

MUSICWORKS 33

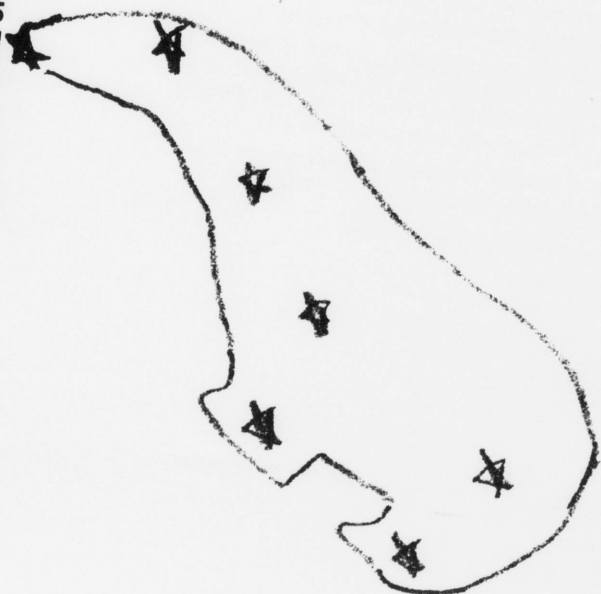
THE CANADIAN JOURNAL OF SOUND EXPLORATION

\$2.00
\$6.00 with cassette

STARTING ALL OBSERVATIONS FROM SCRATCH

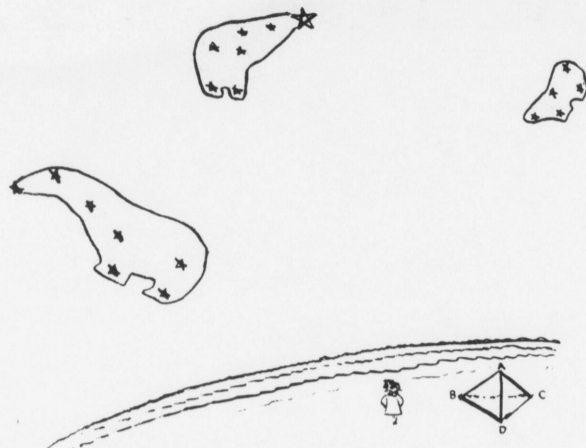


UDO KASEMETS
ANDREW CULVER
DAVID ROKEY
PAULINE OLIVEROS
DAVID DUNN
JOSE ARGUELLES



“Here is Goldy
having a sky
party with her
three friends, the
Polar Bear
family.”

R. Buckminster Fuller, from TETRASCROLL*



TETRASCROLL, STONE1. Text excerpts from TRICAP 1.*

Here is Goldy having a sky party with her three friends, the Polar Bear family. Goldy says the sky party is a "system" because Goldy plus the Three Bears equals four entities (or star events), and it takes four events to produce a system. A system divides all the universe into six parts: all the universe outside the system (the macrocosm), all the universe inside the system (the microcosm), and the four star events A, B, C, D, which do the dividing.

Goldy says, "I have drawn Mommy Bear in reverse. I forgot when I was drawing her that if it is to be printed directly from my drawing, it requires an original mirror-image master. But I am going to leave her that way because it's well to remind everyone at the outset that we can only get from here to there by a series of errors—errors forwardly to the right, then a correcting forwardly error to the left, each time reducing error but never eliminating it. This is what generates waves; this what generates the experience life."

Goldy explains to the Three Bears that synergy means behavior of whole systems unpredicted by the behavior of any of the system's parts when each is considered only by itself. Goldy takes three triangles and brings them together edge-to-edge around a single corner and inadvertently produces the fourth base triangle. Thus she discovers that one-plus-one-plus-one equals four.

Goldy says her mommy is a system and so is her daddy. They both have insides and outsides. Goldy says parents are synergetic: 1 system + 1 system = 3 systems. One outsider plus one insider produces an additional inside-outer—Goldy.

Goldy says to the Three Bears, "If you don't understand any of my words, you can find them in the dictionary." Wee bears replies, "Out here we use cosmic thought communication. We don't have to find words in special-language diction-aries. We use a cosmic thinktionary. All your dictionaries express the universal concepts of our thinktionary but only in special, ethnic-language, sound words. The concepts such as mountain or star or nuance are the same experience engendered concepts in all languages. We understand you perfectly, Goldy."

Concepts are always synergetic systems. Systems are minimum-maximum sets of thinkable, conceptual, omni-interrelevant experience recollections, intertunably differentiated only by time out of nonsimultaneous, unitarily unconceptual Scenario Universe.

* TETRASCROLL, Goldilocks and the Three Bears, A Cosmic Fairy Tale by R. Buckminster Fuller, 1975, 82, St. Martin's Press, New York. Used with permission from the Buckminster Fuller Institute, 1743 S. La Cienega Blvd., Los Angeles, CA, 90035.

EDITOR'S NOTE

This STARTING ALL OBSERVATIONS FROM SCRATCH issue of MUSICWORKS was originally intended to document and coincide with the SYMPOSIUM: SYNERGETICS AND THE ARTS: (RE)TUNING HUMANITY, which was to have taken place December 1985 in Toronto. The SYMPOSIUM project has been rescheduled and extended (see Udo Kasemets notes following), and we have chosen to participate in the extended working process by presenting herein a prelude to the work of five composers and sound artists who submitted materials for publication, at this time. Stay tuned...

STARTING ALL OBSERVATIONS FROM SCRATCH CASSETTE TAPE SELECTIONS:

- Pauline Oliveros' music for **The Indigenous Dance** from **Tasting the Blaze**
- Andrew Culver's **Tensegrity Sound Source #5**
- David Dunn's **Madrigal**
- David Rokeby's **First Real Snake**

6



Conflict

The strong (heaven) and the difficult (water) go their opposite ways forming the condition for Conflict. An enlightened person, therefore, in performing his functions, carefully plans the beginning.

MUSICWORKS 33 WINTER 1985/86

Starting All Observations From Scratch

MUSICWORKS is published quarterly with the financial assistance of the Canada Council for the Arts, the Ontario Arts Council, paid subscription, and advertising.

Published by the **Music Gallery**, 1087 Queen Street West, Toronto, Canada, M6J 1H3.

Editorial and Business Office: 416-533-0192.

ISSN 0225-686X

Editor: Tina Pearson
Assistant: Stuart Shepherd
Design: Andrew McLachlan
Cassette Production: Tim Wilson
Office Manager: Lucy Hogg
Promotion Manager: Stuart Shepherd
Typesetting: Tanya Mars/Compositors
Printing: Delta Web Graphics

Thanks to: Chris Devonshire, Rita Rispolli, Robert W. Stevenson, John Ferry, Gayle Young, Al Mattes, Paul Hodge, Sandor Ajzenstat, Victor Coleman.

I CHING interpretations from R.L. Wing's **The Illustrated I CHING**.

ANNOUNCEMENTS

Composers Conversing

Composers meet to listen and discuss their work. For further information call John Oswald, 924-6060 and/or Linda Smith, 921-0076.

C.I.E.M.

Contact list of Electronic Music is a world wide reference source for "underground musicians and sometimes artists working in many different styles of music. These include ... industrial, German EM, meditative, new age, improvised, harsh, computer EM, progressive rock, sound poetry, found tapes, popular EM, and new wave." CLEM lists addresses and reviews related media. Contact Alex Douglas, P/O Box 86010, North Vancouver, B.C. CANADA, V7L 4J5.

Music Gallery Studio Memberships

Music Gallery offers musicians, composers, and the new music and performance audience a broad range of programmes and services designed to encourage interest in, and promotion/presentations of, all aspects of contemporary music and performance activity. Our recording facility offers members access to a complete 8-track studio and electronic music equipment. Membership application is by cassette tape audition. Tape should provide a selection of applicant's compositions demonstrating exploration into contemporary forms. Tape to be submitted to **Paul Hodge, Music Gallery, 1087 Queen Street West, Toronto, M6J 1H3.**

47



Adversity

The time of satisfaction (lake) is without depth (water) forming the condition for Adversity. An enlightened person, therefore, will take personal risks to carry out his purpose.

Annual Subscription Rates

(4 issues)	PAPER ONLY	WITH CASSETTE
Individual in Canada	\$8	\$20
Individual Elsewhere	\$12	\$24
Institution	\$15	\$33

Advertising Rates (416)533-0192

FULL PAGE (15" x 10")	\$280.00
HALF PAGE (7" x 10")	\$140.00
1/4 PAGE (7" x 5")	\$ 75.00
1/8 PAGE (3 1/2" x 5")	\$ 40.00

DISTRIBUTION: MUSICWORKS is available on newsstands across Canada through the Canadian Periodical Publishers Association, Toronto; and Diffusion Parallele, Inc., Montreal. MUSICWORKS is available outside Canada on independent newsstands. New accounts are welcome. Available internationally by mail subscription.

Letters and unsolicited materials for publication are encouraged. Please send us your scores, tapes, visuals and writings. We would like to hear (from) you. Please enclose a self-addressed-stamped-envelope if you wish to have your material returned. Thank you.

R. Buckminster Fuller
left us a legacy
of an immense amount of information —
philosophical/mathematical/conceptual/structural/poetic/scientific

descriptions and models
demonstrating the general principles
underlying the workings of the universe,
with a special emphasis
on life on our planet
and humanity's unique role
in this total scenario.

Because of its comprehensiveness and generosity,
its consistency in starting all observations "from scratch",
Fuller's worldview
provides
[one of] the best ...
foundations for understanding
the present state of life on Planet Earth
and coping
with the manifold interlocked crisis
facing humanity.

...

The artist, or, as he often preferred to call him or her, the artist/scientist loomed large in
Buckminster Fuller's esteem. To quote him:

Artists are now extraordinarily important to human society. The greatest of all
their faculties is the ability of the imagination to formulate conceptually. I feel
that it is the artists who have kept the integrity of childhood alive until we
reached the bridge between the arts and sciences. Suddenly we realize how
important that conceptual capability is ...

(From Prevailing Conditions in the Arts; UTOPIA OR OBLIVION, p.112.)

The function of the SYMPOSIUM: SYNERGETICS AND THE ARTS: (RE)TUNING
HUMANITY is to provide a forum for the artists, scientists, artists/scientists and
scientists/artists who

either by having been directly or indirectly influenced by R. Buckminster Fuller's
thought patterns and/or personal and social actions/

or by having launched independently their own inquiries into issues of nature's
manifold mysteries and/or of global concern/

have been
and are
contributing
to new understandings and sensibilities
regarding the myriad manifestations of life
which individual humans
and humanity as a whole
are experiencing
at this time of ours

when insights and enlightenments
of previously unimaginable
dimensions and consequences
exist concurrently
with an acute possibility
of the cessation of known life
on Planet Earth.

It is the artists, scientists,
artists/scientists and scientists/artists

whose curiosities, intuitions, imaginations,
explorations, experiments, researches,
speculations, darings, disciplines,
convictions, questionings and visions

approach
the presently experiencable
ultimate limits
of human knowledge and sensibility

and who attempt to illuminate and clarify
the issues
which are central
to the physical and spiritual survival
and the definition of the function
of the human species
in the framework
of the bio/ecological processes
of this planet

on whose shoulders rests
the destiny of humankind.

It is the artists, scientists,
artists/scientists and scientists/artists

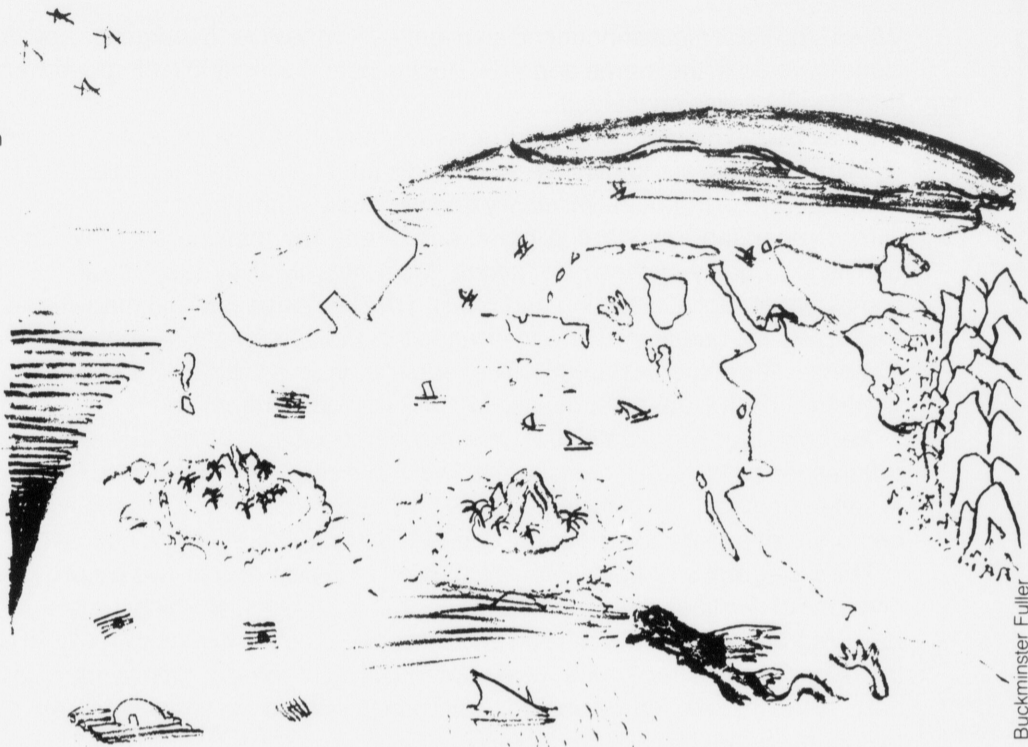
with such concerns
who are invited
to meet, present, discuss,
explain, exchange and share
their immediate attitudes,
results of their recent investigations
and their future prognostications
with each other,
with people of similar preoccupations
and with the community at large,
so as

to establish a basis
for starting a process of (RE)TUNING
humanity's minds and sensibilities
to the demands of the emerging age

including the re-establishment and keeping of
ecological balances,
making benign use of old and new technologies,
comprehending and conceiving extraverbal communication
and developing planetwide, intensive
education and art networking.

SYMPOSIUM: SYNERGETICS AND THE ARTS: (RE)TUNING HUMANITY

UDO KASEMETS



Buckminster Fuller

SYNERGETICS AND THE ARTS (RE)TUNING HUMANITY

The SYMPOSIUM, SYNERGETICS AND THE ARTS (RE)TUNING
HUMANITY will take place in three stages:

PHASE I, an inaugurating SYMPOSIUM in collaboration with the Ontario
Science Centre and the Music Gallery. April being Radio Month at the Music
Gallery, the SYMPOSIUM events will be recorded for future broadcasting over
public radio stations across North America. April 25 through 27, Music Gallery,
Toronto, Ontario.

PHASE II: throughout 1986 and early 1987 intensive and extensive local,
continental and intercontinental networking, workshopping, planning and
preparing for PHASE III.

PHASE III: mid or later 1987, a three-city SYMPOSIUM tentatively planned to link
Toronto, Boston and Los Angeles to bring the issues generated during PHASE I
and developed during PHASE II to wide public attention while simultaneously
celebrating 1) the 60th anniversary of Buckminster Fuller's 1927 decision to
dedicate his life to improving living conditions for all humanity on Spaceship
Earth; 2) the 75th year of John Cage, whose life's work has been to open the
ears, eyes and minds of his fellow humans; 3) the HARMONIC
CONVERGENCE of the Planet Art Network as proposed by Jose Arguelles.

ARTISTS/SCIENTISTS INVITED TO MAKE PRESENTATIONS DURING PHASE I

John Cage, composer, New York City
Jose Arguelles, author, Boulder, Colorado
Juan Geuer, sculptor, Almonte, Ontario
David Dunn, composer, Los Angeles, California
Hildegard Westerkamp, composer, Vancouver, B.C.
Norbert Ruebsaat, poet, Vancouver, B.C.
Neil McNeil, poet/editor, Glasgow, Scotland
Udo Kasemets, composer, Toronto, Ontario
Gary Murphy, computer programmer, Toronto, Ontario
H.S.M. Coxeter, mathematician, Toronto, Ontario
Arthur L. Loeb, mathematician, Toronto, Ontario
Amy C. Edmondson, researcher, New York City
Gayle Young, composer, writer, Grimsby, Ontario
Alcides Lanza, composer, Montreal, Quebec
Andrew Culver, composer, Quebec City, New York City
James Tenney, composer, Toronto, Ontario

(Pauline Oliveros and Deborah Haye are included in the Symposium in its later
phases.)

For further information, contact Udo Kasemets, Ontario College of Art, 100 McCaul Street,
Toronto, Ontario, Canada, M5T 1W1.

INVITATIONS

ANDREW CULVER

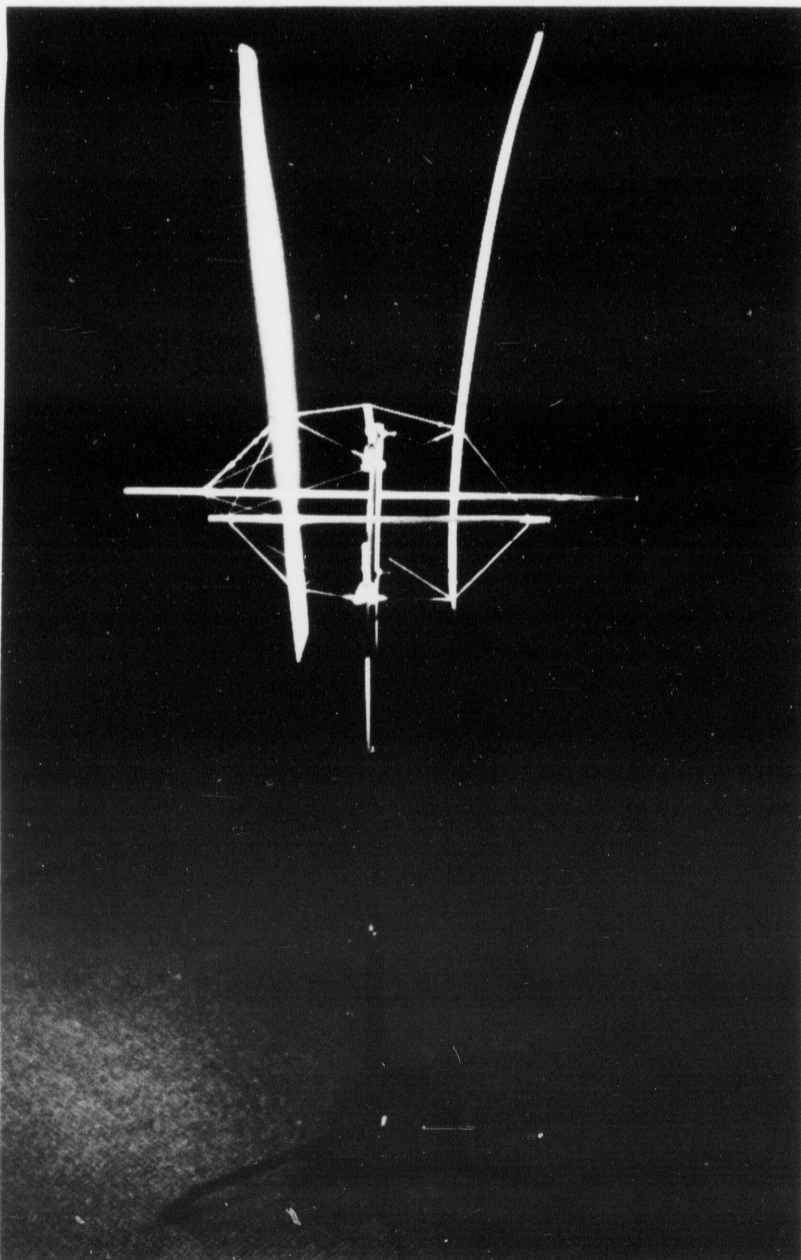
When Udo Kasemets announced an event — *Symposium: Synergetics and the Arts: (Re) Tuning Humanity* — MUSICWORKS announced an issue devoted to the theme and to R. Buckminster Fuller, and I offered *Invitations*. Thus it was in the context of my work as it relates to Fuller that the piece was conceived.

Fuller began his work with a global issue: shelter, he developed his work method into a powerful thinking process, and he tested his work's viability against a standard for which he was unusually gifted: modelability. These three are, I think, the salient features of his work, and from them spring the truthfulness, clarity and generality that attract us so much.

In comparison, my starting point is different, my thinking sporadic, and my standards unclear even to me. Hence the open-ended, unfinished quality of these *Invitations*. Most notably, they are not related sequentially, and their leaping from specifics to generalities is somewhat abrupt. Correcting and refining the language, as I did many times, resulted in the individual parts becoming even more isolated. Faced with the question of how to arrange this multiplicity of single-mindedness on one page, I settled on an unbiased newspaper layout with a chance determined sequence. The reader then could skip about as one does reading a newspaper, without the obstacles of headlines and dividing lines that an editor uses to signal (bias) one's attention.

As John Cage has pointed out, chance operations involve not the making of choices but the asking of questions, bringing about a situation unforeseen by the questioner, and answers that surprise and enliven. Chance operations have to do not with what we are and have been, as in self-expression, but with what we are able to allow ourselves to become, as in self-alteration. In relation to the radical shifts of the twentieth century, self-expression may be a comfort, but self-alteration is a necessity.

The paragraphs of *Invitations* are divided by either one or two empty lines. Paragraphs divided by one line are joined in one text, and divisions of two lines mark the boundaries between texts, of which there are 22. Within the confines of where the longer ones would fit, I used ic (a program of mine that runs on an IBM PC and that simulates the I Ching coin tossing oracles) to determine the placement of each text on the page. The title and byline were treated as any other text: their symmetrical arrangement is unchosen. The one partial exception is that the parts of the 'Provisional History of Structural Principles' were manipulated to assure a sequential progression from top to bottom, though left to right placement was left to chance.



The photo and tape excerpt on the MUSICWORKS 33 cassette are of **Tensegrity Sound Source #5**, a performance sound source developed between 1981 and 1983. Being a tensegrity icosahedron, it has 6 compression (rigid) members and 24 tension members. The latter are all .018" diameter stainless steel wire. The two compression members that are at the top and bottom in the centre of the picture, and that are difficult to see because they run in line with the camera, are made of turnbuckles and threaded rod; they are used to tighten the structure and to attach the pedestal. The two that run across the picture are of 70% T6 aluminum, a very hard alloy that promotes clear and strong upper harmonics. Of the two tall compression members that seem to reach up, the left is 3/32" (.09375") 3-plywood, and the one on the right is .024" cold-rolled steel.

A model is worth a thousand pictures when it comes to describing a tensegrity, but suffice to say that its rich resonance is a result of the manner in which its tension members freely sustain its compression members. On **Tensegrity Sound Source #5**, the electronic pickup is by small crystal contact microphones, one on the wood sheet and one on the steel; the stereo information results from this physical separation of pickup points in the structure. Amplification is at a maximum relative to system noise; there is no signal processing. The tape is a small excerpt of small excerpts: in performance, the work runs about 50 minutes and requires a multi-speaker stereo sound system and powerful spot lighting.

send everyone home

give everybody a receiving card that enables them to get their share of the GGMP (gross global machine product) updated instantly (at minimum hourly)

within a few months, those who can no longer do without researching, postulating, designing, administrating, doctoring, policing, adjudicating, farming, fishing, crafting, flying, sailing, arting, etc., in an extra-personal manner (ie. in a resource-requiring global-effecting manner for the direct benefit of others as well as self), will be implicating themselves actively in the global system

no value (no increase in GGMP share) will be ascribed to anyone's time or labour

rights to property will reflect use not ownership

no decision to alter anything communal (with attention to ecosystemic detail) will be made before the rapid calculation of its effect on the GGMP

all communal issues from everywhere will be computer bulletin board posted globally for a limited time for anyone to comment/improve upon; the overwhelming quantity of such postings will assure that no one individual's influence will dominate (there simply will not be time to influence too many postings before they are withdrawn); in this manner each individual makes known his priorities

CONFUSE
FUSE
USE
MISUSE
REFUSE

con-fused vs. fused

con-, com-
'with'
'together'
'completely'

unity is a multiplicity (Fuller: is complex and at minimum two)

-closepacking : too

TAO
TWO

confusion is travel time from made fusion to found fusion
use is correct conduct
misuse is correctable incorrect conduct
refuse is obstructed use: it's unwanted

Later — Beam-and-post still dominates on land, with the development of high simultaneous tensile and compressive strengths materials continually reaffirming its viability.

19th C to 1952 — The advent of steam and then internal combustion engines means the decline of sail power and the use of tensile structures. But on land the suspension bridge is resurrected with the development of steel and steel cable.

The composition-as-object vs. composition-as-process distinction (cf. Cage): if the invented device is general purpose it's a musical instrument which may be employed for either composition-as-object or composition-as-process; if it's special case, only one composition can be played with it, whose particulars are the particulars of the source, as discovered by the player interactively in an ongoing composition-as-process.

Tensegrity structures are self-tuning. They are always at optimal disposition to external forces or are in transitional progression from an optimal disposition relative to one external force to an optimal disposition relative to a more recently applied external force. The progression towards a new equilibrium disposition is called resonance and is ephemeral.

the primary issue of education will be enhancement of each individual's ability to safeguard his own freedom, ie., to maintain personal response ability for the quality of his own:

Foods
Recreations
Environments
Entropies
Devotions
Options
Mind

by foods i mean that diet is the most influential (influx, fluid intake, in flow) and immediate factor in human health
by recreations i mean energy producing activities
by environments i mean the functionality and sensuosity of immediate surroundings
by entropies i mean energy dissipating activities
by devotions i mean undivided attentions that last
by options i mean the practice of changing our situation at a moment's notice
by mind i mean each person's ego-and-desire-unfettered indivisible susceptible synergetic equilibrium unique centre of interpenetrating thought

Word process the immigration laws. Replace all occurrences of 'immigrate' with 'not emigrate', all occurrences of 'non-citizens' ('aliens', etc.) with 'citizens'. Rename them the emigration laws. Apply . . . Any non-citizen who wishes to enter a country can do so freely. All citizens who can not prove their essentiality will be required to leave their countries. Ultimately, the appliers of the law will have no one left to evict and will evict themselves. Those who want to stay where they are for personal reasons can always do so by renouncing their citizenships. This process should rid us of nations quite painlessly.

Later — With the advent of agriculture, the need for mobile structures is replaced by the need for sturdy ones (to withstand the assaults of land hungry invaders). The power of a society becomes analogous to the weight of its structures. High ground holds the advantage, so height is also esteemed. The beam-and-post structural principle allows the use of weighty materials piled high.

Eventually — The islands are stony and their inhabitants imaginative the great beam-and-post temples are built.

Later — Learning from the Greek ruins the tensile weakness of stone, but still needing high weighty structures for both defense and habitual prestige, the arch is developed.

Meanwhile — The tensile principle remains at sea, where great strength to weight advantage is developed with rope and wood.

a continuous web of tension around and supporting a discontinuous array of compression

because tensegrity
in its isolating of member supported tension and compression forces
allows the discontinuity of its compression member array
such discontinuity implying freedom from rigid intermember bindings
such intermember angle flexibility assuring optimal structural equilibrium
through the instantaneous equalizing of opposing member-borne forces
always at optimal one-and-the-same force induced angles
is unique among structural principles in its resonating
(refinding of equilibrium in response to external forces)
properties
and because
tensegrity
in its most fundamental form
is made up of flexible materials under tension
(taut strings)
and rigid materials under compression
(rods, bars or tubes)
and interconnections thereof
such interconnections easily accommodated
not at compression member endings but at
short whole-number-relationship distances along their lengths
which relationships are favourable to
intra-compression-member vibration
it can be stated
that
the tensegrity structural principle
only the third structural principle humanity has discovered
only thirty years old
is as yet at the threshold of its application towards
music

Three ways have been observed (Cage) by which music is being composed these days — with points and lines on paper (cf. Satie), in recording studios, and through the invention of unique acoustic or electronic interactive sound sources. This last group includes what Mario Bertoncini has called musical design.

The exploration into the acoustical natures of various materials in various formats, the design and construction of special-case sound sources based on these findings and suitable for performance or installation, and the consummating re-exploratory interaction between player and sound source during performance, or between public and sound source within an installation, is a compositional process called musical design.

Sound sources cannot correctly be called instruments, in that an instrument is a tool used for the doing of something other than itself. Instruments, in their general-purposeness, remain distinct from what is being done, acting as isolating buffers between the doer and the being done, or as corporal extentions of the doer; in either case they are actionary, not interactionary. A source, on the other hand, is a place of emanation, is always special-case, and can be the source of many things.

Taken separately the members of a tensegrity structure are helpless against gravity which being external indicates the collection's lack of integrity. Add no material, bindings, catalyst, force, only metaphysical principle: the system is gravity independent and integral.

what makes is weightless imperceptible free

Business, while advancing the devaluation of material things, is moving towards trade in information, the historical domain of religion.

Inevitable is the decline in business' influence over the population to a degree more in keeping with the numbers who are naturally so inclined, as has happened with religion, as we move towards a society based on unemployment.

Provisional History of Structural Principles

Early on — Tensile structures are invented to harness the wind's power for navigation. Some of the rigid members are only under compression (esp. a boomless mast) while others (the boom, the hull) are simultaneously under tension and compression. The tension members (the lines, sheets, halyards, guys, etc.) are of course only under tension.

Later — The tensile principle moves ashore as tents and other mobile structures suitable for the wandering hunter/gatherer societies.

improvisation is impossible

silence is at equilibrium

everybody is an everything

invitations

mind is still mind moves
the nature of revolution

We are all cordially invited
to work free of employment
with the help of an elegant principle
to make nothing
in particular
music

Improvisation can never be the whole process. Improvisation means not provided. The list of items not provided can never be the whole list: we are of this life. Improvisation is useful as a procedural caution in conjunction with correct affirmatives, as in

exquisite improvisation — from seeking not providing

from andrew culver

1952 ff — Mankind discovers a third structural principle, named tensegrity by its main protagonist R. Buckminster Fuller. Here no member need withstand the simultaneous forces of tension and compression as exerted by other structural members (its main source in beam-and-post structures). (The two forces coexist intramembrally). Tensegrity structures' primary suitability to very large space enclosures initially inhibit their use as society still clings to ideas of ownership (and its resultant small-parcelling of land) and habitual power posturing (and its concomitant desire for weight and height). It does however find an early application to sound source design.

Tensile structures begin to appear again with new appreciation for temporary structures, low structures, and wind-assisted navigation.

Awareness of non-limitless resources and staggeringly powerful weaponry erodes beam-and-post's earlier advantage — weighty sturdiness — but its propensity for height over a small base assures its dominance on land, at least until society's habit for employment and its concomitant high population densities goes into inevitable decline.

I, Andrew Culver, have no career and a good deal of it too. I do my utmost to advance my own unemployment, and to do the same for others. I am a musician.

I did not choose this path and I do not choose to leave it. I take great pains to eat and sleep well, and things have never been worse.

My material needs are the usual; I am surrounded by exceptional people. I am very happy.

(Andrew Culver was a founding member of SONDE, a Montreal-based musical design and performance ensemble. He now lives and works in New York City.)

Andrew Culver, 181 Hudson, New York, NY, 10013

CYBERNETIC INSTALLATION: FIRST REAL SNAKE

DAVID ROKEBY



Photo: Dennis Day
Dancer: Karen Koyanangi

PREDICTING THE WEATHER

("BODY LANGUAGE": Three cameras observe the movements of people in a room. They relay their images to a computer. The computer analyses these images and translates the results into sound using a digital synthesizer.)

Whenever the weatherman makes a mistake we feel betrayed. It is his job to predict the weather, and he fails over and over again. It seems as though any experienced farmer can tell you as much about the next day's weather as the meteorologists armed with their satellite photos and Cray supercomputers.

I am always being asked if the response of my sound installations is predictable. "Will a specific movement always create the same sound?"

(I remember huddling in a tent in the pouring rain during the tail end of a hurricane on Prince Edward Island and being informed by the local radio station that the skies were clear and the sun shining.)

The source of our anger and sense of betrayal runs deeper than damage to shoes due to unexpected rain. We seem to feel the same resentment towards accidental death. We have learned to expect a life deprived of surprises. Such things shouldn't happen in a properly organized, rational society. We write letters to our government representatives.

(I used to get a bit defensive, quickly explaining that it is next to impossible to repeat a movement exactly...)

It's as though a sacred trust is broken or an inviolable right infringed everytime events elude our understanding and control.

... Imagine an uncharted planet... the atmosphere is more intimate than earth's and we personally affect the weather. (Some people run through my installation as though they are afraid of getting wet.)

We seem to be victims of a sort of intellectual materialism. Just as we (as a society) have come to accept the financial yardstick as the measure of value, we have accepted logical proof (ergo predictability) as the only yardstick for measuring truth.

The computer program which interprets the motion and translates it into sound makes perfect 'sense' at the foundation level. That level of sense is, however, not completely accessible through the experience of the piece. It is obscured by its own complexity. Any attempt to solely rationally understand the work is automatically doomed to failure.

Money and logic, removed from subjective reality, serve as incorruptable media of translation and communication. We reduce our lives to functions of these lowest common denominators and in the process, lose contact with both subjective reality of the individual, and integrated reality of the whole. The active ingredients of life slip through our fingers. All we have left are facts, and a basic distrust of anything we can't pin down.

(It seems that the more intent one is on controlling my installation, the less predictable the response appears to be...)

This 'noise' of information becomes nonsense; the surprises and accidents multiply... Dazzled and dispirited by the impossibility of absolute understanding, we begin to behave irresponsibly, paying little attention to the results of our actions. Still the mind is tantalized by apparitions of order. One gets no sleep...

One of the intentions of the installations that I have been constructing over the past few years has been to examine the way that we approach and resolve complex experience.

(How can I be expected to act responsibly if I don't know what is going to happen?)

With my computers, cameras, and synthesizers, I present a synthetic reality which can be physically explored. The phenomena through which the underlying principles of this 'reality' are articulated are the sound events. The phenomena are instigated by and related to various aspects of the dynamics of movement and the 'explorer'.

Or else we condemn, then ignore reality as a sloppy manifestation of eternal and unchanging laws... doubting the weather instead of the weatherman... ('The Soviets are controlling our weather')

Though the behaviour of this installation is complex enough to resist absolute analytical comprehension, it is integrated enough to create a strong though veiled and elusive overall impression of orderedness and relatedness.

Absolute prediction and control of very complex situations is not possible, and partial control often disastrous. (The universe chooses its own ways of returning to equilibrium.) We must learn to accept this fact without abdicating from the responsibility for the results of our actions. Refining awareness of the ways in which we affect our physical and metaphysical environments is the only way to avoid increasing the apparently chaotic and cataclysmic behaviour of the universe. (Weather is becoming interactive... (acid rain)).

(Imagine exploring the potentially errogenous zones of a new lover...)

A certain flexibility is required... an ability to move with grace back and forth between informed intelligence and naive perception.

The question of unpredictability, and the sense of chaotic confusion seem to disappear simultaneously at the point at which one suspends one's disbelief and begins 'exploring to discover' rather than 'exploring to confirm'.

How **does** one best function within a situation one cannot hope to entirely understand???

David Rokeby

First Real Snake is one of several unique works which I have written for the installation. This piece involves a loop of sound events which loosens around movement and tightens around inaction. Very short loops sound like resonances or tight echoes. Sustained movement expands the loop to its maximum length at which point old events are replaced by newer ones related to the immediately present movement. The amplitudes of old events decay from iteration to iteration back to silence.

— David Rokeby

(**First Real Snake** was installed at Art Culture Resource Centre in Toronto the week of November 11, 1985. Tim Wilson and Tina Pearson visited David at the installation and recorded his demonstration of the piece for the MUSICWORKS 33 Cassette. The following conversation is from that meeting.)

David: I've found that it's really important for people to discover things for themselves. In fact, outside of musical considerations and movement considerations, one of the interesting things about the piece is the way that people learn to deal with it. And also the way people feel when they've discovered something for themselves in a situation where they actually have no inherent understanding of what's going on. And that's when people really get moved — when they start to discover things about it and develop a relationship on their own. If I spend a lot of time explaining things, with big posters on the walls, they're deprived of that. Some people will walk through and have *no* idea of what's going on and be really annoyed and frustrated. But I think it can be a much better experience for the people who do know what's going on if they come to it themselves.

Tim: Do people discover things about themselves other than how to make the machine do various things; in other words, are you aware of them coming away with a different idea of what their body is like?

David: It depends a lot on the people.

Tina: Tim, what did you learn about yourself when you came into the piece?

Tim: I felt very stiff. I was partly self-conscious about just being here moving in front of you two. And I don't think I spent long enough to find a relationship.

David: A half an hour is the minimum period — that's my guess at how long it basically takes to get tied in to that. People find out more about their resistance to movement in public than they do about their body. They still don't think enough about their body, in general. They think more about feeling comfortable or uncomfortable in the space. But at a certain point they might become seduced enough by the experience so they aren't thinking about that anymore, and then they're surprised at what they just finished doing. So it's more psychological/sociological in that sense. People who are very aware of their movement in a specific way do find a lot of interesting things about their movement, generally afterwards. If they really get caught up in it, they're not thinking while they're in it, very much. Afterward when you start to again just be yourself and moving, you're still thinking about sounds your movements might be making, and that all ties in with the sounds of cars going by et cetera, so you start to become conscious of your movement in a different way out in the world itself, as opposed to in the piece.

Tina: I noticed something in just the little bit that I tried with the piece. I tend to like to flow in my movement, to move with continuous patterns, and I found myself needing to be more articulate and have more pauses, more jumpy kinds of movements in order to have a relationship with the machine.

David: There's a very specific reason for that. I'm much more fond of *flowing* movements myself in this piece, in general. But I have found that people generally, as they come into a gallery, which is the setting where it's usually set up, are too tense and uptight automatically, from the idea of being in an art gallery and being implicated in the piece. If I don't have the piece sensitive particularly to the kind of movement that results from someone who's uptight like that, then you have a real problem in interfacing with that kind of person. I have very different pieces that I use specifically with dancers where it picks up the whole of a gesture, and interprets the whole gesture and encourages long flowing movements that could be punctuated and accentuated with sudden movements.

Tim: What are the cameras actually reading?

David: There is a matrix of light cells in the back, quite a low resolution, 8 pixels by 8 pixels, which create a very very raw, rough video image, but it's digitized into 256 grey levels. So there is a lot of dynamic interpretation at each point, and each point is actually representing a space of about a foot by a foot in the middle of the room. And so within that area, the dynamics of your movement can be quite articulate, to the system. But they're basically really bad video cameras.

Tim: You were saying that the room can have 'hot spots' — the entire volume of this room is not equally surveyed.

David: This room has hot spots in particular because it's lit very specifically from three focussed points and those points are seen directly by the cameras. So when you cross between a light and the camera, there's a very direct sound as a result of that. Generally I like to set it up with a much more homogeneous light situation. I don't like the hot spots because I would like people to be able to move without thinking specifically where in the room they are, just think about the movements.

The piece is, in a sense, virtually invisible. It's just you and space, and sound happens.

Tina: What was your motivation for working with this kind of system? How did you start?

David: Well, I had just obtained the first synthesizer that I owned that I could actually have in my own apartment. It was a Korg NS-20 that had a lot of plugability — it was a real patch bay — and I thought, Wow, this is great, there's going to be a way of drawing a lot of stuff into the synthesizer to control it, other than just me tweaking the knobs and playing the keyboard. So I thought, Maybe I can connect light cells to cables and put those into the jacks and have a dancer casting shadows of light cells, and have those modify parameters of the synthesizer, and use that. The piece sort of started there, and about a year and a half later I decided I should do something with this and eventually the light cells having shadows cast on them turned into cameras having light reflected onto them, a computer was added to do the analysis, and digital synthesizers to do the sound. But it's still the same idea. It's just something that I really wanted to do, and wanted to do enough that I went about learning the technology to do it.

I used to have a lot of problems with what I used to call hallucinations, because I had a lot of noise in the camera and so it would suddenly decide there was someone in the room who wasn't there, and it would give a whole interpretation of that nonexistent movement, basically, probably because someone with a very powerful CB went by quite close, or something. People used to actually interpret it as spirits, and I would explain that it was just electromagnetic manifestations of something. I'm slowly getting rid of those things. The original cameras I built, I built in the state of not knowing anything about video cameras, and they were really awful, very bad. I'm slowly learning how to deal with that as well. It's a slow process learning how to deal with all this technology. You can't buy cameras like this at your radio shack — these low resolution cameras. You can get things in California made for missile guidance systems that are low resolution video cameras, but they're outrageously expensive and they don't like to let them out of the country in case they get in the hands of the Russians. It's a weird problem that you run into there.

Tim: I'm wondering if it's possible to state the objectives of this kind of investigation.

David: I've come up with about 100 objectives so far. I think it sort of breeds objectives — they spill out without my calling them forth. Originally it was because I thought it would be a really interesting thing to do. It was an idea that needed to be realized, as far as I was concerned. It became very important to me, the idea of the interaction itself ... in a very McLuhanesque kind of way in the sense that my nervous system was being dumped out into the space here and the people who walked through were interacting with me and my perceptions and the way I manifested them into the system. So there's that kind of interaction which got a bit upsetting after awhile, I think, it just got too intense. I would be watching someone in it and I would be too involved with what was going on, so I had to start leaving that behind. It's better to interact with people, obviously.

Tim: You felt they were moving with you?

David: Through me, in a sense. It was very strange. It was almost a sexual kind of thing, the relationship that developed. In a very real sense, I would walk out of a gallery show feeling very exhausted afterward. I had to stop going because I would just get drained. There is a real intimacy that develops, or that I feel, to the person who's in there. It's very hard if you don't know that person. But there are a lot of other things that have evolved in it for me now. I'm interested in the fact that it's not entirely predictable, yet it makes some degree of sense, and I'm interested in how people learn to work with that sort of situation; the degree to which people are annoyed and feel manipulated, and the degree to which they're manipulating it, all of the political issues, emotional issues, issues of consciousness of one's own body. It's a piece that really pushes self-consciousness on a certain level. You immediately have to become very conscious of yourself, and sometimes that has a very negative effect of making you feel shy, sometimes it has a positive effect of making you very connected with yourself. All of these things and about a hundred other things are involved in it for me now, as a result of watching people in it, thinking about it, working on it, developing and changing it.

Tim: You've said several times that it's an issue for you of not getting too far removed from your own body. Is there a line you can fall on the wrong side of; being in your body, listening to that, or paying more attention to what the machine is doing. Where does that line fall? I suppose part of the objective is to blur that. I would imagine it's a problem of an inventor and such a humanoid sort of device like this; what does that **do** to relationships with living breathing people?

David: For me, it's only had very beneficial effects. I hope that on one level it forces you to be **sort of open** and aware, and at the same time active and creative, so combining those two things in one **act**. Which in any situation, whether you're dealing with a human being or any other responsive situation in **your environment**, is a beneficial way of approaching things. I've found that it's really damaged my relationship with people to the degree that I've been right inside of the machine program, running it and designing the electronics. That's when I have difficulty with people because the level of concentration involved is one that doesn't allow you to be open and social. But I found when I'm in the piece, working on it after having come out from it, I'm much more capable of dealing with people. Certainly I don't see it as a replacement for people. Some people think that I'm trying to create something that replaces people in my life, it's not **that at all**. I think when I first started this piece I was very frustrated because I didn't find enough significance in the relationships I was having with the people in my life, and this was a sort of declaration that, I want significant relationships. Not with machines, but I could declare that through machines because they were the only ones I could produce on my own at that point. There are all sorts of weird things involved with one's own relationship with one's work. I've met an enormous number of people through this piece, let's put it that way.

This is a very important aspect of the piece for me. I can very much live in my imagination, and that ends up being a rut. For any artist there's a tension that has to be maintained between the ground and the sky, or your insides and the external world around you. This piece does draw you out, even if it does just draw you out into a cycle like this, it does draw you out into the world. And also from my point of view, it draws possibilities that were in my head out into the world — and it draws the world back in through the cameras into this construction of possibilities.

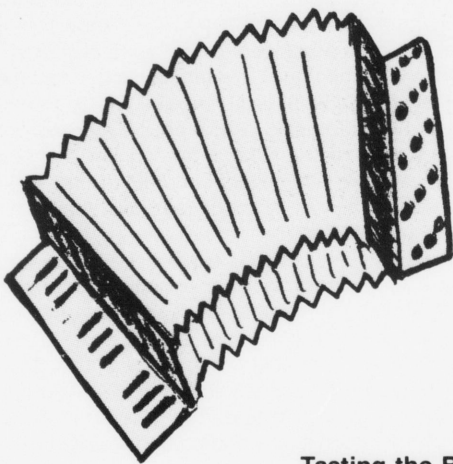
The piece is called **First Real Snake**, for very specific reasons. I have this symbol in my head of a snake as a sine wave, it's a wave of all kinds, and it's also a dialectic. ... The snake is a personification of that. It's a self-propelled dialectic, it's a self-propelled sine wave. This was the first piece that I did that embodied some of my ideas of the snake. Also, it's something that never quite pinned itself down, that was avoiding but swimming around in what's happening. It was a metaphor that was never quite parallel. There's a propulsion forward because of the inaccuracies of that metaphor.

The snake was originally a symbol of wisdom, and in the Bible it was the first one to turn wisdom into evil. But it originally is a symbol of wisdom.

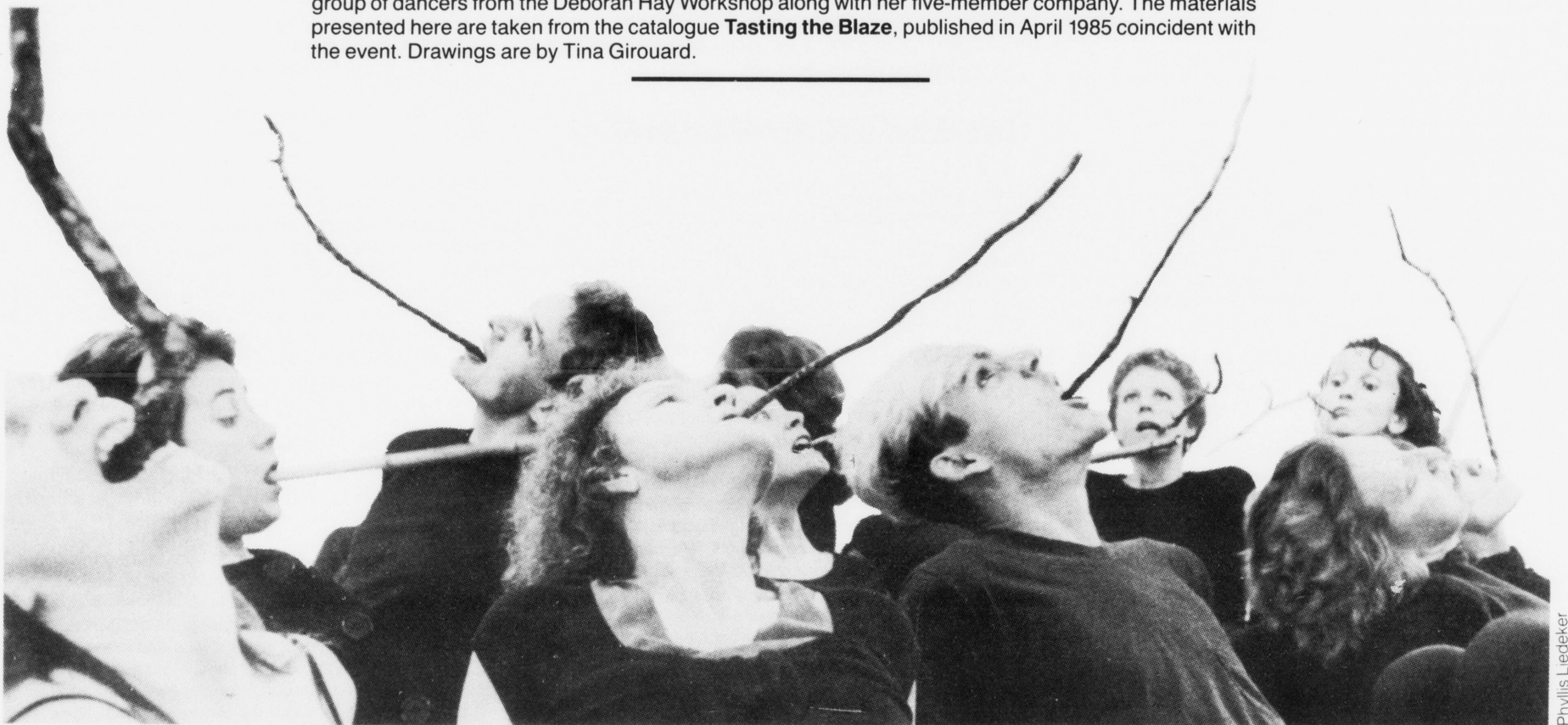
David Rokeby was born in Tillsonburg, Ontario, and raised in London, Hamilton, St. Catharines and Jordan, Ontario. After a year at Trinity College in Toronto focussing on visual art and philosophy, he set up a small electronic music studio, composed some film soundtracks, turned down some computer programming jobs, and dabbled in graphic art. He eventually ended up at the Ontario College of Art where he drew together his disparate interests by creating interactive computerized sound and video installations which have been exhibited across Canada.

TASTING THE BLAZE

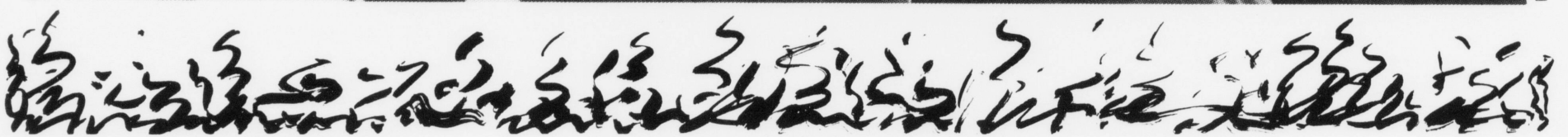
PAULINE OLIVEROS
DEBORAH HAY
TINA GIROUARD



Tasting the Blaze is a "three-hour multi-media intimate spectacle premiered at the Opry House in Austin, Texas on April 19, 1985. Performers include three different groups of musicians—B L Lacerta, a new music ensemble; Strahl Music, a five-accordion group; and a Gagaku Orchestra—and a large group of dancers from the Deborah Hay Workshop along with her five-member company. The materials presented here are taken from the catalogue **Tasting the Blaze**, published in April 1985 coincident with the event. Drawings are by Tina Girouard.



Phyllis Liedeker



A CONVERSATION IN A PARK; TINA GIROUARD, PAULINE OLIVEROS, DEBORAH HAY ...

(from a tape transcription, February 27, 1985, Austin, Texas)

Tina: Being the last component of *Tasting the Blaze*, being invited by the two of you, which was a wonderful surprise, I saw it immediately as a challenge, also. Then, because I am the third member of the collaboration, I'm most curious to know about the development of the collaboration between you, Pauline and Deborah, on *The Well*, particularly in the early stages, before *The Well* existed.

Pauline: My answer to that question is that we went into Deborah's studio, and Deborah danced and I played. We just kept doing that each morning. Getting acquainted with the energy of each other's work, watching, listening, and sensing. I worked out the images that Deborah presented and mentioned to me.

Tina: Deborah, do you remember any of those early images?

Deborah: When we began, we decided that we would not hold onto anything. That Pauline would play and I would dance, and we would not name anything anything, just so we could find out about, get acquainted with each other, with our energy flow.

Tina: Instead of having an idea and each of you finding your way to expressing that idea, it was that the two of you worked and the idea happened secondly, or the form happened as a result.

Deborah: My feeling is that both of us have had enough experience so that faith in what comes out of emptiness as a form was something that we both

knew we could trust, and I feel that that was a decision we made. What would come out of emptiness together, working together, I had been working with that as form and so had Pauline. Right?

Pauline: Yes.

Deborah: So, that was really where we were familiar, that was a discipline we both had in common — the practice of emptiness; not accumulating it, just coming to work at the most spontaneous place that we could possibly provide to ourselves at the time.

Tina: Do you see it as a searching or seeking process?

Deborah: Discovering. It was much more well rounded. Discovery is more rounded than searching.

Tina: Because you're targeting, if you're searching, you're looking for something.

Pauline: I think from my point of view, it's tuning to something, resonating. Knowing that there is presence, there is energy everywhere, and you tune to it.

Tina: You attune to it and you tune to it as well.

Pauline: Yes, that's my tune.

Deborah: I feel, Tina, like I could hear it in myself and maybe a little bit in Pauline, too, that we've been asking this question a lot. You know, how did *The Well* begin, how did you get started? And, the desire to come up with some other answer, or to approach it, to look at it some other way. For myself, personally, there's got to be another answer to that question.

Pauline: Well, I think there is, and certainly, since the beginning, there's a lot of material.

Tina: It was a subjective question I was asking because I feel that my way of working in the collaboration is quite different from that, and I suppose that's why I wanted to look in your face and hear it, not read it

or come about it some other way; to hear you say it to me.

Pauline: Well, how did you and Deborah work with *The Light of the Body*?

Tina: In my mind, with *The Light of the Body*, we felt in the end that it was an unbalanced collaboration; it turned out to be a collaboration, but at some point we decided it was not a collaboration. In the months as *The Light of the Body* was developing, I was not connected because, you know, of not living near enough to Austin to be a part of the subtlety of the formulation, that seminal time as the idea was developing. At one point I said, that's fine, you know, just to understand that I'm in a response position.

As it turned out, however, I was able to come, toward the end when the ideas were fully developed, and I think we did achieve a balance. In a way, that was something like the trio of the three of us. In that case, Richard Landry did the music, and you know, he's been my family for twenty years. So, we were very close together, and Deborah was here, and I think that Deborah is the force at play here, and I continued to respond to her, with this broad knowledge of some fifteen years of knowing her work and having been a part of it.

You used the word *faith* a while ago. I trust Deborah completely, and I'm interested in her because our work and our methods, our processes are different. I've learned from these collaborations, but through others as well, that the visual artist is coming at life from a completely different angle than musicians or dancers are, because we're tied to the physical matter of object and vision: the static image. Both of you are dealing with time, and I'm dealing with a permanence, a matter. It's like a stone compared with the wind.

A CONVERSATION BETWEEN PAULINE OLIVEROS AND TINA GIROUARD

(from a taped transcript, February 26, 1985, Austin, Texas)

Pauline: I am fascinated with the idea of a bonfire on Saturday. Your idea to bring everyone together to work and make a fire is wonderful. It's a ritual act and metaphor of the piece, *Tasting the Blaze*.

Tina: . . . part of my imagery is the space shuttle. The rocket is fire, it's like a bomb that sends our brothers and sisters now. Sally Ride went into a new territory: outer space. Also, with so many people (there are the twenty artists I'm working with, twenty musicians, then the twenty dancers plus the company, and we involved some thirty or so people in helping to produce the work) — to have everyone meet each other I think is really necessary.

Pauline: Then, of course, it gave me a wonderful impetus for the opening music, which is to record the fire and use the fire sound as a major sound element as it is — and also to use the rhythm of the fire.

Tina: As a jumping off place?

Pauline: Well, as a process, because the music or sounds can come right out of the fire.

Tina: Are you seeing it as a setting a tone, are you going to use the fire throughout? Or are you going

to use it to set a mood at the beginning of the piece? Or do you see it working through?

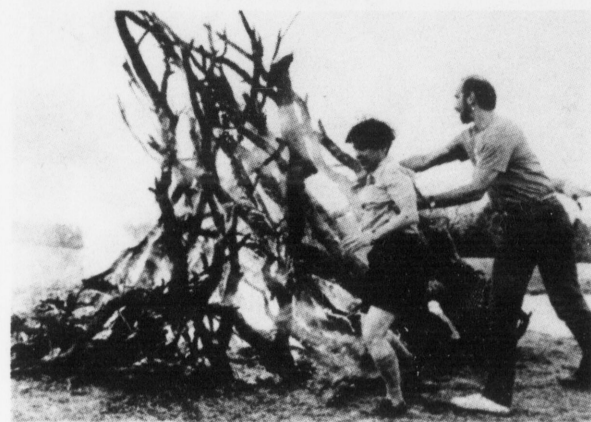
Pauline: Well, it might come back, but it certainly will be in the beginning as a parallel to the indigenous dance. You know the dancers each have contributed two movements, and so there is a sequence from those contributions.

Tina: Well, this fire will be something that we all make. It'll be as though you have this whole group as your orchestra for your fire.

Pauline: That's right, so you take the sound of the fire, I'll get the musicians to parallel the dance, in a way contributing sounds which come from no history.

Tina: And what I'm trying to do for you and for Deborah at that moment is to create a void to be filled with movement and music. I'm trying to stay out of suggesting anything, just presenting a blank. I guess my image for it is like the planet before the volcano or at the time of the volcano when the planet comes alive. Fortunately, *National Geographic* just had a two-hour special on volcanoes. They reconstructed Krakatoa and showed the dynamics of it, and I ate that information right up. The sound was heard or sensed 2,000 miles away.

Pauline: The sounds of fires are stored in everyone's memories.



Phyllis Liedeker

TASTING THE BLAZE,

an intimate spectacle or how people reflect the knowledge fire

The INTRODUCTION is the blaze

A trio in which Pauline, Tina, and Deborah in their respective art forms identify *Tasting the Blaze* as an attentional strategy for performance.

PROLOGUE

The indigenous dance, performed by the large group and the dance company as soloists, in which simple and unpretentious movements are performed ceremoniously by the community of dancers. *The indigenous dancer performs the rightness of movement, in which nothing is out of place.*

THE FIRST MOVEMENT is fuel

The Well is performed by the large group and the dance company. Complete attention is devoted to the movement of the body as the source of inexhaustible nourishment.

ENTRACTE

A metaphorical passage from the first to the second movement performed by the large group.

THE SECOND MOVEMENT is fire

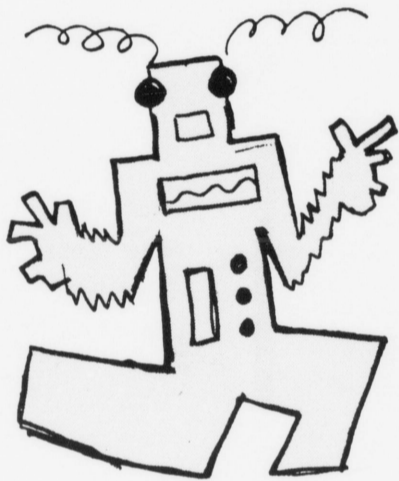
Preponderance of the Great. The peak. Extraordinary reanimation of the processes of growth. *Abundance.* A period of advanced civilization. The will is directed toward what is great. A situation that cannot last. Performed by the large group and the dance company.

THE THIRD MOVEMENT is the hearth

The Gentle. Work. Ceaselessness. Always moving toward clarity. Wind. Homecoming. *A Love Song.* Performed by the large group, the dance company, and the dance company as soloists.

— D. H.

February 10, 1985



Pauline: Well, I think of sound as occupying space, auditory space.

Tina: In the sculptural sense. But as soon as you hear it, it's gone.

Pauline: No. (I could get existential here. . . .) I think being really, physically, truly aware of the sound is different from just having it disappear. It becomes a part of you rather than disappearing.

Tina: You mean the richness of experience, that all becomes a permanence. I'm not speaking of any kind of existentialism. I mean the static object versus the moving, shifting, changing of music and dance.

Pauline: Right, I understand what you mean. But at the same time, it seems to me your talking about the way you're going to work is with moving images.

Tina: Oh, for *Tasting the Blaze* you mean. Well, there's no nuance in it. It's a big thing that just moves, and it comes to its place and stops. I'm trying, you're right. I'm influenced and I'm very excited about not trying to form some sort of scene, or put a frame around what you and Deborah are doing. I think that that's the strength and balance of the collaboration: that we're all going to be at work together.

Deborah: You know, I think that there's an even more simplistic statement to be made. I mean, I want your work around my work. I'm collaborating with people who are friends, and I want what you do to be close to what I do. I want what you do within the same time that what I do is happening. All our reasons for collaborating are slightly different; how you and I started collaborating, or how Pauline and I started collaborating, they're slightly different, but yet there is something. . . . I can't even quite describe it. I mean, there's just some indescribable connection with

another person's work that you want around your work. You can't even say what the great attraction is, maybe, but you feel like you want more of what you pick up on in another person's work. And I feel that's why we're collaborating.

Tina, there was something about what it was from the very first time I met you in New York. Something about who you are as a person, your material, so that I want you to be included in the work that I do in some dimension. I think that probably most people end up collaborating that way. . . .

Tina: Well, it feels almost that certainly, by our choosing each other, that is the major statement right there; that is the collaboration, that we already have this bonding, this mutual bonding. But it seems to me that you're making a special place that doesn't exist without you, and you want to have a group of people. It's like in *Tasting the Blaze*, it's starting to feel like we're creating almost a city, because we've had this elaborate, ever-widening circle of people who are involved; it's like our goal is to arrive at this place all at the same time, fully awake, and belong there; and I can't wait to get there. And we won't have to leave it — then it belongs to us forever, with the power and intimacy of passion. It's the analogy of making a dinner, with everyone bringing a part of the meal and you sit down together, and you all eat it. Which is the reason for the bonfire, to practice belonging together.

Pauline: The sharing of experience, it has a meaningful input into the work. Your desire to do that, of course, triggered my interest in recording the fire as part of the music. Those are important ways that you collaborate.

Deborah: I think that another realm of the collaboration was at one of my board meetings, when we were trying

to think of categories of contributors for *Tasting the Blaze*. It was my board that came up with the idea that if you gave \$10, you were a spark, and if you gave \$25 you were a blaze, and if you gave \$100, you were —

Tina: And if you gave a million dollars you were a nuclear power plant!

Deborah: It's a very small thing, but three months later in the Houston airport, where I was waiting to catch my airplane for five hours, that's what came to my mind in terms of the sections of the program; the introduction being the spark, the entract being the flame . . . so there's the collaboration with the behind-the-scene participants.

Tina: The collaboration's far beyond us at this point. We came together and started this ever-widening circle around us. Pauline and I touched on this the other day. With the indigenous dance, for instance, you were listening to and letting the actual moves come from the individual dancers; we are all doing the same thing. So the collaboration is like spiders spinning away, making the web, the place, home.

Pauline: I see an analogy between some of the work you do, Tina, and the indigenous dance, each dancer contributing to the movements and those coming together. But it's very much like one of your murals or paintings, with your images, the common image, like the frog or the saxophone or the gun or the plane; and how you put those together, it's not static. The pattern is very rhythmic.

Tina: Yes, I know. I'm trying . . . to put time in an object.

Pauline: It seems to me that there is an analogous relationship there.



Phyllis Lieberman

NOTES ON THE INDIGENOUS DANCE /DEBORAH HAY

The indigenous dance comes from a desire to make visible the ceremony inherent in movement. The inspiration to create such a dance comes from seeing the Alabama-Coushatta Indians at the Dougherty Arts Center, Austin, Texas, September 7, 1984.

Dear Tina and Pauline,
" . . . the indigenous peoples understood the rightness of nature, in which nothing is out of place."
— from *Indian Country* by Peter Matthiessen

The indigenous dancer understands the rightness of movement, in which nothing is out of place, time, form, character, or possibility.

The indigenous dance is accompanied by the vibration of one's own rhythm. The movement being performed is simultaneously impressed upon space.

The indigenous dance is the first dance. There is no existing vocabulary. It is performed by the first and only person. There is no loneliness because there is no knowledge of other people. The dance is performed in relation to the universe.

The indigenous dance is the honoring of movement as it is being performed and the honoring of the space in which it is performed.

Because of a twenty-year-old curiosity about the presentation of all movement as dance, all movement is indigenous movement if it is performed with that understanding.

USE OF THE I CHING AND THE DEVELOPMENT OF THE WELL

The coins were thrown in order to determine the overriding influence of each dance.

The hexagram was read several times and then left alone for several days. I would do this in the course

II THE INDIGENOUS DANCE

ICHI

5' WATER

ENERGY: CALM, FLOWING, INEXHAUSTIBLE NOURISHMENT.
~~RAINS, WATERFALL, BROOKS - DRIPPING, BUBBLING, RAPPING.~~
VOCAL SOLO

KU

5' FIRE

ENERGY: FAST, SNAPPING, CRACKLING, FLAMING, BURNING, HEATING, SCORCHING, BURNING
PERCUSSION SOLO

BO

5' AIR

ENERGY: BREATH OF LIFE, WINDS, BLOWING, GUSTING, CHANGING, AIRING, WHISTLING
RYUTEKI SOLO

BI

5' METAL

ENERGY: CHANGING DYNAMIC SHAPES, HARD CLANGING, TINKLING, CLANKING, CLUNKING, WORKING METALS
TRUMPET SOLO

KATZU

5' EARTH

ENERGY: STABILITY, SUSTAINING, STILLNESS, DARKNESS, MOUNTAINS, VALLEYS, PLAINS, SOIL
CELLO SOLO

PAULINE OLIVEROS

The Introduction (the blaze) and a shortened version of Pauline Oliveros' music for *The Indigenous Dance* can be heard on the MUSICWORKS 33 cassette tape.

II THE INDIGENOUS DANCE LARGE GROUP AND SOLO DANCERS

INSTRUCTIONS:
THE 5 GIVEN CHORDS, REPRESENTING WATER, FIRE, AIR, METAL AND EARTH RESPECTIVELY, ARE TO BE SUSTAINED FOR APPROXIMATELY 5 MINUTES EACH FOR A TOTAL OF 25 MINUTES ALTOGETHER. TRANSITIONS BETWEEN THE CHORDS ARE TO BE MADE GRADUALLY, ORGANICALLY WITH AN OVERLAP OF 1 TO 2 MINUTES OR MORE.

PART A OF THE INDIGENOUS DANCE INCLUDES WATER, FIRE AND AIR. (15 MINUTES) PART A IS PERFORMED BY THE LARGE GROUP AND TWO SOLOISTS.

PART B INCLUDES METAL AND EARTH. (10 MINUTES) PART B BEGINS WITH THE STEP HOP PERFORMED BY THE LARGE GROUP AND ONE SOLOIST.

THE INDIGENOUS DANCE BEGINS WITH THE CRY OF THE PHOENIX GIVEN BY THE SHO PLAYERS USING THE CHORD ICHI. THEN THE ACCORDIONS BEGIN PERFORMING THE WATER CHORD. THE OTHER INSTRUMENTS ENTER GRADUALLY AS INDIVIDUAL DANCERS JOIN THE LARGE GROUP.

ACCORDIONS: EXPRESS THE DIFFERENT ENERGY ASSOCIATED WITH EACH CHORD BY USING THE GIVEN NOTES IN ONE OR BOTH HANDS. USE ONE OR MORE NOTES TO DEVELOP APPROPRIATE PATTERNS FOR THE GIVEN ENERGY. BE SUBTLE, EXPRESSIVE WITHOUT OVER STATING THE MATERIAL. LISTEN! OCCASIONALLY IMITATE, ECHO OR SUSTAIN TONES WHICH OTHER INSTRUMENTS ARE PLAYING.

THE WELL

USE ONLY IN ALL REGISTERS.

USE THE FOLLOWING GUIDE WORDS FOR ALL ENSEMBLE INTERACTIONS AND FOR WATCHING THE DANCERS:

LISTEN IS HOME
MERGE MEANS MAKE YOUR SOUND DISAPPEAR INTO SOMEONE ELSE'S SOUND.
MATCH MEANS PLAY EXACTLY AS SOMEONE ELSE IS PLAYING.
SUPPORT MEANS TO ACCOMPANY WHAT SOMEONE ELSE IS PLAYING.
SOAR MEANS TO SOLO OR RIDE.

Pauline Oliveros SEPTEMBER 1982 AUSTIN, TEXAS

PREPONDERANCE OF THE GREAT

REACTING INSTANTANEOUSLY WITH SHORT LOUD IMPULSES.

SOME TIMES ANTICIPATING A DANCER'S MOVE OR SOUND. SILENCES ARE ALWAYS CHARGED, ELECTRIC BECAUSE THE NEXT SOUND MAY OR MAY NOT COME.

MAKE SOUND TO TRIGGER ANOTHER SOUND OR MOVEMENT, OR MAKE SOUND AS A RESPONSE TO ANOTHER SOUND OR MOVEMENT.

Pauline Oliveros
January 1983
Austin, Texas

THE GENTLE

ONLY. ALL REGISTERS.

NEVER MORE THAN 2 OR 3 NOTES PER PATTERN. PLAY ALL OR ANY PART OF THE RHYTHMIC MODE. SHIFT ACCENTS.

INTRODUCE OCCASIONAL LONG TONES WITH DYNAMIC SHAPES. NO MELODIES.

Pauline Oliveros
January 1983
Austin, Texas



Tina: I have always been an admirer of the mundane, making the ordinary extraordinary and the extraordinary ordinary.

Pauline: Well, if you listen to the sound long enough, it becomes extraordinary.

Tina: Because you bring more attention to it, and it grows. The more you give of yourself as a witness, the larger and larger it becomes, be it a step-hop, or middle C, or a dollar sign.

Pauline: [As a dog romps through the park] I'm watching the indigenous dancer.

Tina: [As a grackle screams] I'm listening to the indigenous sound. [silence]

Pauline: So, Deborah, what are you listening to these days when you're working with my music? I wanted to ask you that, and I haven't had the chance to ask you.

Deborah: I'm listening to its nonrepetition and I'm listening to its authenticity. I can hear in the sound some kind of truth of what you're thinking of.

Pauline: Can you say any more about it? Enlighten me. I just want to see if I can get some understanding of the movement.

Deborah: There's one tape in particular that Pauline sent me that she made from the porch. I've been listening to it a lot and playing it a lot in the workshop. I feel like it's an example. While we're doing our dancing, if people can hear it at the same time, it's an example of the dynamics of being present. It's a graphic example of Pauline's presence in the moment; you can hear that through the sound. And it's funny, it has a lot of humor in it, it's very sweet and loving, and it is the sound of the *ah hah* that I talk about

when I teach.
Pauline: What do you mean by *ah hah*?
Tina: We haven't taken your classes, Deborah. [Laughter]
Deborah: *Ah hah* means understanding the moment, when you understand something and it just happens. . . . It doesn't even happen, it's a depth of understanding, it doesn't happen in time, it's not sequential understanding, it's instantaneous understanding. It's understanding the connection, your connection to the whole. It's understanding of the whole, and you can't describe it. It's a combination of humility, honor, and understanding. . . . It's *ah hah*!
Tina: I've experienced it, and it is quick. To me, it's like lightning. And the moment you realize it, it's over.
Deborah: But it isn't quick in that moment.
Pauline: It occupies all of space. And that's what I meant about music occupying space instead of time. The truth of it is that you can enter, go in balance between those realms, the tempo and spatial realms.
Tina: In terms of your attention. That's the way I feel. When I listen to your music, Pauline, I experience it as a rocking motion. I'm not moving physically or tapping or anything, but I feel drawn to, like breathing, I feel drawn to the inhale and pushed away with the exhale, and I think my consciousness or my attention, my focus might even change with it. It's the accordion. The expanding and contracting thing. That breathing of a huge lung. That's how I'm experiencing your music.
Pauline: You're talking about my accordion music.
Tina: Yes, which is what I'm most familiar with, certainly in performance.
Pauline: But now I have to transmit that big-lung feeling

to the three groups.
Tina: I don't think you'll have any problems.
Pauline: So I can breathe in, breathe out, be present with each sound. It's the moment-to-moment consciousness of every detail of the sound.
Tina: There is another thing that we share in terms of our separate forms. There are a lot of sounds and rhythms in what you do. There are a lot of movements, small ones, but also the locomotive ones. It's the body moving in place and moving in space. A lot of small details, changes, quick changes. You know, in my work, it's layers and layers that fracture each other, and so you look at what I do . . . it's confetti on one level. Then if you focus on any individual aspect, it's the most simple, reduced, common image.
Deborah: Do you think, do you know of another composer who makes music from sound and not notes?
Pauline: Malcolm Goldstein does that.
Deborah: Probably people who are immediately around you and your work. I think that that's what's so exciting to me, the realization that you're hearing music coming from sound.
Tina: Just as we don't recognize any arabesques in your work.
Deborah: No, even if they're there, they're there for the sake of movement, not for the sake of arabesque, and I feel like that's common with us all. We're a pretty rudimentary group.
Tina: Work with what is there, work with what is abundant, conceptually, in terms of our sources, but also in the manufacture of the separate works. I am

certainly responding in Austin, Texas, in 1985, and to, since I'm working in the physical space, matter. So the Austin Opera House is my big sound, it's the sound that I'm listening to right now. Do you feel that way? I'm saying that my work is site specific.
Pauline: It's always true that wherever I am, I'm listening to the auditory space. Each place that one performs has different characteristics, different problems, different solutions, and the Opera House will be a different one, for me.
Tina: You mentioned a fiddler, rather than a violinist.
Pauline: Because it's the sound of the country fiddler I'm looking for, which is of course a very indigenous sound around here, and I would like to have that in my work and the piece, if we can work it out, so it does relate to the Opera House, which represents country/western music.
Tina: [to Deborah] Do you still go out dancing around here? I know you did.
Deborah: Oh, I did, but I haven't gone out dancing in a year; I can't believe it.
Tina: Well, you get up every day and you go and you dance with twenty-five people for three hours; I'm jealous. Instead of talking, I'd rather be painting, and I'm sure you'd rather be playing music, and I'm sure you'd rather be dancing.
Deborah: To articulate, it seems like a choice. You make the choice to talk. I do when I'm teaching and I don't when I'm not teaching. It's a realm I keep a lid on. I put up my own reserve.
Tina: So that it's there for you. [Pause] The reason to articulate now is the catalogue. I see the catalogue as a document and a dilemma. How do you present something that hasn't happened, if it is to be a

document of *Tasting the Blaze*, how can it? There is no *Tasting the Blaze* yet. There is a swirling effect, a tightening as we're getting closer and closer, but I loathe to, at this point, say that this is it, that this is *Tasting the Blaze*. How can it be?
Deborah: For yourself, Tina, your work and what you do, how do you understand *Tasting the Blaze*?
Tina: I have taken the phrase *Tasting the Blaze* and branded it somewhere on the inside of my eyelids, and I haven't delved into the source of where it came from, or any of that. My kind of meditation has been looking at fire continually. I heat my house with a wood-burning stove, so I'm thinking about the blaze all of the time. I've decided for myself that all of the elements must be there for there to be fire, so a lot of my imagery for *Tasting the Blaze* is air, earth, water, and fire; it's not just fire.
Deborah: Do you know what I love? The fact that in the program, *The Well* is the fuel, so the water is the source of the fire.
Tina: My symbol for water, for *Tasting the Blaze*, is the frogman, this very modern person who has conquered the elements, right? He's got his oxygen tanks on. But the frog itself, somehow, decomposing, is fire. Decomposition is fire. And tadpoles always seem to come from nowhere, they seem to come out of the rotting leaves at the bottom of the puddle, right? They can be born and die because the sun dries up the puddle. Another thing about them is that tadpoles are fish when they're born, and then they come out of the water, and they're frogs. So all of that, you know, went on in my head.
The set pieces, I can't talk about the set pieces. I know that I'm going to join you, instead of, as I said earlier, framing or decorating what the two of you are

doing, I've joined in with you and am performing. So this "people-powered parade" is on its way, but I don't know what those dozen or so images are going to be yet, because I want to work with what is best and what's in abundance and with the people, just as you're letting the dancers suggest the moves, and Pauline's letting the musicians suggest the sound. I'm doing the same thing. Did that answer anything for you, Deborah? In this past month, with fire meditation, I've been smoking cigarettes all day long. I've been cleaning under four hundred pecan trees and gathering up that wood, chopping it up for next year's heat, but also setting these big bonfires every week.
[Looking at notes] Myth, I have here "myth, mystery"; where do they play? Does it figure into your work?
Pauline: Well, it is mystery, where it all comes from. I think there's a certain mystery as to what the shape of the sound will be, how another one will join them, those are the mysteries. It's mysterious how it all works, and it does.
Tina: It's provocative. For the receiver, there's that other mystery also, the one they receive.
Pauline: Right. You mean mystery like a mystery story, what's meaningful in an experience, not just the experience itself. Are you talking about that kind of mystery?
Tina: Mystery in that sense. Mystery that could provoke illusion, provoke narrative revery, mystery in the sense that the content is never fully disclosed.
Pauline: I see. So, there are areas or places to go which are unknown in whatever is to be presented.
Tina: And in the perception. And Deborah, my question for you is myth. [Silence]

A CONFERENCE CALL INTERVIEW:

Pauline Oliveros, Deborah Hay, Lisa Nelson (for CQ*) August 19, 1984

Lisa (in Vermont): Hi Deborah. Hi Pauline. Can you describe how you work with sound and movement in your collaboration, what the essence of that work is?

Deborah (in Austin): It has to do with listening. And that both Pauline and myself have a long history of practicing listening. Both of us have a long history with martial arts, with tai-chi and karate. I think that there's a parallel too in the nature of the listening, a total kind of listening. Not just ear listening. It is a kind of attention that is warrior-like without the added aggressive characteristics of the warrior. It is a strong and grounded listening.

Lisa: I'm thinking about the word *listening* because I use it a lot and I wonder why, in a way, we don't say *sensing*. How is the word *listening* defined?

Deborah: It's freer than *sensing*. When I think of sensing I think of the limitations of sight, smell, taste, touch, and when I think about *listening*, I'm really talking about a perceptual mode outside of, or in addition to sensing — a sensing mode that certainly includes perception beyond the three dimensions. It includes an extra-sensory perception; it includes a belief that all knowledge is present always and that in listening you can hear anything.

Lisa: Is the term ever used in the training in martial arts?

Deborah: It wasn't with my teacher. He only spoke Manchurian Chinese. I never learned martial arts from the verbal language. I really had to learn it from listening. With my eyes.

Lisa: Pauline, do you have an idea about listening?

Pauline (in Houston): First of all, *listening* in the way that Deborah is presenting it is very much the same

as the way I use the term. It means total presence, total, an inclusive kind of presence in whatever one is doing. The warrior way in the martial arts required that to stay alive. It's a life-or-death reality. And I think that in order to work with sound in the way that Deborah and I are working is nothing less than a life-and-death reality. That the moment you leave, in the sense of a lapse in attention, then you've lost, you've died. In that moment, you lose everyone; it's that crucial, that critical.

Reprinted from *Contact Quarterly*, a vehicle for moving ideas. Music and Sound Issue No. 1 published Vol. X, No. 1, Winter 1985



HORSE SINGS FROM CLOUD

To dancing breath

LISTEN
LONG SOUND
SOUND LONG
LONG BREATH
BREATHE LONG
LISTEN
SOUND STRONGER
BREATH LONGER
SOUND LONGER
BREATHE STRONGER
BREATH SOUND
SOUND BREATH
LISTEN
DANCING BREATH
LISTEN
NO CHANGE
WHEN DESIRE
TO CHANGE
CHANGE WHEN
NO DESIRE
TO CHANGE
WHEN DESIRE CHANGE
CHANGE DESIRE
WHEN NO DESIRE
NO CHANGE
LISTEN
BREATHE SOUND
WHEN NO SOUND
BREATH CHANGE
WHEN NO CHANGE
BREATHE DESIRE

Horse Sings From Cloud by Pauline Oliveros is recorded on her LP recordings **The Wanderer** and **Horse Sings From Cloud** both on the Lovely Music label.

Pauline Oliveros, c/o Marianne Collins, 2430 West Saugerties Road, Saugerties, New York, 12477.

Deborah Hay, c/o The Deborah Hay Dance Company, 1007 Lorrain, Austin, Texas, 78703.

Tina Girouard, P.O. Box 64, Cecilia, Los Angeles, 70521.

Pauline Oliveros Austin, Texas January 8, 1984

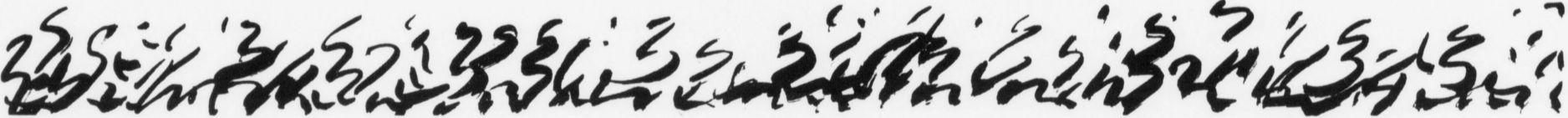
LISTEN
DANCING BREATH
CHANGE
BREATHE
SOUND
DESIRE
DESIRE
CHANGE
BREATHE
SOUND
SOUND
CHANGE
DESIRE
BREATH
BREATHE
SOUND
CHANGE
DESIRE
LISTEN
DANCING BREATH
WHEN NO BREATH
NO CHANGE
NO DESIRE
NO SOUND
LISTEN
DANCING BREATH
LISTEN
HORSE SINGS FROM CLOUD

DANCING BREATH

Years ago, when I was still living on a farm in Vermont, I was given a name. It happened while I was engaged in my daily practice of movement. It is a particularly strong memory because as it was happening, I could feel myself being changed.

I was alone and heard "dancing breath" spoken one time. My movement practice then was to listen, perform, and let go of everything I perceived for one uninterrupted hour every day. Within this context there was no time to question the clear deep quality of the voice which spoke "dancing breath." Within this same context, I had to let go of it. But as these actions were occurring, I recognized that the name I heard was mine, and that it was bestowed as a gift.

A few years later I learned that in Japanese, the calligraphy for "dancing breath" translates "to stop the mouth, to use the body." — D. H. March 1985



Deborah: I'd much rather answer mystery. One of the places that, as the doer of the dance, I encourage people to go, myself included, is the place where you don't know anything, where you don't know what movement feels like. You don't know what this moment feels like, you have no idea what's coming up, not even what's been, so you can discover whatever is now.

Tina: So in essence, you guys are never repeating yourselves at all. In fact, you're never repeating yourself. With 250 hours of rehearsal, you will not have ever repeated yourself.

Deborah: Gertrude Stein says that there is no such thing as repetition, just insistence.

Tina: Just insistence, or persistence?

Deborah: I like insistence.

Tina: Pauline touched on it a moment ago: it's like leaving. I try to leave room for the viewer, for the receiver, so there's room for them to be there, too, to add their two cents. Perhaps in my case, I am shooting for the narrative, and so I am working more toward the mystery story than I'd like to admit. So I'm giving clues and letting the witnesses discern, solve the mystery for themselves.

Deborah: I think we all want to play, rather than tell them what to do. We want to play with the perceiver of our work, we want them to be engaged. I feel like a lot of what I do is playing. And it's inviting the receiver to play along with me, and not tell them what I'm doing. Not telling a story. I mean, I think storytelling is fun, but I'm not a storyteller, you're not a storyteller.

Tina: No, no, but I thought perhaps that I was closer to that because I'm dealing with these literal objects

out of life.

Deborah: I don't think so. I think the parallel in my work is that my movements can easily allude to other things. There are references, there are glimpses of movements that people can identify with, but there's no continuity of identification, so it's non-narrative. But one invites the perceiver into it.

Tina: I'm feeling like we're provoking it.

Deborah: We all do what we're supposed to. I mean, I sort of make dances, Pauline sort of makes music, it's not quite music, and you sort of make images, but you can't quite put your hands on them.

Tina: You can't say that I'm a portrait painter, and you're a ballerina, and you're an accordion player.

Deborah: I think we all like to stay on the edge of having our work defined.

Tina: Do you think that we're hiding?

Deborah: Oh no. I don't think of it as hiding; I think of it as playing. I don't want to play in the safe territory of making dances. It's boring.

Tina: Well, we all made that kind of decision a long, long time ago. The veil of mystery, keeping your veil up, maybe not wanting to be tied down is really why we all chose that path. Not wanting to be rigid. All of us are living the changes rather than living the repetition. And somehow I don't see it as hiding, but it is something that one could call the veil of mystery.

Deborah: I think the mystery in the dancing is in the performance of that dancing and in the perceiving, and the willingness to perceive the dancing. It's the performer willing to be heard, and willing to be heard absolutely from the unknown, from a non-knowing place — a conscious place — but one that is full of non-knowing, from listening. And I feel that the mystery

comes from the performers, and of course the mystery is in the performance, and the mystery is in the perception of the performance, how willing the audience is to *not know* what it is that they're all looking at, to have mystery, just the movement of mystery.

Pauline: And not to have to hear a sonata allegro form.

Tina: Beyond the veil. . . . Another thing that we share is that we all bear our souls. We are all pulling out as deeply as we can to reveal ourselves. And looking internally to make sure that we really open up as much as possible and tell as much of the truth as we can, knowing full well that the simplest things are the truest things. They're not shaded by social mores or cultural molds, either one. So we are wearing veils but are naked underneath them. Because I try to express the cacophony of the world, that's what I'm responding to in my work: that there is no pure life possible, no pure existence possible. We are bombarded daily with sensory overload, and so I have stopped chasing the one. Instead of trying to pull the universe out of one thing, I'm just trying to accept this confetti, this barrage of experience as what it is. I want it all. I want the four-leaf clover, I want that spotted dog, I want the jet that flew over, I want to know that they're all there and that I don't have to pretend that they're not.

For a long time, I tried to pretend that it didn't exist. When I chose to be an artist, it was so I could invent my own life and not have to pay any attention to the rest of the world. But now I feel quite different. When I'm in my studio in Cecilia, I'm painting for a farmer who's in his seventies and who never made it past the third grade, and for the kids who live down the road and come pick pecans. I want to make sure that not only art enthusiasts see what I'm doing, but that it's visible and communicates to anyone.

HARMONIC CONVERGENCE

JOSE ARGUELLES

HARMONIC CONVERGENCE is the name given to a Planet Art Event of unprecedented dimensions to occur August 16, 1987.

Conception and planning for the event began in 1983 as an outgrowth of research related to the text **EARTH ASCENDING: AN ILLUSTRATED TREATISE ON THE LAW GOVERNING WHOLE SYSTEMS** (Shambhala, 1984). The original inspiration for HARMONIC CONVERGENCE was provided by the clearly perceived need to bring the **biopsychoic** field of the planet into resonance with the other two planetary fields, the **electromagnetic** and the **gravitational**.

The first strategy to attain HARMONIC CONVERGENCE is **geomantic**: to consciously coordinate great numbers of the planet's power points: sacred natural sites, temples, and key historic memorials of human suffering and transfiguration. The mapping of these sites is being charted according to information about the **earth grid** of planetary energy lines. The geomantic strategy will be focussed through a globally synchronized ritual event: EARTH SURRENDER RITES, to take place at Dawn, August 16, 1987. This neo-shamanic ritual event will occur within the context of light-sound (RADIOSONIC) synchronizations keyed to code information based on the resonant field matrices presented in **EARTH ASCENDING**. The intention is to create a multisensory, synaesthetic field of such harmonic power that the biopsychoic field will be harmonically interfaced with the electromagnetic and gravitational fields of the planet: HARMONIC CONVERGENCE.

As design of the geomantic strategy develops, two other factors have come into play: **resonant frequency technologies** and **crystals**. Resonant frequency technologies merge earth grid research (geomancy) with research in wave harmonics, including much of the work pioneered by Nicholas Tesla. The operating premise is that the earth itself

is fundamentally crystalline in nature and structure, hence the image of THE CRYSTAL EARTH, and the over-all name of the strategy: THE CRYSTAL EARTH GRIDWORK PROJECT.

While crystals represent the alpha of technology, computers are the omega. In bringing together the resonant earth harmonics of the crystal with the instantaneousness of computers and related information technologies, HARMONIC CONVERGENCE provides the opportunity for the merging of technological alpha and omega. This unprecedented achievement represents the evolutionary moment by which left hemisphere technology is finally brought up to speed with the intuitive instantaneousness of the right hemisphere.

Amounting to the creation of an integrated planetary biopsychoic circuit, the synchronization of virtually immaterial information technologies with the geomantic dimension of the event qualify HARMONIC CONVERGENCE as the MANHATTAN PROJECT OF THE CREATIVE IMAGINATION.

Questions concerning the capacity to achieve a planetary synchronization of the order of HARMONIC CONVERGENCE were put to rest by the LIVE AID event, July 13, 1985. If ten weeks were all it took to launch the new era in global telecommunications, then something less than two years can suffice to launch a new world order—for that is precisely what is intended as the outcome of HARMONIC CONVERGENCE: the synergistic transition from **Global Industrial Society** to a media networked, decentralized **Global Information Society**. The measure of success of HARMONIC CONVERGENCE will be the facility with which the new order may be implemented through a massive social reorganization plan, THE CAMPAIGN FOR THE EARTH.

Building on the momentum of events like LIVE AID, THE FIRST EARTH RUN (SPRING, 1986), WORLD DAY (JUNE 21, 1986), and the

GOODWILL GAMES (SUMMER, 1986), HARMONIC CONVERGENCE will also take on a dimension of great popularity. But this popular movement, expressed through numerous media/entertainment packages and local and transnational alliances will itself only be the crest of a gathering wave: HARMONIC CONVERGENCE.

Greater than the power of the human race is the power of the earth. HARMONIC CONVERGENCE is the wavelength of the evolutionary program of the planet. Riding the wavelength of planetary synchronization humanity may arrive at a moment of collective realization. Brought about through a superior coordination of art, science and genuinely spiritual intention, this realization will not be any human possession but rather will come as a gift of the earth.

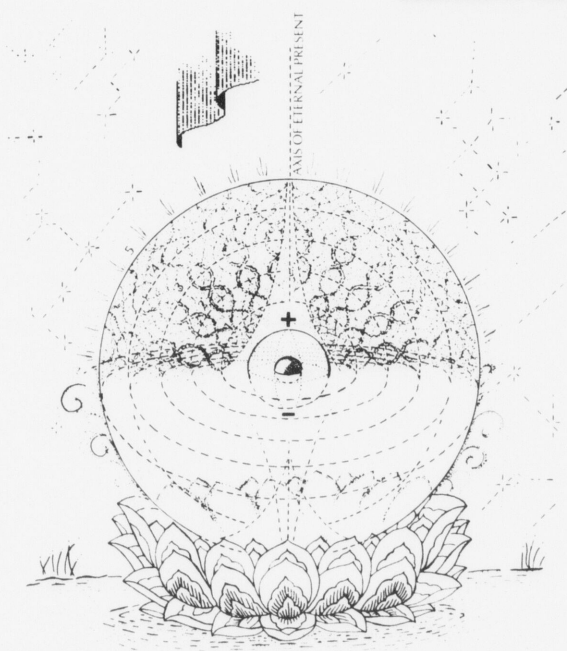
For the designers of HARMONIC CONVERGENCE, the fulfillment of Bucky's **Design Revolution**, the planetary situation is not an issue of peace and war, but rather one of rejoining the evolutionary mainstream. At the heart of this mainstream is not the stasis of ownership and material status but transformation—continuous, dynamic never-ending transformation.

To paraphrase Goethe, HARMONIC CONVERGENCE is

INFORMATION TRANSFORMATION
ETERNAL MINDS'S ETERNAL
RECREATION

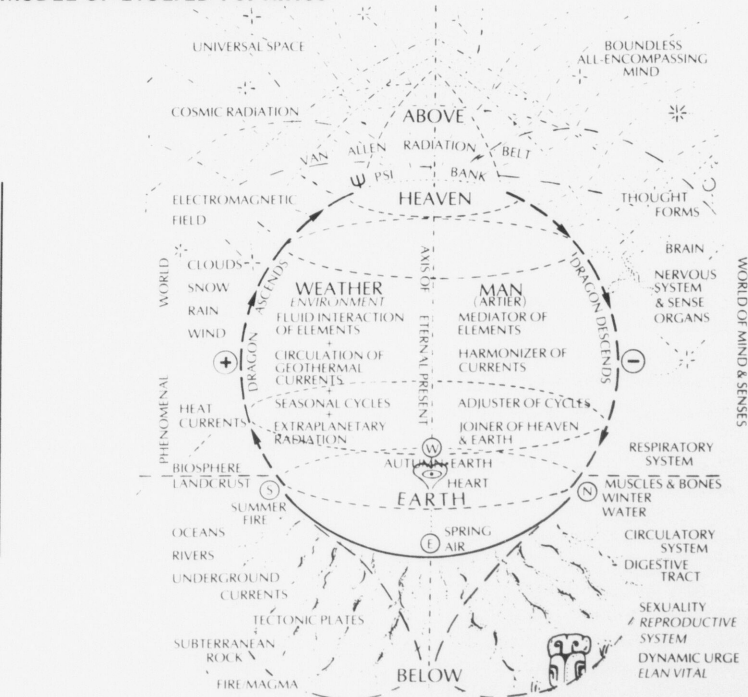
A PLANET ART NETWORK Time-Release. Boulder, Colorado, 105 W. Mystic Column, September 5-6, 1985 40 AH

GEOMANTIC FLOWCHART AND MODEL OF EVOLVED PSI RINGS



The geomantic flowchart corresponds to the primary geomantic perception, heaven above, earth below, and man in between. As we have seen, these three designations correspond respectively to the electromagnetic, gravitational, and biopsychoic fields of the primary resonant field model. The geomantic flowchart emphasizes this three-part relationship as an organismic cycle revolving about the central axis which divides the model into two halves: man and weather.

As the two volatile variables between heaven and earth, man and the weather comprise a unique binary relationship, the mutual interaction of which has long been a recognized foundation of all systems of geomancy. More generally, the weather or left-hand side of the geomantic flowchart represents the total spectrum of the phenomenal world known to man, the so-called objective world. The right-hand side, representing the biopsychoic spectrum of internal and



external sensations as well as all psychic impulses, corresponds to the so-called subjective world of mind. The totality of these two halves, with all of their mutual correspondences, comprises the binary structure of nature and the holonomic model of knowing.

The facing model of a holonomic topocosm with evolved psi bank rings depicts a consciously harmonized planetary field structure, the primal model of which is represented by the geomantic flowchart. The horizontal rings represent the motions of the planet in time—the gravitational field—while the vertical rings correspond to the cumulative articulations of the different psychocultural stages in the planet's evolution toward a consciously harmonized condition. The lotus, from which emerges this "planet with noosphere," to use de Chardin's phrase, is the age-old symbol of purity and awakened intelligence. ●

From **Earth Ascending: An Illustrated Treatise on the Law Governing Whole Systems** Jose Arguelles, Shambala, 1984, pages 38 and 39.

DAVID DUNN

(From) An Expository Journal of Extractions from Wilderness

6

Near where I live is a coastal estuary set aside as a bird refuge. This estuary lies north of a small group of hills and canyons covered in the indigenous chapparel (Southern California coastal scrub). But surrounding this patch of uninhabited terrain is the suburban sprawl of Southern California:

*condominiums to the east;
private homes to the south;
and Interstate Highway 5 to the west,
with the Pacific Ocean just beyond.*

*Standing on these hills alone at night,
no matter in what direction I turn,
I see lights flashing:*

*automobile headlights,
advertising searchlights,
airplanes,
streetlights,
and the eerie glow of television sets in windows.*

*Close to my feet are living things,
their presence illuminated by these abrupt and disparate bursts of lights.
Everything that struggles for life here must listen continuously,
all day and all night,
to the roar of nearby traffic.
It is beyond my imagination to believe
that what lives here is not changed by all of this;
or not changed by the web of communication network
which surrounds and entangles the biosphere.*

Notes Towards an Environmental Language

While it is certainly simplistic to state that music has not been well understood, it remains true that most discussion which addresses it has been insufficient. Generally music has been relegated to a vague category associated with human intuition where activities are seldom considered capable of a very high level of articulation in language other than that used to generate the specific activity. For music this has resulted not only in musicians not being expected to talk about what they do, but also there has seldom been serious discussion of what music as a phenomenon might actually be. To some extent this has been liberating. More often it has reduced music to an exploitable commodity for either commercial merchandising or as throughly mystified illustration for philosophic or religious metaphor.

Perhaps intuition is that point at which the things with which we are unfamiliar begin to feed consciousness. The idea of a cultural intuition seems appropriate for describing music as if it had been lurking at the edge of our collective cognition trying to decide how best to regard itself. It seems by sheer persistence that we have needed music while all along not really caring what it might actually be.

But music as a discipline has reached a constrained position where its insufficiency is obvious. Too many musicians regard it as a form of addiction and not a significant means for the acquisition of knowledge. Music has suffered such drastic exploitation that its manufacture in overabundance by the popular and commercial industries can hardly be taken seriously as anything other than another form of consumer pollution. "Civilization" continues this rampant obsession with going deaf as if the sheer amplitude of the "music business" can serve no other meaning than to drown out the other aural by-products of the industrial age. In the face of this disaster the self-appointed protectors of culture offer no other solution than a compulsive fetish of technique, as if another interpretation of Bach were something other than a more efficient mode of transport through the graveyard.

The essential question remains: how do we proceed toward a definition of music and not merely from one? In this sense the primary issue for twentieth-century composers has not been structural, it has been philosophical. Discussions such as tonality versus atonality, or serialism versus indeterminacy, are trivial in retrospect. Every significant contribution has addressed this question, attempting to expand upon a body of musical artifacts, the total quanta of which must be invoked as the only available definition for music. But as emphasis has shifted from merely expanding upon this quantitative search for definition, toward a connecting of music to other fundamental human activities, the advancement of music becomes focused upon an advancement of the consciousness about what composers are really doing rather than a mere surface fascination with new aural results. This has had a two-edged function in the sense that music as a discipline has begun to examine both its sufficiency within a larger societal context and the current societal necessity for its unique attributes as a human expression.

The substantial reduction of levels of information redundancy in later twentieth century music has rendered both its making and understanding primarily acts of privacy. While experimental composers are frustrated that their work only inflicts confusion upon an audience which cannot be expected to be educated to each unique language, their comprehension unfolds as a slow and private interaction between the listener and the work put forth. This has become a near impossible task considering the societal pressure toward instant gratification. It is no wonder that composers and other individuals who struggle to make unique descriptions of the world feel themselves relegated to the same extinction status as the rest of that world's diminishing diversity. But, the act of putting forth private or vernacular systems of thought is not only a response to such loss but also a position stance against it.

Thoughts are biological constructs. There is a food chain of consciousness just as there is a food chain of flesh. Since some ideas require a greater period of decay, the originality of an idea remains inedible for a long time because the tools for its understanding are inadequate.

Beyond the obvious notion that the ways in which we perceive the world are its most potent shapers, is the realization that language controls and directs those perceptions. Erroneous beliefs and assumptions are imbedded deeply into the scheme of our daily behavior, and in spite of this we are able to often make things work. But even thought insufficient language can function in the world for quite some time, we must inevitably confront the gap between description and what is described. It is that gap which allows for catastrophic events when we continue to operate with insufficient language as if it were all that were necessary. To bridge such dysfunctions requires the generation of new language through realization that language itself is the essential problematic.

The changing of realities through language begins as a physical transformation within the deep structure of the body. Language is perhaps the most physical thing we do in that it requires all of the organism to generate it. Yet, the screen upon which consciousness projects meaning and purpose is a very narrow field. The complexity of mind as an interactive, cybernetic system is certainly more akin to an environment which recedes beyond the conscious view of the organism possessing it. But there is an uneasiness between consciousness and its house. As a guest of the whole organism it has a tendency to be too self-absorbed by creating ideologies which subvert the delicately circuitous relationship that the organism has to its environment. At the very worst such ideologies forget that a relationship exists at all. Ultimately consciousness becomes preoccupied with synthetic levels of abstraction (i.e., compounded symbolic representation of symbolic representation) unable to respond appropriately to stimuli except on that abstract level.

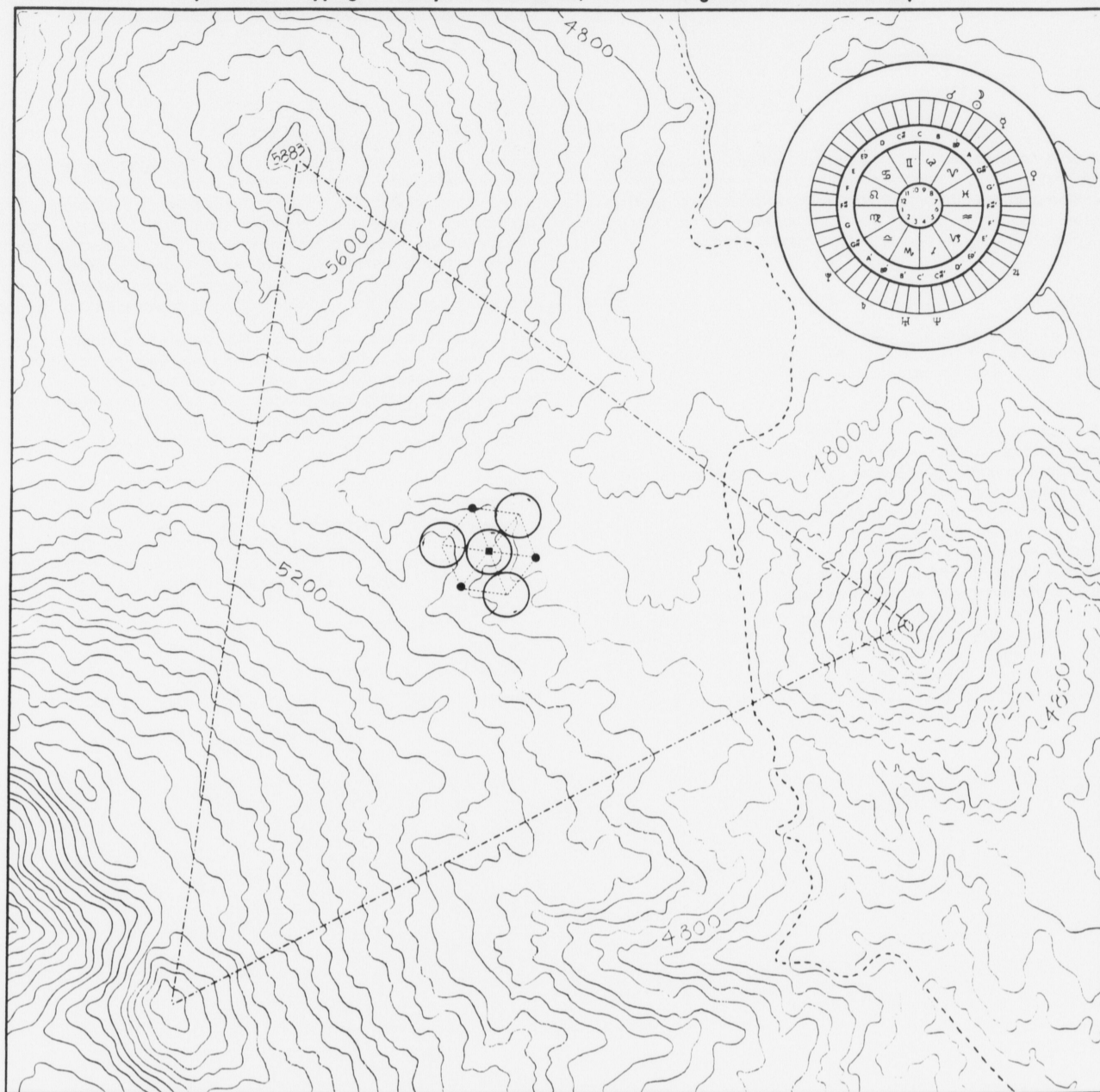
Recent neuro-physiological research suggests that this problem may arise from inadequate 'hard-wiring' between the neo-cortex and the brain's more primitive structures. A pathological imbalance between intellective and emotive processes could derive from this stranding of the neo-cortex from the more instinctive components of the mind. The creation of ideological frameworks which direct consciousness toward a deeper awareness of this larger mental system, and which encourage behaviour that reinforces such awareness, must engender physiological changes: resonant interconnection between the multiple levels of mind. This would require conscious revisiting/reminding of various states of the systemic mind (i.e., inclusive of both internal physiological states and links to external environments) in order to maintain balanced patterns of interaction.

The complex structures of a musical composition as a new language not only represent a compound set of signs generated from an interactive process but also the exterior mapping of physiological transformations within the composer. This must also be a bi-directional phenomenon in that such changes are both a consequence of and an instigator for further transformation through acquisition of language in others. Composers have not only been involved in the imagining of alternative systems of thought but also in their implementation as functional systems: generation of new language and ideology. Such an expansion of the "musical" context from the dramatic expressivity of concert ritual, towards an active potential for organization of perceptual realities, is analogous to the compression of communications patterns in other biological systems which optimize discrimination between signals and increase the diversity of potential interactions between the organism and its environment.

Many animals exhibit multifarious examples of fantasy-acts performed out of dual necessity. They extract from everyday activity the substance of mime, and play out the skills of survival in order to both practice those skills and generate deeper satisfaction from them. Since I regard such satisfaction as a result of a wider systemic bonding to the environment, perhaps this was the origin and need for human ritual. Certainly this biological necessity for play was a primary impetus for music and art. Not only do we make things to connect ourselves in broader ways to the world but through making we reaffirm our systemic balance in that world.

Much of my work has involved human communication with non-human living systems. To many this seems an inappropriate activity for a musician, or for music as a discipline. Music generally conjures up associations with various human cultural rituals and not learning to decipher patterns in nature, yet alone participate in them. But it hardly seems a coincidence that the idea of music as an appropriate means to open pathways of interaction with the biotic world, begins to be revisited at a time of ecological crisis. This is an idea rarely visited since the Neolithic. It seems to have taken several thousand years for us to remember that talking to animals wasn't such a bad idea.

(Geomantic Mappings of Eco-Systemic Resonance, 116° 35' Longitude x 32° 58' Latitude)



Three performers pre-recorded stream-of-consciousness descriptions and observations of the surrounding environment from the three mountain peaks delineated in the diagram. Each performer was assigned a separate peak and recorded for 45 minutes. These recordings included thoughts about and reactions to events within the environment but no attempt to overtly control such events was to be made. An attitude of focused openness to whatever occurred was desirable. These recordings were subsequently mixed with static drones derived from astrological chartings for the time and location of the performance (as indicated in the diagram). Playback of these sounds occurred from portable cassette recorders with self-amplified loudspeakers and sufficient amplitude to be audible from the center of the performance configuration. These were placed at the positions notated in the diagram as solid black circles. Each speech recording was closest to and in alignment with its corresponding peak where the recording took place. In the center of the space (notated as a solid black square) was placed a digital recorder programmed to sample and then immediately output periodic sound blocks of three seconds duration. This was amplified through a central loudspeaker. The input signal to the digital recorder was from a single omni-directional

microphone mounted within a parabolic reflector. A performer carried this microphone while walking slowly along the clockwise perimeter of the large central circle. The microphone pointed outward from this circle. This same performer also recorded the overall performance through the use of binaural microphones attached to a stereo tape deck. Three other performers carried small portable oscillators made audible through self-amplified loudspeakers. These performers walked slowly along the perimeter of the three large outer circles while altering the oscillator frequency in a process of conceptual tuning to the overall sound environment. This process was relaxed and continuous while avoiding very abrupt changes. The primary task was to somehow define nodes of interaction within the changing soundscape. The spatial distance between the triangulation points indicated was approximately a radius of 33 feet. The performance began at 2:05 PM and ended at 2:50 PM. This took place at Azalea Glen, Cuyamaca State Park, California, on May 19, 1985, and was sponsored by SUSHI GALLERY, San Diego, California. PERFORMANCE PARTICIPANTS: David Dunn, Ronald Robboy, Lizbeth Rymland, Peter Seibel, Stephen Storer, Danny Swartz; ASTROLOGICAL CASTING: Ellen Band; GRAPHIC: Stephen Storer and David Dunn.

Many of my compositions are concerned with specific places, or to put it more precisely: the awareness of their context having been composed. An important aspect of this is the idea of context as "found object": interacting with a physical location generally ignored, and extracting knowledge from it. Beyond this is the significance of knowing where you are and how you're connected to it; taking time to expand the mental web of where you stand: interaction is intrinsic language. For music to have any real significance it must address this intrinsic acquisition of new knowledge and not the mere musicality of what is already known.

I refer to much of my work as 'environmental language' in order to distinguish it from the more general term "environmental music". My objection to most of what has been referred to by this latter term is in its specific lack of intrinsic language. While I am sympathetic toward what much of these activities posit as models for environmental interaction, they unfortunately remain only models which graft traditional musical values inappropriately onto another context. They are invariably decorative but seldom interactive and thus tend to trivialize interaction through mere usage as grist for pre-existent value mills. The result has often been a musical equivalent to familiar forms of environmental exploitation. The issue then is not how can one bring out latent musical qualities in nature but rather, can one generate a musical structure intrinsic to specific interaction with non-human systems?

My use of the term 'environmental' refers to the interactive nature of my music as distinct from the construction of an "environment" in which the observer merely maintains a relational stance. The

resulting compositions have been not only descriptive of their environmental context but are residual evidence of unique interactive systems. In this sense 'interactive' addresses the generation of a linguistic structure intrinsic to the observer-observed contextual relationship such that change is induced in both as a consequence of this interaction. The 'music' is thus the tracings and expression of the composite mind immanent in a particular connective instance. In other words, the music results from the implicit needs of said interaction such that, not only description of an observed phenomenon results but also description of the changes induced in both the observer and the observed. These activities have primarily focused upon exploration of a variety of geo-physical phenomena such as: the unusual resonance characteristics of specific geographies; intensification of environmental sensing; interspecies communication; and the compositional analysis of environmental ambience patterning.

Essential to many of these interactive systems has been the use of sophisticated technology, which notwithstanding has caused me a certain amount of trepidation. My distrust of machines is linked to the obvious realization that biological systems are infinitely more complex than any electronic device. Discussions about "artificial intelligence" approaching the complexity of the human mind strike me merely as a statement of our tautological ignorance about the mind and not a statement about the future progress of technology. Not only are our machines a mirror of self-description but we begin to emulate the machines we make. The claims of artificial intelligence are generally trivial because its reductionist view of humanity is trivial. According to Australian

permaculturist Bill Mollison, the aboriginal peoples of Australia are perhaps the most sophisticated thinking society on the planet: "Let me give you the aboriginal ethic: the more you understand, the less you need... in terms of changing material objects around, in any way."² Such a notion is so foreign to industrial culture that generally our only way of approaching interaction with other living systems is after we have made extraordinary leaps of technological invention. Hopefully it need not be such an either/or situation. We neither exclusively change the world through understanding it, nor understand the world through changing it. Rather, both of these are conditional states dependent upon the engaged presence of the other.

Interactive language is dialogue and argument. It is an acknowledgement that reality is constructed from participation in a changing landscape fundamentally imbedded in an intrinsic field of interplay. While human anthropocentrism seems inescapable, cooperative concepts about maintaining a balance between environment and human may be the more recent product of the evolution of ideas, and not merely a condition once had but now lost. Any radical change in our behavioral interaction with the biotic environment must come from a shift in our ideological argument. Such a shift can only occur from a change in language, a language which includes the voices of other forms of life.

Footnotes

¹ Kenneth Gaburo, *Whole Language Language*, Lingua Press, 1978.

² Bill Mollison, "Permaculture Yarns," *CoEvolution Quarterly*, No. 29, 1981.

4

The act of description is not passive, I speak in the place of what is described and in one sense become its representative. Responsible representation demands accuracy gained through interaction: **listening as expansion of connection within the biotic world**. It is not trivial to assert that when humanity ceases to listen to the voice of wolf or whale, hindering their survival, we help to limit the biosphere's potential reality toward our own destructive short term advantage.

Biologist Gregory Bateson has stated:

There is an ecology of bad ideas, just as there is an ecology of weeds, and it is characteristic of the system that basic error propagates itself. It branches out like a rooted parasite through the tissues of life, and everything gets into a rather peculiar mess.¹

The making of creative connections between phenomena involves the disassembling of reality constructs with which I operate in blind assumption. I consist of more than I recognize. Freedom is not just having choice among a set of contrived possibilities, it is fundamentally the expanding of what I do not know, expanding the connection with what I previously thought outside myself. Most current socio-economic systems reward attempts to make social and biotic systems predictable. Predictability is achieved through redundancy introduced as subsequent loss of choice. High predictability yields low information and therefore less freedom. For example, the diversity of the food we currently eat diminishes almost daily. Large corporate takeovers of the patented seed industry has recently put pressure on world governments to centralize the manufacture of seeds in order to guarantee industry profit. Laws have been passed in both the United States and Europe which outlaw certain unpatented plants. The European **Common Catalog** lists all varieties which remain legal to grow, and over a year's time literally hundreds of plants are removed from the list. Stiff fines are levied against gardeners who attempt to grow these illegal varieties. It has been estimated that these attempts to ensure corporate profits will result in three-quarters of all European vegetable varieties becoming extinct by 1991.²

7

My composition entitled **MADRIGAL: (The Language of the Environment is Encoded in the Patterns of Its Living Systems)** began with a reticular notion: perhaps each instance of environmental ambience which I perceive is part of a much larger structure, that within the patterns of communication between living organisms there is a larger communication logic which each separate utterance combines with to form an environmental language. To decode a moment of this pattern might generate an appropriate language not only descriptive of a specific place and time, but more precisely a language descriptive of the mentality implicit in this connective instance: a composition of this environment and not merely about it.

The compositional process for MADRIGAL entailed the phonetic transcription of an environmental ambience recording made in the Cyamaca Mountains of Southern California. One minute of recorded ambience provided the entire source material for the notated score. The transcription procedure involved attempting to bring the ambience into my physiology through both aural sensing and vocal emulation. Compositional organization of this transcription was made according to structural relationships intrinsic to the material itself.

In one sense MADRIGAL juxtaposes a **primitive** function of language (namely, to interact with the external environment) with one of the most recent analytical notations for language. Additionally my intention has been to combine multiple descriptions of a particular environment in order to convey: (1) a resonant sense of the richness of information contained in one spatial and temporal location; and (2) to exemplify the notion that most definitions of **wilderness** are not based upon interaction but are generalized abstractions which may or may not apply to a particular place.

NOTES

¹Gregory Bateson, *Steps to an Ecology of Mind* (New York, Ballantine, 1972), p. 484.

²See Cary Fowler, "Sowing the Seeds of Destruction," in *Science for the People* (Sept./Oct., 1980), p. 8.

(EXCERPTS FROM) MAPPINGS AND ENTRAINMENTS— INTRODUCTION TO WORK IN PROGRESS, 1984

In retrospect, the most interesting part of the project (MADRIGAL) came as a side-effect. Specifically, the necessity to learn how to spell them resulted in an unforeseen imprinting or sensitivity to the environmental sounds where I was living. For example, I often found myself in an automatic mode of translation when specific bird calls were sounded in my immediate vicinity. On one level this became validation for my initial intuition that the larger patterns of communication between living organisms (what I term environmental language) might provide clues into the evolutionary continuity of both human language and music. It is as if through this musical process of language acquisition (that is to say, compositional listening), I revisited a morphology of auditory templates shared by the bird and myself.

Art-making has traditionally provided us with spirit bridges, reminding us of our place within a larger systemic complexity, but remains, for the most part, non-interactive. So does science. Biologists, for example, have not sufficiently considered the observers's influence within their methodologies. An ecologist who studies a complex rainforest affects the ecology of that system in direct relationship to the intensity of detailed observation. There are side-effects resulting from any observation and it is indicative when such effects are dismissed as too subtle to be significant. They are disavowed because factual scientific method does not encode the observer as part of the environment's total systemic complexity. It is precisely such side-effects that fascinate me. R. Buckminster Fuller has called them *precession*: "the effects of bodies in motion on other bodies in motion". A similar concept was recently used by system's theorist Will McWhinney to discuss the central process of interaction at work in my music. He proposed that much intellectual activity attempts to boil down to geometric simplicity in order to achieve an awareness of archetypal symbols but felt that I was moving in a different direction toward allowing incredibly diverse sources to rub surfaces that they might generate their own signification. The term *entrainment* was used to describe this process of sounds, ideas, species, and minds rubbing against each other until their relative squirming becomes synchronous. It occurs to me that this is a bit like asking, "what can we make?", instead of, "what do we share?". There is, of course, nothing particularly unusual in this concept, per se. Entrainment is a fundamental process in nature and describes a vast set of phenomena such as sympathetic resonance. But

what I am attempting is its intentional use in circumstances which may generate new levels of communicative awareness. Perhaps intrinsic to such a process is the generation of interactive pathways between the individual's consciousness and the larger systemic mentality which surrounds it: **geographic accupuncture for the mental complexity of eco-systems**.





I definitely see this notion of entrainment in my work as a preliminary process since the patterns for a language of interactions which I seek are just starting to form. In that sense I am groping towards an epiphenomenon of synergic mentality where awareness of external pathways proceeds from the integration of internal pathways. This is similar to the concept of *triadic orthogenesis* where movement from **lack of differentiation to differentiation to integration** is inherent in the unity of: **subconsciousness/selfconsciousness/superconsciousness**. In other words, retracing evolutionary links to other life forms helps to establish the internal integration for a synergic leap toward external integration. This process is also implicit in Keostler's "draw back to leap" where regression to prior, less rigidified levels in the evolutionary structure precedes mutation. I also sense that a similar process of integration which might have something to do with the aesthetic impulse as a phenomenon which can't easily be located as either subjective or objective in nature. For me the aesthetic impulse is a compounding of observer and observed where their synergic integration is sensed by the observer as a new pattern: **beauty as the summational evidence of a generative mental system of interactions**.

I am specifically interested in the total aural environment as a systemic phenomenon, hearing and working compositionally with that system as an interactive musical process. I want to use advanced technology as an opening up of perception and as a tool for increasing the environment's systemic complexity by re-including the human as an intrinsic part. The question that most concerns me is: how can we describe environmental systems in ways which do not separate us from that environment. My assumption is that we have yet to create minimally obtrusive participatory systems which educate ourselves about our environment while establishing interactive communicative links to that environment. This certainly seems evident as a particular failure of recent Western culture with its gross technological dependency. Despite its problematics I have opted to use that technology to advantage in the sense that our culture's most sophisticated tools might help transform it in ways yet unforeseen. Perhaps I sense a latent compatibility between micro-processors

and wilderness because the system's thinking of cybernetics led in large part to both digital computers and a renewed understanding of ecological dynamics. I therefore take Gary Snyder very seriously when he wished for: "Computer technicians who run the plant part of the year and walk along with the Elk in their migrations during the rest." I also do not see an even further blending of these two states as a necessarily bad idea if a non-obtrusive technology can add to an overall increase in the systemic interactive awareness of environment plus human. If creative people do not use such technology in ways which encourage diversity rather than delimit it, our worst fears will be made manifest. Digital technology has the capability of not only utilizing an animal's own signals as material for communicative interaction but allows such signals to be appropriately modified within that context. This makes possible the control of specific aspects of the interaction based upon elements already familiar to another life form but not limited to those which are merely imitative.

The image of someone carrying digital hardware through the woods in search of an elusive mental system with which to interact conjures up a variety of associations besides those which are humorous. Obviously it serves to overtly illustrate McLuhan's prophecy of a joining of *high tech* and tribal consciousness but even more specifically represents the merging of two of Mimi Lobell's *spatial archetypes*: the placing of a *meandering spiral* upon the *global network grid*. As the network of global technological culture expands into chaos we become nomadic and plot entropic points of consciousness upon its grid. I want to turn the cybernetic technology of that global grid back on itself in order to take it on a nomadic journey to hunt and gather the sounds of a larger systemic awareness: the **Age of Chaos** transmuting into the **Age of Gods**.

David Dunn is an experimental composer and interdisciplinary researcher. David Dunn, c/o International Synergy, 8320 Melrose Avenue, Suite 101, Los Angeles, California, 90069.

 } throat rasp
 }
 5 } pitch range
 4 }
 3 } 1-low to 5-high
 2 }
 1 }
 trill
 sustain

ONE

ANNOUNCING: HUGH LE CAINE:
PIONEER IN ELECTRONIC MUSIC INSTRUMENT
DESIGN COMPOSITIONS AND DEMONSTRATIONS,
1948 TO 1972
—LP RECORDING



Canadian scientist and composer Hugh Le Caine (1914-1977) has been called one of the "heroes" of electronic music. Perhaps the most important aspect of his instrument designs was his concern for the "playability" of his instruments. He composed a number of short pieces and studies intended to explore and demonstrate his new instruments. This recording includes a number of these and illustrates the wide range of techniques which Le Caine pioneered. It also shows something of his personality and sense of humour. In addition to the recordings, detailed notes and photographs of the instruments are included.

The record costs \$10.00 plus \$2.50 postage and handling. Please make cheques payable to The Hugh Le Caine Project.

ORDER FROM: The Hugh Le Caine Project, c/o Gayle Young
146 Ridge Road West, Grimsby, Ontario, Canada L3M 4E7

advertisement

DIVISION OF DUAL PRESS LIMITED

KING PRINT

624 KING STREET WEST, TORONTO, ONTARIO M5V 1M7

364-5560

Stationary & Offset Printing

- quality instant & regular printing
- forms
- business cards
- letter-heads
- envelopes
- invoices
- n.c.r. forms
- wedding invitations
- statements
- sales reports
- reports
- menus
- catalogues
- flyers
- photocopies
- gummed paper
- self-adhesive labels
- price-lists
- bulletins
- medical forms
- purchase orders
- post cards

Binding:

- folding
- perforating
- automatic collate - staple
- punching
- cerlox
- padding, etc.
- numbering
- mailings

**WE PROMISE PROFESSIONAL ADVICE AND PERSONAL ATTENTION
TO ALL YOUR PRINTING REQUIREMENTS.**

DECADE

THE FIRST TEN YEARS OF THE MUSIC GALLERY

includes statements by CCMC members,
a chronology of performances & events,
a detailed listing of Festivals & Special Projects,
a selection of articles & scores from MUSICWORKS,
and a 16 page section of duotone b&w photographs
by Vid Ingelevics, David Smiley, & Judy Whalen,

96 pages, 9" x 12"

\$10. (discounts for orders over 5 copies)

DECADE: THE TAPE

includes 139 excerpts from The Music Gallery's
concert recordings assembled by Casey Sokol &
Sandor Ajzenstat.

90 minutes, chrome \$6.

Book & tape together: \$13.

available directly from
The Music Gallery
1087 Queen Street West
Toronto M6J 1H3

MUSIC OF STEPHEN RIECK

6 NEW CASSETTE ALBUMS

1. NEWS FROM THE UNDERGROUND \$14.95
 2. R TAPZ A No. 376/J \$9.95
 3. Electronic Music Studies IV \$14.95
 4. FLUIDS - GENTLE THUNDERSTORM \$9.95
 5. Classics on the Electric Clavier \$14.95
 6. SEND \$ 4.95 for SAMPLER - concise overview all
- * FREE information, discount coupon & order form



FULL CIRCLE MUSIC SPECIALTIES



P.O. BOX 146, GEORGETOWN, ONTARIO, CANADA

L7G 4T1

LLOYD GARBER



**PRIVATE GUITAR
TUITION CALL
782-2485**

20th Century new-world
music. **AUNTIE NATURE,
UNCLE TREE AND
COUSIN BLADE-A-GRASS**
by Lloyd Garber. (\$45.00)

**DEMONS OF THE 20th
CENTURY ATTACK THE
DEMONS OF THE NOTRE
DAME** by Lloyd Garber.
(\$49.00)

Private lessons. Aesthetic sub-
jects; composition; and guitar.
Telephone Lloyd Garber
(416) 782-2485.

Book orders: Box 7020,
Station "A", Toronto,
Ontario, M5W 1X7 Canada

SOFTWARE FOR PEOPLE

COLLECTED WRITINGS by PAULINE OLIVEROS

New music composer Pauline Oliveros is celebrated for her groundbreaking work in electronics, notation, and performance. Concerned with music's relation to consciousness and society, she has worked for decades to broaden the scope and accessibility of musical experience. Oliveros' book, **Software for People** addresses the field of music with breadth and clarity, combining disciplined essays with lively diary entries, interviews, dream narrations, drawings, and photographs. This chronological exploration of Oliveros' own philosophical and artistic development immerses the reader in contemporary musical practices. Electronic techniques, sonic experiments, feminist theory, meditation, and the ritual aspects of art combine here to illuminate her definition of music as "a process which integrates listening, composing, and performing with environment and the deep structure of attention."

hardcover #0-88268-021-8 at \$29.95

softcover #0-88268-020-X at \$14.95

plus \$1.50 shipping and handling

Mail payment to Smith Publications
2617 Gwynndale Ave.
Baltimore, MD 21207

COMPOSERS' FORUM

The
Composers'
and
Performer's
Organization . . .

Since
1935

Members are entitled to:

- THE DIRECTORY—annual listing of members/resource for concert presenters
- NETWORK NEWS—quarterly publication
- Group insurance rates/discounts on professional services
- Publicity/Fundraising/Promotional assistance
- New York management consultation service

- Your membership supports our NYC concert series.

I would like to join. Enclosed is my check for annual membership dues.

- ☐ \$15 Student
 - ☐ \$25 Individual
 - ☐ \$100 Individual (5 yr.)
 - ☐ \$50 Organization
 - ☐ \$125 Organization (3 yr.)
- US currency only, please.

Name _____
Address _____
City/State _____ Zip _____
Phone _____

Composers' Forum
One Fifth Avenue
NY, NY 10003
(212) 673-8794



NEW MUSIC CONCERTS



RE-TUNING for old problems, new solutions
Sunday, December 15, 1985 7:00 p.m.

Premiere Dance Theatre /
Harbourfront

7:00 p.m. **INTER-VIEW** — **John Cage**, music follows
JOHN CAGE, BEN JOHNSTON, JAMES TENNEY
6 harps, Accordes String Quartet



NE PLUS ULTRA 15th Birthday Celebration
Sunday, January 26, 1986 8:00 p.m.

Walter Hall /
Edward Johnson Building

BOULEZ, BRADY, MELLNÄS, SCHAFER, TAKEMITSU
Trio "Ars Nova", New Music Concerts Ensemble



CONTINENTAL COUNTEANCE
Saturday, March 8, 1986 8:00 p.m.

Jane Mallet Theatre /
St. Lawrence Centre

ALLAN BELL, MICHEL-GEORGES BRÉGENT, HENRY KUCHARZYK
Robert Aitken, Joseph Petric, New Music Concerts Ensemble

— In association with the American Society of University Composers and co-sponsored by CBC —



MAGIC THUNDER with 53 percussion instruments
Sunday, April 13, 1986 8:00 p.m.

Premiere Dance Theatre /
Harbourfront

STEVE REICH, JOHN HAWKINS, ALBERTO GINASTERA
Claudette Leblanc, members of Nexus, Peter Schenkman



ILLUMINATING INTRODUCTIONS Prior to each concert, at 7:00 p.m., hear the composers featured on that evening's program speak about the works to be performed.

A new standard feature of NEW MUSIC CONCERTS.

TICKETS: \$10 / Adults \$5 / Seniors & Students BASS, New Music Concerts, Box Office Call 961-9594 for information

Each concert in NEW MUSIC CONCERTS' 15th Anniversary Season is being recorded for broadcast by the CBC on Two New Hours.

ARTHEA is a French group dedicated to the research and development of new instruments. Their building (named 'Le Prado') consists of machining and construction workshops, a soundproof testing chamber, various listening and recording rooms, an electronic and acoustic sound research workshop, an exhibition hall where ethnic instruments as well as instruments by ARTHEA are displayed, a performance hall, and other exhibition spaces and offices. They are presently making preparations for marketing their instruments.

For further information, write: ARTHEA, le Prado, Route Napoleon, 06130 Grasse, France. (Although the group ARTHEA is not part of the SYMPOSIUM, we have included them in this issue for their complementary concerns.)

THE IMPORTANCE OF SOUND AND MUSIC

In Hindu mythology, the god *Siva* dances the world's creation. In one hand he holds fire, symbol of the nourishing heat without which no germ can grow. In the other, he holds a tambourine, symbol of rhythmic sound without which no form can take shape. The first steps of the universe are thus made on music.

This mythic image persists in our day when scientists see it resurgent in their observations and equations: elementary particles dance and sing producing rhythmic systems of energy that go from the simplest atom to the most complex matter, from the densest to the subtlest.

On the human level, hearing is a fundamental sense, one that permits apprehension of vibratory relations with the utmost clarity and possibility of analysis. It is by the ear, in the depth of the womb, rocked by the deep rhythm of the mother's heart, that the external world begins to unfold to the infant.

Music is an integral part of the world, sustaining the history of societies, both mirroring the hearts of peoples and guarding their laws. As a mirror of hearts, music expresses all that words fail to say, all that the linear logic of language cannot render. As guardian of laws, the privileged position of music places it upstream of all discourse, permitting it to inscribe that much better the orders and ideologies in the unconscious. The rulers of history well understood this: Charlemagne imposed Gregorian chant by force of arms to serve his great project of unifying Europe, an islamic sovereign even forbade music and singing, on pain of losing hands and tongue, the better to gag his people; less crude, but just as efficacious, the institution of the western tempered scale, in the 17th century, laid down the foundations of the bourgeois and rationalistic way of thinking.

At each stage of life, even at the very secret of its organization itself, music is there, from the dance of fundamental particles to human song. And before either words or acts, it expresses the evolutional changes that are approaching. When music changes, mentality and laws change in its wake, and today we are all witnessing such a change, more essential than has ever been, though not operating in mere externals. The change we are witnessing does not simply replace one form by another, one style by another, or an older theory by a newer one. It

works at the foundation and leads to an all-encompassing conception of the universe of sound and music. Here, all the musics of the world reveal that they are the diverse manifestations of a same energy. Here, history and myth, politics and economy, illuminate the paths of music across the centuries. Here, physics and physiology indicate the connections of matter and human body with sound.

We, the Arthea group, share this vision which is more and more spread out, and we attempt to lead it to fruition by completing the work of thought in constructing new instruments without which this new musical area could not effectively be realized. As to music itself: it can, from now on, forget its partitions, its points of references; forego its conventions and habits; cross over its frontiers. As the only guide in this endeavour, music recognizes only the auditory attention, by which the tumult of ideas can be stilled in order to allow new, ever-evolving musical forms to surge forth.

A CONCERT OF SOUND GESTATION: THE PRACTICE OF AUDITORY ATTENTION

The auditory experience, the moment, the musicians and the audience are the four poles from which a Sound Gestation concert is developed.

The experience of audition tends to strip itself of all precepts. Hearing each sound summons another. The auditory experience of the musicians themselves, on the basis of this concentrated attention, spontaneously generates each moment of the musical experience. The auditory attention of the audience opens a space of sharing.

Thus is overreached a present moment which makes no reference to any rule, written music or pre-established theme. The only organization is that which is produced from instant to instant.

The essential work of the musicians themselves consists in letting themselves be carried by the sound. Such an abandon

to sound is not to be regarded as one of ignorance, but rather rooted necessarily in multiple knowledge of music and sound (years of research on instrumental practice, ethnomusicology, acoustics and physics of sound, instrument construction, etc ...). This is an approach to the world of sound that avoids the impasse of a merely egocentric form of expression.

It must be remembered that an audience with the requisite receptive capacity is also creatively productive as the receiving pole where the meaning of the sonorous instant is accomplished.

A Sound Gestation concert is thus no longer music in the conventional sense being defined in relation to an oral or written tradition which fixes rules and delimits the field of sound, or to a discourse on music that precedes the actual sound. Neither is it incoherent, but what the practise of Sound Gestation offers and proposes is the contemplation, with full participation of the audience and musicians, of the sounds that surge and organize themselves in immediate present, in the same manner as life itself surges and organizes, from the growing of a tree to the movement of the planets. This practice is not to be taken as a formal dictum but rather as an indication of a direction, a pathway to follow, a gesture to be perfected endlessly, and never a definite state of fixed arrival.

THE ANIMATIONS

On the basis of the instruments used in such a concert, the animations include the following: first, the place of sound in the organization of life, the place of music in the organization of society, the appearance of the western tempered scale, its causes and effects, the principal elements in the construction of musical instruments all over the world; second, the necessity for our times of a different approach to the universe of sound that recognizes itself as an heir of the musics of the entire world, and which is not circumscribed by any tradition or musical theory that restricts sound within the limits of some conception of thought or cultural habit, from all which proceeds the further necessity of new musical instruments that will be truly transcultural.



STRINGAR

An instrument inspired by the traditional string instrument building techniques. A wooden structure and a hollowed out fretless finger board make the link between the sound box and the embossed copper resonator situated at the top of the neck. The instrument is fitted with 52 rhythmic, melodic and sympathetic strings lying on a bridge which is pressed against a stretched skin that serves as a sound board. The stringar can be played in pizzicato or with a bow, and has a range of 6 octaves. Different woods have been used in its construction: mahogany, isoke, cork, oak, box wood, pear and Rio rosewood. The fretless finger board is made of brass. In addition to the tuning pegs, it is fitted with a fine tuning tailpiece. The skin, serving as a sound board, is attached to the box by woven leather straps; a system of cords regulate its tension. It took 1200 hours to build the stringar.



CHRYSTAR

An instrument which uses 5 different physical systems. A wooden sound board on which lies a harp, with a range of 4 octaves, that is played either by percussion or plucked, and a system of flat strings spanning 2 octaves. The strings are divided in two by a mobile bridge and are played by percussion. A set of metallic resonators which amplify, by means of a suspended bridge: steel rods with a range of 3 octaves played either with a bow or by percussion; steels pipes with a range of 3 and a half octaves vibrated by rubbing them either with dry fingers coated with resin or moistened; mobile pipes with a range of one octave, vibrated by rubbing them with the fingers.