ROPE

Performers: Steed COWART conductor
Joel DAVEL percussion, stage right
Michael GENDREAU percussion, stage left
Manuel ROCHA piano
William WINANT percussion, center stage

I. WNB
[4 elements (including Marker)]
In the section for which this composition was named, the musicians weave strands of
noises. The piano, a red thread, plays sforzando notes in a degree-of-dissonance scale
in ascent to 2 minutes into the section, then descends on a different DOD scale. At
76 seconds $v_p$ is proportional to $e^t$.

II. BuNB
[9 e (including Or Espana Cani, M #1 SC, Neck of Land, and M #2 SC), 0 m]

III. I, Symbolic Version

IV. II, Symbolic Version

V. BkNB
[7 e (including Green Box Points, 4gg, Baseline 8.28, Baseline 9.21,
   Baseline 10.2, and Baseline 11.12)]
A. Introduction of Several Materials, Including Hesitation Pulse
Hesitation Pulse (HP) is introduced to the performers in this way:

In many places in this section, indication for hesitation pulse (HP) is
given. This is an indication for what instrument(s) to play on (a note
head) inside a box on the staff. Above or below the box is a number
which indicates how many coups per beat to play. A vertical line with
an arrow pointing backwards indicates where the HP stops and normal
notation resumes.

Basically, HP is a rhythmic variation around the given pulse. At all
times when the request to play HP is given, another percussionist is
playing an even pulse.

The HP should vary from the steady pulse only a small amount. For
example, to lay over the straight pulse of 8th notes, the HP might vary
at will between 3 over 2 quarter notes, to 3 over one quarter note. But
variations closer to the steady pulse are preferred. In another example, for a steady pulse of 6 coups per quarter note, the HP overlay might vary between 16th notes to 32nd notes. Note that for higher pulse rates, the actual effective time variation for HP decreases proportionally.

A good performance often has points of stable dislocation (consistent deviation from steady pulse) where the player stays at a particular deviation for several beats. Then, in the spirit of HP, move to another point of stable dislocation, or change continuously.

The 7 elements are introduced simultaneously in blocks at 35 and 57 seconds into the section, in accordance with a line drawing used as form for this section (figure 1).

B. \( y = x - 5 \)
C. Chase

D. \( y = x - 5 \) and \( y = 10.5 \pm 0.5 \left(-4x^2 + 84.8x - 193.44\right)^{1/2} \), where

\[ v_v = 2v_{pl} - v_{ph} \text{ and } v_v = v_{pl} + v_{ph} \]

E. A Motive I Have Enjoyed for Many Years
1. \( y = 0.8x - 6.8 \) in melody and rhythm with percussion flare
2. Interlude
3. Reflex: \( y = x - 24 + \ln(x - 32) \)

*Figure 1: Line Drawing Form of V (and VI)*

VI. V, Distortion Ritual Version (omitted at this performance)
The musicians replay Section V at dynamic level \( ppp \) and are amplified and highly distorted. A small amount of physical activity is translated into a wide band of sound (i.e., carries a great amount of information.) In this case, the distortion 1. renders standard instruments unrecognizable to the ear, destroying the motives and solving the problem of virtuosity, 2. Alters the directionality of the sound, and 3. makes the control of dynamic level closely related to the control of density in the music.
VII. ONB
[7 e (including Anna String Block, Rain on VW Roof, Scale from Father Dream, and Broken Oil Machine), 7 m]

A. Contracting Area, Unit Literal Version
   Two or more areas can contract (or expand) at the same rate, even though their length or height may decrease (increase) at a different rate. Area here means any block of frequency vs. time (see Figure 2).

B. RO1
   Round Off, negligence of details to clarify an object.

C. Contracting Area, Double Literal Version

D. RO2
   Object is diffused

E. Vocabulary Limit Cycle 1
   All possible words $\rightarrow$ limit cycle $\rightarrow$ all possible words. Destabilized by snare drum trio.

F. PLR Section II
   Performed on the Organ of Corti.

G. Vocabulary Limit Cycle 2

H. Bell Choir
   Initiated by signal.

Figure 2: Two Different Methods of Contracting Areas
(illustration from Berge, Pomeau, Vidal: Order Within Chaos)
[There will be a short break to move drums and chairs]

CATALOG OF SHIPS interpolating Shape Set 10.23.90

Performers:  Eric BERGKVIST bass trombone  
              Tom DAMBLY Bb trumpet, piccolo trumpet  
              Michael GENDREAU drum set  
              Chris JONAS soprano saxophone  
              Randy McKEAN alto saxophone  
              Rajesh MEHTA Bb trumpet  
              Daniel PLONSEY baritone saxophone

The harmony in the notated section is based on geometry (in this case, the geometry of Shape Set 10.23.90) rather than on specific pitches. The shape set in mapped into notation linearly, a way to aurally complicate simple shapes, rather than logarithmically (see the approximate sketch in Figure 3) or one of many other possible transformations.

Figure 3:  Shape  
          Logarithmic transformation  
          (as perceived)  
          Linear Transformation  
          (as perceived)

In the improvised sections and in the improvisations interposed throughout the notated sections, the musicians are using density as the only conscious parameter. For example, the following is an excerpt from the notes to the performers:

These Sections are made distinct by the density of the sounds within them. All sounds (noises and pitches) should be short, pointlike. Use no ideas about rhythm and melody. Think only of how the inclosure is filled. Timbral variety is also important to suppress the emergence of rhythm and melody.
LOOPS

Again, excerpts from the notes to the performers:

PROCEDURE
The group is divided into two trios with an auxiliary drummer.

Each of the 19 boxes of notation are played in turn (left to right, top to bottom.) Musicians improvise towards each box, gradually integrating elements of it into the improvisation. Eventually, at any time they decide to, the musicians play the box exactly and repeat until the signal is given. The signal can be given only after all musicians are playing the box together, as written. The various musicians give the signals in turn or in any order, or it can be agreed upon beforehand that anyone can give the signal at his inspiration. Immediately after the signal, musicians improvise towards the next box.

SIGNAL
The signal is played once. It is written in concert pitch, but may be played by any instrument by transposing if necessary. Transpose by 8ve if the signal given is not in the range of the instrument. If there is nothing in this bar, any signal can be given.

DYNAMICS
Sometimes the dynamic of a box is given (in the traditional notation) and sometimes it is not. When the dynamic is not given it is mf - f or whatever seems appropriate considering the rest of the music being played at the time. The signal is louder than any other bar. Dramatic dynamic changes just before and after each box is played are encouraged. For information on the overall dynamic scheme, see the synchronization diagram at the end of this text. Here, standard dynamic markings are given where they are used in the loops, and no dynamic mark means that the dynamic is not specified.

LOOP-TYPES
The loops are classified by mood to suggest the temper of the improvisation that precedes and follows them. The overall loop-type scheme is shown in the diagram.

SYNCHRONIZATION
The possibility of synchronization, both trios playing the same loop together, varies throughout the piece. The loops where there is a high probability of synchronization are marked by an asterisk on the following diagram. In this case, one of three approaches can be taken: synchronization; cannon, or near-synchronization; and sequence (no synchronization.)
IMPROVISATION
Perhaps 40-80% of each improvisation could be related to outgoing and incoming loops, with a section in the center for any group work. Improvisors may communicate directly with any persons in the entire group, or add to a loop being played by the other trio, in any way. See also the suggestions in DYNAMICS and LOOP-TYPES.

SYNCHRONIZATION DIAGRAM

<table>
<thead>
<tr>
<th>Saxophone Loop Dynamic Form:</th>
<th>mp</th>
<th>p</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saxophone Loop-type Form:</td>
<td>ST</td>
<td>ST</td>
<td>H</td>
</tr>
<tr>
<td>Synchronization Possibilities:</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Brass Loop-type Form:</td>
<td>ST</td>
<td>ST</td>
<td>H</td>
</tr>
<tr>
<td>Brass Loop Dynamic Form:</td>
<td>mp</td>
<td>p</td>
<td>p</td>
</tr>
</tbody>
</table>

Loop-type Abbreviations: 0 silent, C creep, EW eccentric wheel, F fast, H halting, P pulse, SC slow circus, SL slippery, ST soundtrack

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Following the concert, everyone is invited to a reception in the Ensemble Room (in the left wing of the building.)