key of B-flat major, showing a sequence of notes and chords with a - 1/4 annotation.

Two staves of music in treble clef, key of B-flat major, showing a sequence of notes and chords.

The first system of the musical score consists of two staves. The treble clef staff begins with a chord of F4, A4, and C5, followed by a melodic line: F4 (quarter), A4 (quarter), B4 (quarter), C5 (quarter), B4 (quarter), A4 (quarter), G4 (quarter), F4 (quarter). The bass clef staff begins with a chord of F2, A2, and C3, followed by a melodic line: F2 (quarter), A2 (quarter), B2 (quarter), C3 (quarter), B2 (quarter), A2 (quarter), G2 (quarter), F2 (quarter).

The second system of the musical score consists of two staves. The treble clef staff begins with a chord of F4, A4, and C5, followed by a melodic line: F4 (quarter), A4 (quarter), B4 (quarter), C5 (quarter), B4 (quarter), A4 (quarter), G4 (quarter), F4 (quarter). The bass clef staff begins with a chord of F2, A2, and C3, followed by a melodic line: F2 (quarter), A2 (quarter), B2 (quarter), C3 (quarter), B2 (quarter), A2 (quarter), G2 (quarter), F2 (quarter).

The third system of the musical score consists of two staves. The treble clef staff begins with a chord of F4, A4, and C5, followed by a melodic line: F4 (quarter), A4 (quarter), B4 (quarter), C5 (quarter), B4 (quarter), A4 (quarter), G4 (quarter), F4 (quarter). The bass clef staff begins with a chord of F2, A2, and C3, followed by a melodic line: F2 (quarter), A2 (quarter), B2 (quarter), C3 (quarter), B2 (quarter), A2 (quarter), G2 (quarter), F2 (quarter).

The fourth system of the musical score consists of two staves. The treble clef staff begins with a chord of F4, A4, and C5, followed by a melodic line: F4 (quarter), A4 (quarter), B4 (quarter), C5 (quarter), B4 (quarter), A4 (quarter), G4 (quarter), F4 (quarter). The bass clef staff begins with a chord of F2, A2, and C3, followed by a melodic line: F2 (quarter), A2 (quarter), B2 (quarter), C3 (quarter), B2 (quarter), A2 (quarter), G2 (quarter), F2 (quarter).

The fifth system of the musical score consists of two staves. The treble clef staff begins with a chord of F4, A4, and C5, followed by a melodic line: F4 (quarter), A4 (quarter), B4 (quarter), C5 (quarter), B4 (quarter), A4 (quarter), G4 (quarter), F4 (quarter). The bass clef staff begins with a chord of F2, A2, and C3, followed by a melodic line: F2 (quarter), A2 (quarter), B2 (quarter), C3 (quarter), B2 (quarter), A2 (quarter), G2 (quarter), F2 (quarter).

The sixth system of the musical score consists of two staves. The treble clef staff begins with a chord of F4, A4, and C5, followed by a melodic line: F4 (quarter), A4 (quarter), B4 (quarter), C5 (quarter), B4 (quarter), A4 (quarter), G4 (quarter), F4 (quarter). The bass clef staff begins with a chord of F2, A2, and C3, followed by a melodic line: F2 (quarter), A2 (quarter), B2 (quarter), C3 (quarter), B2 (quarter), A2 (quarter), G2 (quarter), F2 (quarter).



First system of musical notation, consisting of a grand staff with treble and bass clefs. The key signature has three flats (B-flat, E-flat, A-flat). The melody in the treble clef starts with a quarter note G4, followed by a dotted quarter note A4, an eighth note B4, a quarter note C5, and a dotted quarter note B4. The bass line starts with a quarter note G3, followed by a dotted quarter note A3, an eighth note B3, a quarter note C4, and a dotted quarter note B3. The system concludes with several chords in both hands.



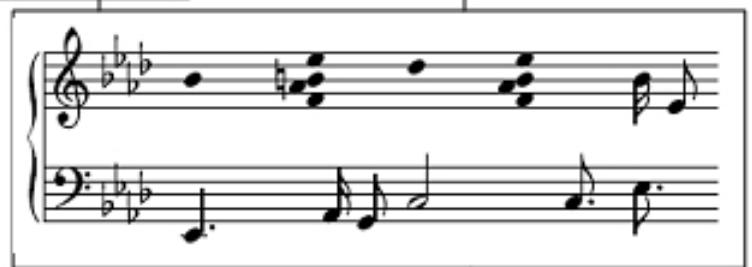
Second system of musical notation, continuing the piece. The treble clef melody continues with a dotted quarter note A4, an eighth note B4, a quarter note C5, and a dotted quarter note B4. The bass line continues with a dotted quarter note A3, an eighth note B3, a quarter note C4, and a dotted quarter note B3. The system ends with chords.



Third system of musical notation, continuing the piece. The treble clef melody continues with a dotted quarter note A4, an eighth note B4, a quarter note C5, and a dotted quarter note B4. The bass line continues with a dotted quarter note A3, an eighth note B3, a quarter note C4, and a dotted quarter note B3. The system ends with chords.



Fourth system of musical notation, continuing the piece. The treble clef melody continues with a dotted quarter note A4, an eighth note B4, a quarter note C5, and a dotted quarter note B4. The bass line continues with a dotted quarter note A3, an eighth note B3, a quarter note C4, and a dotted quarter note B3. The system ends with chords. A tempo marking of +1/4 is present above the first measure.



Fifth system of musical notation, continuing the piece. The treble clef melody continues with a dotted quarter note A4, an eighth note B4, a quarter note C5, and a dotted quarter note B4. The bass line continues with a dotted quarter note A3, an eighth note B3, a quarter note C4, and a dotted quarter note B3. The system ends with chords.



Sixth system of musical notation, continuing the piece. The treble clef melody continues with a dotted quarter note A4, an eighth note B4, a quarter note C5, and a dotted quarter note B4. The bass line continues with a dotted quarter note A3, an eighth note B3, a quarter note C4, and a dotted quarter note B3. The system ends with chords.

Keyboard (common)

the relative probability of forming a knot

A box containing five chords in G minor: G7, F7, E7, D7, and C7. Each chord is shown in a separate staff.

A box containing two staves. The top staff has a melodic line in G minor with notes G4, A4, B4, C5, B4, A4, G4. The bottom staff has a bass line with notes G3, F3, E3, D3, C3, B2, A2, G2.

A box containing a single staff with a melodic line in G minor. It starts with a repeat sign and contains notes G4, A4, B4, C5, B4, A4, G4, F4, E4, D4, C4, B3, A3, G3.

- 1/4

A box containing two staves. The top staff has a melodic line in G minor with notes G4, A4, B4, C5, B4, A4, G4. The bottom staff has a bass line with notes G3, F3, E3, D3, C3, B2, A2, G2.

A box containing two staves. The top staff has a melodic line in G minor with notes G4, A4, B4, C5, B4, A4, G4. The bottom staff has a bass line with notes G3, F3, E3, D3, C3, B2, A2, G2.

The Relative Probability of Forming a Knot II (2009) - Guy De Bièvre

instructions:

the pages:

In addition to a compulsory “common” page, each performer chooses 3 pages among A1, A2, B1, B2, D1, D2, without consulting or informing the other performers about that choice. Each performer is free to decide on the order in which to play the 4 chosen pages.

the cells:

The pages can be started in any of the cells and with any of the elements within that cell. At least one element of each cell should be played. Moving from cell to cell can only happen according to the connecting lines. It is permitted to go back and forth between 2 cells.

the elements:

- chords: can be played as chords, can be arpeggiated or can be played in any other way relevant to the chord (e.g. as a melody generator); in any octave.
- melodic sequences: can be played in any direction (L to R or R to L), entirely or in segments; rhythmic interpretation is free; they can be played in any octave.

Moving to a next page can happen at any time, also if all the cells have not been played. It is permitted to return to a previous page.

The general pace should be slow, preferably.

At times melodic or chordal sequences should be looped (groove locked, ||: :||).

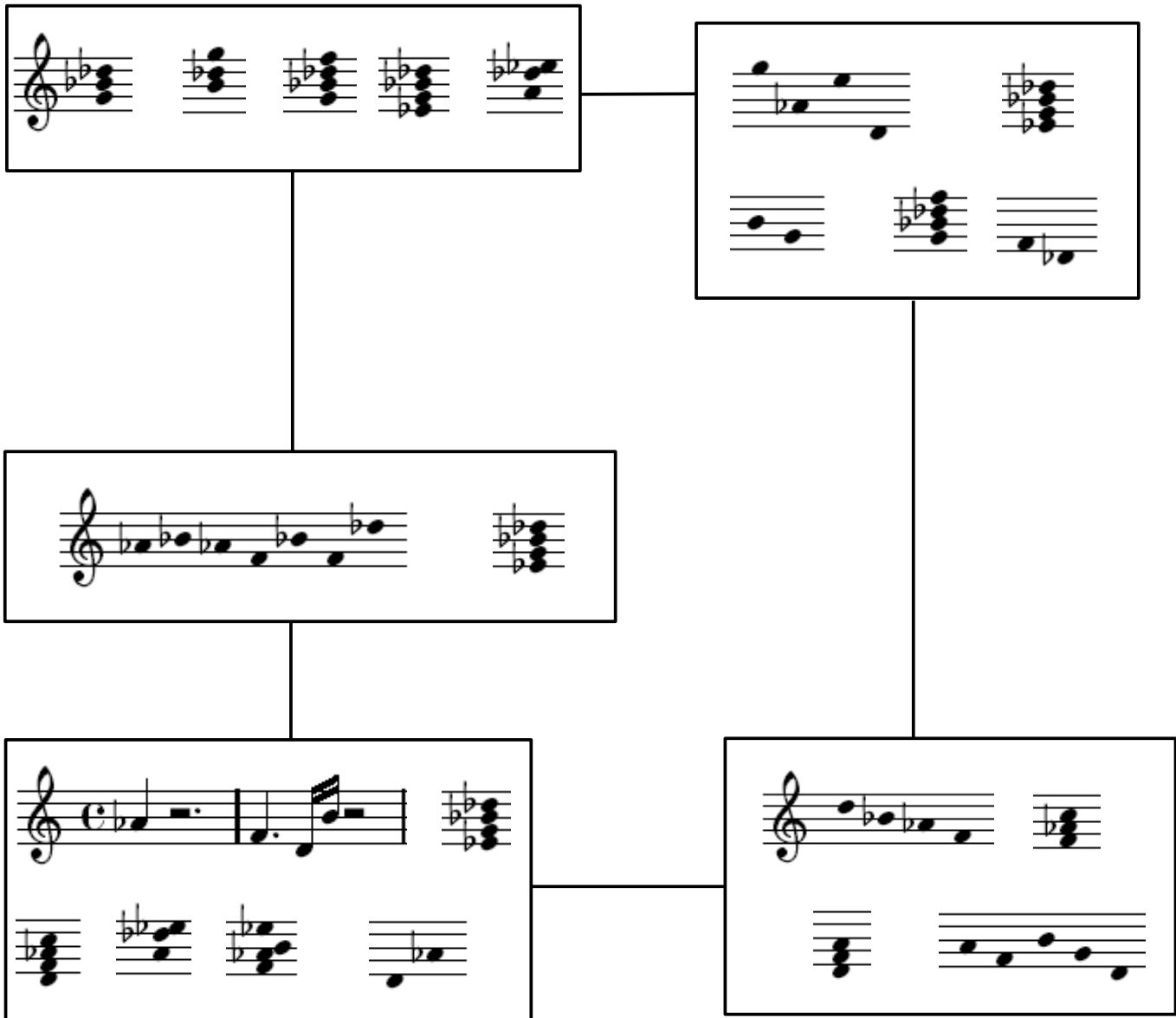
Pitches should every now and then be singled out and sustained for a longer time.

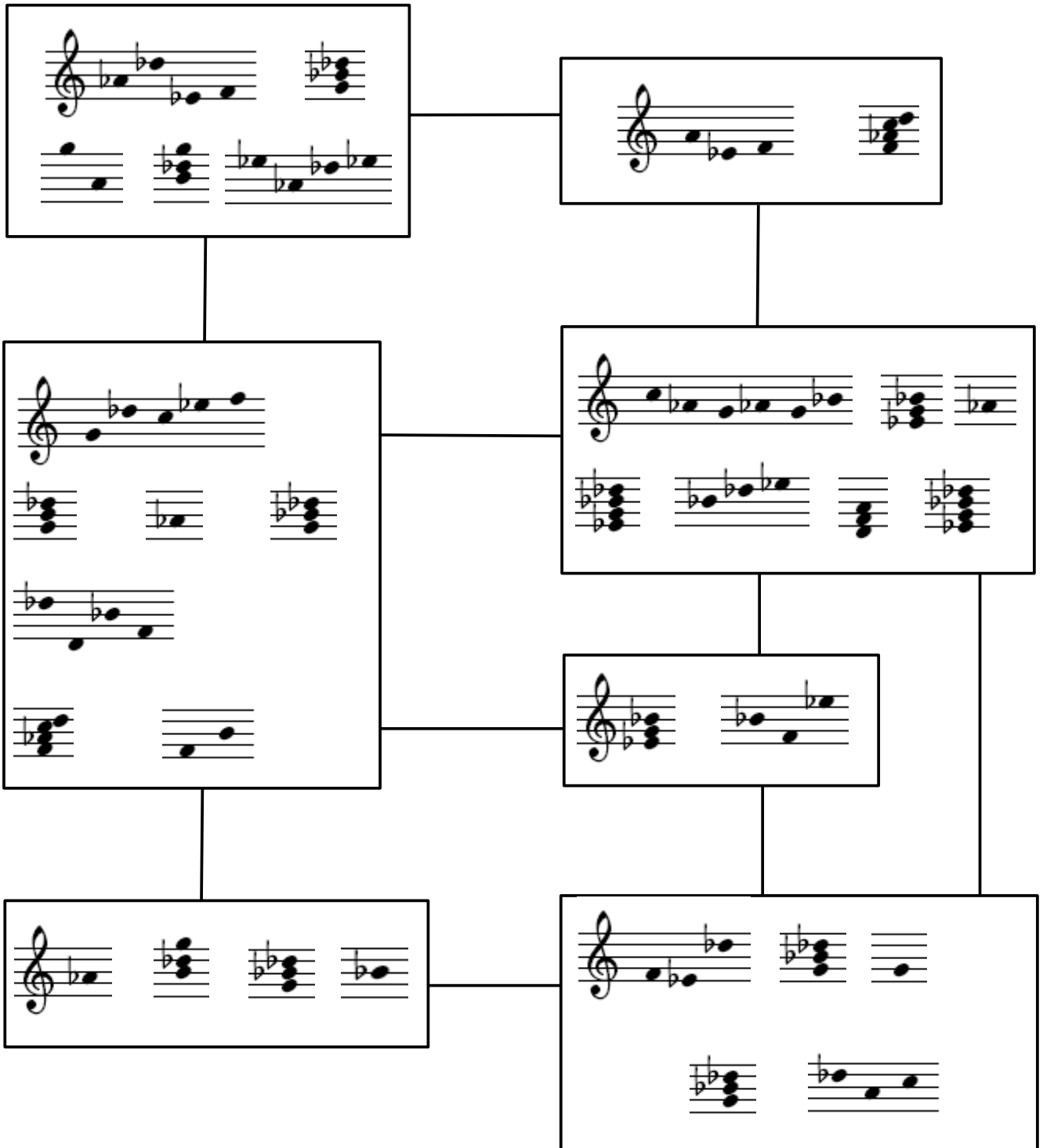
The piece should end with Ab and or Db. Droning those pitches would be a way to indicate other players that the performance could/should end. Of course it has to make sense according to where one is on a page, therefore it can take time before all players join in that drone.

Optional: the performance can be accompanied by a recording of environmental sound.

I (common)

the relative probability of forming a knot





A box containing musical notation. The top staff is a treble clef with a whole note G4 and a whole note chord of Bb4, D5, and F5. The bottom staff is a bass clef with a whole note chord of G2, Bb2, and D3, and a whole note chord of G2, Bb2, and D3.

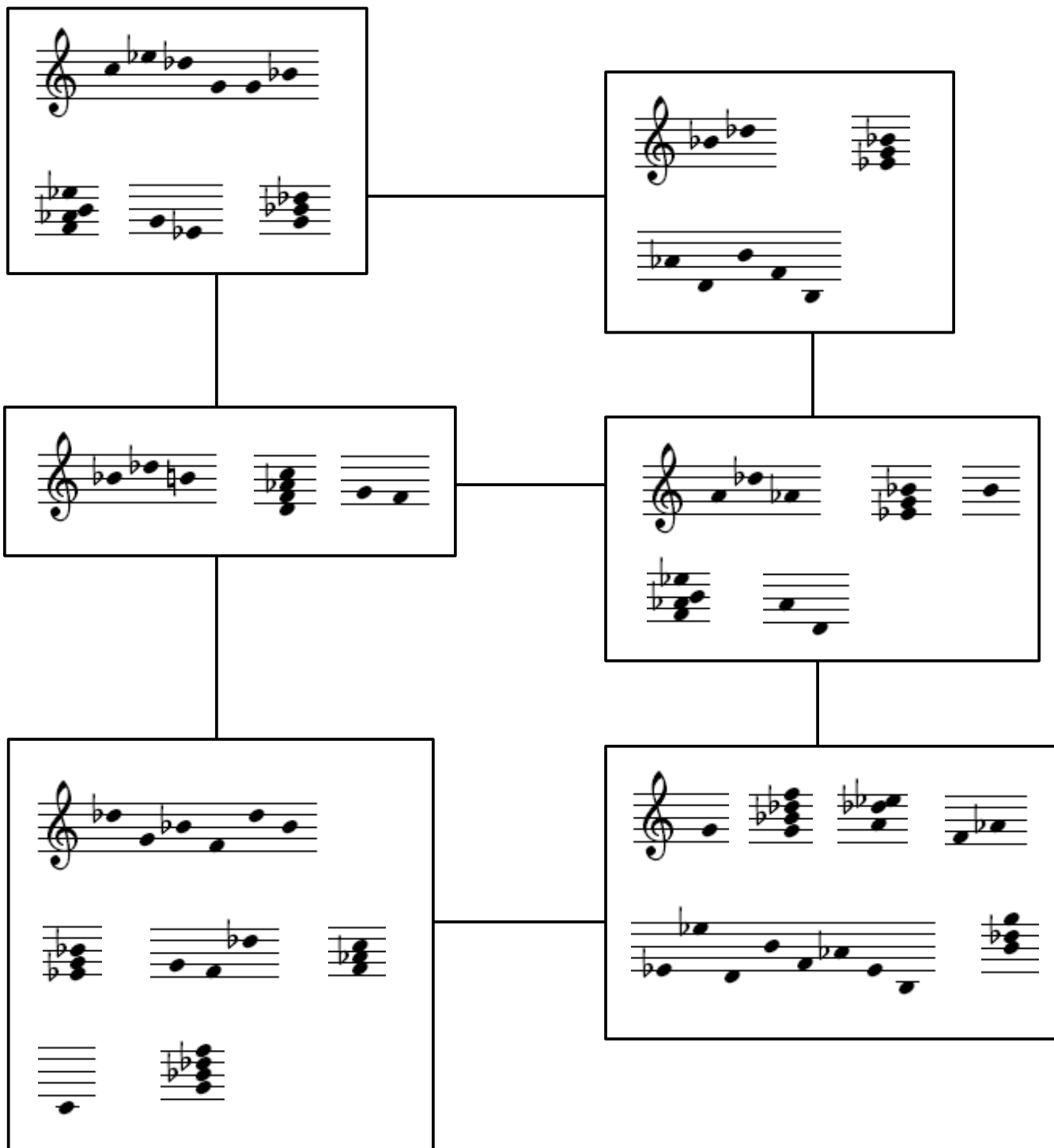
A box containing musical notation. The top staff is a treble clef with a whole note chord of Bb4, D5, and F5, a whole note chord of Bb4, D5, and F5, a whole note chord of Bb4, D5, and F5, and a whole note chord of Bb4, D5, and F5. The bottom staff is a bass clef with a whole note chord of G2, Bb2, and D3, a whole note chord of G2, Bb2, and D3, and a whole note chord of G2, Bb2, and D3.

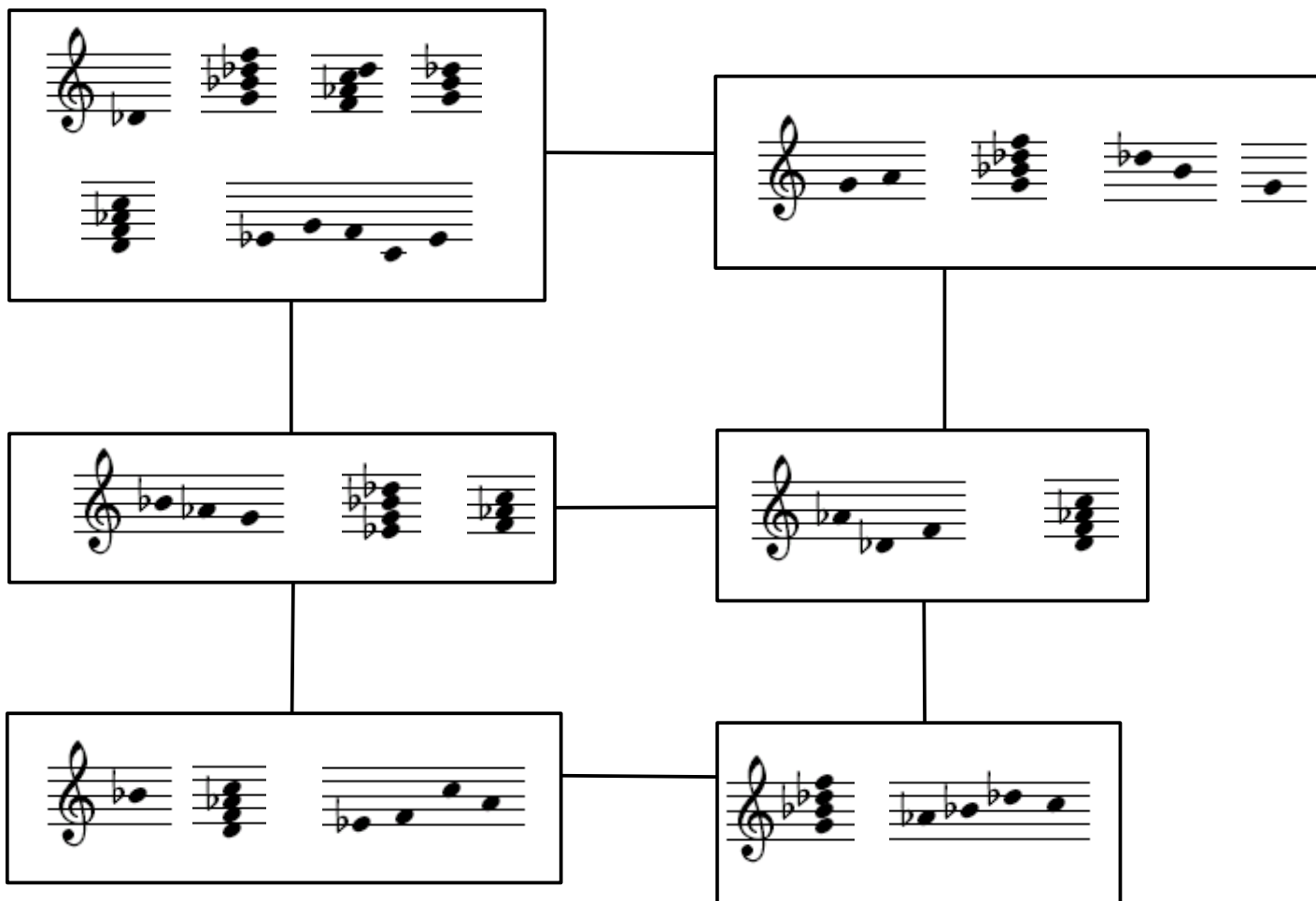
A box containing musical notation. The top staff is a treble clef with a whole note chord of Bb4, D5, and F5, a whole note chord of Bb4, D5, and F5, a whole note chord of Bb4, D5, and F5, and a whole note chord of Bb4, D5, and F5. The bottom staff is a bass clef with a whole note chord of G2, Bb2, and D3, a whole note chord of G2, Bb2, and D3, and a whole note chord of G2, Bb2, and D3.

A box containing musical notation. The top staff is a treble clef with a whole note chord of Bb4, D5, and F5, a whole note chord of Bb4, D5, and F5, a whole note chord of Bb4, D5, and F5, and a whole note chord of Bb4, D5, and F5. The bottom staff is a bass clef with a whole note chord of G2, Bb2, and D3, a whole note chord of G2, Bb2, and D3, and a whole note chord of G2, Bb2, and D3.

A box containing musical notation. The top staff is a treble clef with a whole note chord of Bb4, D5, and F5, a whole note chord of Bb4, D5, and F5, a whole note chord of Bb4, D5, and F5, and a whole note chord of Bb4, D5, and F5. The bottom staff is a bass clef with a whole note chord of G2, Bb2, and D3, a whole note chord of G2, Bb2, and D3, and a whole note chord of G2, Bb2, and D3.

A box containing musical notation. The top staff is a treble clef with a whole note chord of Bb4, D5, and F5, a whole note chord of Bb4, D5, and F5, a whole note chord of Bb4, D5, and F5, and a whole note chord of Bb4, D5, and F5. The bottom staff is a bass clef with a whole note chord of G2, Bb2, and D3, a whole note chord of G2, Bb2, and D3, and a whole note chord of G2, Bb2, and D3.





A box containing two staves of musical notation. The top staff has a treble clef and a key signature of two flats (B-flat and E-flat). It contains six measures: a whole note chord (B-flat, E-flat, A-flat), a half note chord (B-flat, E-flat), a half note chord (B-flat, E-flat), a half note chord (B-flat, E-flat), a half note chord (B-flat, E-flat), and a half note chord (B-flat, E-flat). The bottom staff has a bass clef and contains four measures: a whole note chord (B-flat, E-flat, A-flat), a half note chord (B-flat, E-flat), a half note chord (B-flat, E-flat), and a half note chord (B-flat, E-flat).

A box containing two staves of musical notation. The top staff has a treble clef and a key signature of two flats. It contains four measures: a half note chord (B-flat, E-flat), a half note chord (B-flat, E-flat), a half note chord (B-flat, E-flat), and a half note chord (B-flat, E-flat). The bottom staff has a bass clef and contains three measures: a half note chord (B-flat, E-flat), a half note chord (B-flat, E-flat), and a half note chord (B-flat, E-flat).

A box containing two staves of musical notation. The top staff has a treble clef and a key signature of two flats. It contains four measures: a half note chord (B-flat, E-flat), a half note chord (B-flat, E-flat), a half note chord (B-flat, E-flat), and a half note chord (B-flat, E-flat). The bottom staff has a bass clef and contains three measures: a half note chord (B-flat, E-flat), a half note chord (B-flat, E-flat), and a half note chord (B-flat, E-flat).

A box containing two staves of musical notation. The top staff has a treble clef and a key signature of two flats. It contains two measures: a half note chord (B-flat, E-flat) and a half note chord (B-flat, E-flat). The bottom staff has a bass clef and contains two measures: a half note chord (B-flat, E-flat) and a half note chord (B-flat, E-flat).

A box containing two staves of musical notation. The top staff has a treble clef and a key signature of two flats. It contains four measures: a half note chord (B-flat, E-flat), a half note chord (B-flat, E-flat), a half note chord (B-flat, E-flat), and a half note chord (B-flat, E-flat). The bottom staff has a bass clef and contains two measures: a half note chord (B-flat, E-flat) and a half note chord (B-flat, E-flat).

A box containing two staves of musical notation. The top staff has a treble clef and a key signature of two flats. It contains four measures: a half note chord (B-flat, E-flat), a half note chord (B-flat, E-flat), a half note chord (B-flat, E-flat), and a half note chord (B-flat, E-flat). The bottom staff has a bass clef and contains three measures: a half note chord (B-flat, E-flat), a half note chord (B-flat, E-flat), and a half note chord (B-flat, E-flat).

Poker Test (2011) - Guy De Bièvre
for Zwerm (guitar quartet)

Instructions:

Each player receives pages 1, 2 and 3. If one of the players is designated as a bass player (this is optional), the bassist receives page 4. The players cannot tell each other which pages they intend or do not intend to play or in what order they will do so. Ideally those individual choices will be different for each performance (including the rehearsals - the rehearsals are only intended to get acquainted with the score, to set sound levels, or just to try things out; each rehearsal should be seen as a performance and should therefore differ from the previous and the next one).

The tempo is very slow, between MM15 and 30.

Each page can be entered from any of its four edges. From there on the motion should go horizontally or vertically from cell to cell. It is also only possible to move to another page from one of the cells along the edges.

Playing should happen with a pick, preferably on electric guitars (or, if not electric, on acoustic guitars with steel strings).

Each played cell should at least be repeated once or more (one could imagine an “extreme” interpretation during which one player (or more) confines himself to a single cell, repeating it for the entire length of the performance).

The cells can be tied, but do not have to be; players should feel free to pause in between cells, to reflect upon how to proceed further.

The pitches E, A, d, g, b and e' (the pitches of the individual strings) should be played as open strings.

Players do not have to synchronize their playing with that of the others (but they may).

The “cell zones” are separated from each other by chords (all different Gb chords). Those chords can be played with a single strum, or the different pitches can be phrased to choice (the only thing prohibited is a formal down or upward arpeggio). The chords can be repeated, but between each repetition 7 seconds should be mentally counted.

A performance should ideally last between 10 and 60 minutes. This duration can be agreed upon beforehand, but should preferably be estimated without a timer.

Try ending with all players (except the bass, if any) in one of the chord areas.

Gbdim	Gb7 #5b9	Gbm7b5	Gb7sus4	GbmMaj9	Gbm7+13	Gbm7b9	Gbm11	GbmMaj11	Gbm	Gbm6	Gbm7 #5	Gbm7b5
e--2--	e--0--	e--0--	e--0--	e-1--	e--0--	e--0--	e--4--	e--4--	e--2--	e--2--	e--0--	e--0--
B-1--	B-3--	B--1--	B--2--	B--2--	B--2--	B--2--	B--2--	B--2--	B--2--	B--2--	B--3--	B--1--
G--2--	G--0--	G--2--	G--4--	G--1--	G--2--	G--0--	G--4--	G--4--	G--2--	G--2--	G--2--	G--2--
D--4--	D--0--	D--2--	D--2--	D--3--	D--1--	D--2--	D--2--	D--3--	D--4--	D--1--	D--0--	D--2--
A--0--	A--1--	A--0--	A--2--	A--0--	A--0--	A--0--	A--0--	A--0--	A--0--	A--0--	A--0--	A--0--
E--2--	E--2--	E--2--	E--2--	E--2--	E--2--	E--2--	E--2--	E--2--	E--2--	E--2--	E--2--	E--2--

GB9b13 **GB7** **Gbm6+9** **Gb9sus4** **Gbm9** **Gbm7b9** **GB9b13** **GB7sus4** **GB7b9** **GBm7b9** **Gbm** **GB7#5** **GB9b13** **GB7b5** **GB7#5b9** **Gbm13**
 e-0-- e-0-- e-0-- e-0-- e-0-- e-2-- e-0-- e-0-- e-0-- e-0-- e-2-- e-0-- e-0-- e-0-- e-0--
 B--2 B--2 B--2 B--2 B--2 B--2 B--2 B--2 B--2 B--2 B--2 B--2 B--2 B--2 B--2
 G--1 G--3 G--1 G--1 G--1 G--0 G--1 G--4 G--0 G--0 G--2 G--1 G--1 G--3 G--0
 D--0 D--2 D--2 D--1 D--2 D--2 D--0 D--4 D--2 D--2 D--4 D--0 D--2 D--0 D--1
 A--1 A--1 A--0 A--2 A--0 A--2 A--1 A--2 A--1 A--1 A--0 A--1 A--1 A--1 A--0
 E--2 E--2 E--2 E--2 E--2 E--2 E--2 E--2 E--2 E--2 E--2 E--2 E--2 E--2 E--2

GB9b13 **GB7** **Gbm6+9** **Gb9sus4** **Gbm9** **Gbm7b9** **GB9b13** **GB7sus4** **GB7b9** **GBm7b9** **Gbm** **GB7#5** **GB9b13** **GB7b5** **GB7#5b9** **Gbm13**
 e-0-- e-0-- e-0-- e-0-- e-0-- e-2-- e-0-- e-0-- e-0-- e-0-- e-2-- e-0-- e-0-- e-0-- e-0--
 B--2 B--2 B--2 B--2 B--2 B--2 B--2 B--2 B--2 B--2 B--2 B--2 B--2 B--2 B--2
 G--1 G--3 G--1 G--1 G--1 G--0 G--1 G--4 G--0 G--0 G--2 G--1 G--1 G--3 G--0
 D--0 D--2 D--2 D--1 D--2 D--2 D--0 D--4 D--2 D--2 D--4 D--0 D--2 D--0 D--1
 A--1 A--1 A--0 A--2 A--0 A--2 A--1 A--2 A--1 A--1 A--0 A--1 A--1 A--1 A--0
 E--2 E--2 E--2 E--2 E--2 E--2 E--2 E--2 E--2 E--2 E--2 E--2 E--2 E--2 E--2

This image displays a musical score for the piece "Guy De Bièvre - Poker Test (2011)". The score is written in bass clef with a common time signature (C). It consists of 40 staves of music, organized into 10 systems of 4 staves each. The notation includes various rhythmic values such as eighth and sixteenth notes, rests, and dynamic markings like *f* (forte) and *mf* (mezzo-forte). The key signature is one flat (B-flat). The music features a complex, rhythmic texture with frequent sixteenth-note patterns and rests, characteristic of a contemporary or experimental composition.