SOUND/PATH/FIELD in Winter

A talk by Robert Morris

This talk was given in the week preceding the performance of my outdoor composition SOUND/PATH/FIELD at 3 p.m. on September 24, 2006 on the quadrangle of Syracuse University. It introduces the conceptual and aesthetic basis for the piece as well as documents its genesis in the winter and spring of 2006.

I presented it with music-sound and slides at the music department of SUNY Geneseo (9-18-06), the Eastman School of Music Composition Symposium (9-21-06), and the Setnor School of Music, Syracuse University (9-22-06).

The talk is ninety-one pages long, with each page read within a time unit of 30 seconds (although some pages do not have text); thus the talk is 45.5 minutes long. Each page of the talk shows a tone and/or a minimal musical event that accompanies the unit. At the top of some pages is a heading starting with an “S” denoting a slide change, followed by the number of the slide and a brief description of the slide’s image, such as: “S 3a Wales shore.”

The PowerPoint file and an audio CD of the music-sound for the talk are available from me for a nominal sum.

—Robert Morris
S 1 title

0:00

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This is a talk about the genesis of Sound/Path/Field, written for eight different ensembles, carillon, and outdoor theater and lasing ninety minutes.

My previous outdoor compositions call for music to be performed in natural surroundings, but Sound/Path/Field is different because the occasion and the location are within social and civic space.
In a piece this vast and diverse, time and space may be experienced in ways different from music played in concert halls. Perhaps it's like looking at the countryside from a great distance; one sees patterns and connections among things normally far apart.

*S*
S 3b Borge's quote

1:30

In Sound/Path/Field the basic unit of time is the minute, with the onset of some minutes announced by the carillon. Minutes are felt rather than measured, being too long to be contained within local memory or the time of a breath. Minute-long units encourage us to experience the music as time, rather than as being within time.

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In the winter of 2005, I was approached by Society of New Music to ask if I would compose an outdoor piece to celebrate its thirty-fifth anniversary. Soon I was in touch with Neva Pilgrim, the Society’s director. Since the Society is based in Syracuse, New York, Neva asked performing organizations within greater Syracuse if they might support or contribute to the piece.
Due to Neva’s good work, soon musical ensembles and individuals within the University’s Setnor School and the University at large agreed to perform the work so that the location became fixed on the quad. The Syracuse Children’s Chorus, the Westhill High School Singers, and the Open Hand Puppet Theatre also signed on.
3:00

My previous outdoor pieces were performed by one ensemble divided up into parts. But here different performing groups that do not usually play together inhabit the same time and space; their music is performed independently except for stop and starting times. Sometimes ensembles play different versions of the same music.
S 4a list

3:30

The screen lists the people and ensembles that perform Sound/Path/Field.

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Although written for traditional music organizations, Sound/Path/Field offers the listener a non-traditional way of perceiving music—indeed a different music—in which space and time are experienced as concomitant, replacing the usual emphasis on unity with a focus on process, on how events change.
S 5 waterfall

4:30 (sham chord at end)

Whether within or without a scientific frame of mind, if you think about it, everything is changing; what we call stasis is just something changing too slowly for it to be noticed in the moment. The idea that there is something that does not change, or underlies change, is a hypothesis, not an axiom.

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Even on a calm day, when contemplating a body of water or the sky, one often senses a dynamic presence, something that while still, is not static. This may be more apparent in the larger realms of scale than at local levels of perception.

The question is how to suggest—even express—in music what appears to be a dynamic unfolding of energy. What aspects of music will allow it to be heard?
5:30 (clar upbeat to next)

While large scale helps, the composer Webern, in his beautiful and elegant short compositions was interested in expressing dynamic presence. In my own compositional history, I felt such connections at first intuitively, simply by noticing that titles like “Strata” and “Streams and Willows,” seemed completely appropriate to suggest the content of my music. Slowly I became aware that my compositional technique had a lot to do with this orientation.
S 7a Einstein

6:00

The following quote comes from the abstract of the scientific paper titled, "On the Effects of External Sensory Input on Time Dilation." by A. Einstein, Institute for Advanced Study, Princeton, N.J.

“When a man sits with a pretty girl for an hour, it seems like a minute; but let him sit on a hot stove for a minute, and it seems longer than any hour. That’s relativity.”

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This talk is composed of text and music-sound; the music-sound consists of a series held tones, once in a while elaborated by chords or other events. These notes change every 30 seconds; nevertheless, these equally spaced stretches of sound seem of different lengths.

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S 8a 90-note on green

7:00 (noise at 17.5”)

In fact, this talk is based on the structure of Sound/Path/Field, which is guided by a series of 90 notes, one per unit or minute. I will describe the functions of this series later, but here the same series articulates the talk every 30 seconds.

In this way, this talk is a model or map of the composition, at the scale of 2:1.

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Let me continue that quotation from Borges, a text that I set for one of the choral ensembles to sing:

“Time is the substance from which I am made. Time is a river which carries me along, but I am the river; it is a tiger that devours me, but I am the tiger; it is a fire that consumes me, but I am the fire.”
Borges’ assertions about time can be found more radically reflected in classical sources, such as the philosophical writings of Dogen, a Zen-monk who lived in the 13th-century. For Dogen, being and time are fused.

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Dogen writes: “Time is not separate from you, and as you are present, time does not go away. As time is not marked by coming and going, the moment you [for instance] climbed the mountain is the time-being right now. This is the meaning of the time-being.”
9:00

Another Dogen quote: “Because there is no other time than this very moment, ‘existence-time’ is always the entire time. Existing things, existing phenomena are all times; all existence and the entire world are embraced within the time of every moment. Ponder for a while whether there is any existence or world outside of the present moment.”

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After many years, it became obvious to me that working with abstract musical materials such as series, arrays, and schema was not a fascination with the abstract for its own sake, but a good way for me to make music that conveys what I sense in natural settings, on outings and hikes.
10:00
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The 90-note series determines the tonality and harmony of each unit of Sound/Path/Field. The series is actually a linked succession of three related cycles of 29 notes. These cycles have a remarkable property, taking the notes in overlapping groups of four; all twenty-nine of the four-note harmonies available in the 12-note, equal-tempered system, are found exactly once in the cycle.
Thus, as the piece goes on, one hears music based on the present unit’s nuclear tone and one of the 29 four-note harmonies. This gives some unity and identity to each unit, no matter how the unit is composed out. Via the isomorphism of pitch and time, the timings of the musical events in each unit are also derived from the harmony of the unit.

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S 9b blue

11:30 (marm at 45”)

While the composition has many moments where different musics occur together in any relation from correspondence to conflict, this talk is a stripped down model, certainly stark by contrast.

It might be called “Sound/Path/Field in Winter.”
The title South/Path/Field refers not only to the layout of the University quadrangle, but to a phenomenology of music put forth by Karheintz Stockhausen. Stockhausen suggested that all music-sound might be divided into three categories; points, groups, and fields. Points are single sounds, groups are collections of sounds that hang together somehow, and fields are massive collections of sounds so that one sound is not heard as separate from the whole textural effect.

12:00 (arp at 17")
12:30

Most traditional music focuses on groups, that is, musical phrases. However, the exploration of sounds and fields as primary musical entities has been the occupation of many composers of my generation. Having so many ensembles and performers available to me made such explorations possible and even idiomatic. Imagine a chord for chorus where every note is of a different pitch.

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Thus, as ideas and sound images for the piece began to present themselves, I had to find ways to notate them. I adapted special notations I had used in my other outdoor and improvisational pieces that allow the players to have some choice as to timing and pitch, and to permit textures of the field type to be easily performed.

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S 9d black

13:30 (guit at 45")

I continually try to characterize my dynamic conception of music experience using various metaphors and similes.

Two concepts always arise: presencing and place.

Things and events are not just there, they present themselves to us, just as we present ourselves to them when we pay them attention. The result is an experience of place, that is, this is happening here and now.
Being in the moment has two modalities, passage and waking-up. We notice that things change or continue, or that something new has appeared. Our attention is either continuous or changes instantaneously to some other thing. If we attend to the way we attend, it becomes clear that we are continually “changing the subject,” so that our consciousness is really marked by discontinuity as it loses touch with the moment. When we return to awareness, this is waking-up.

*
S10 90-note on black

14:30 (start of second string)

With the note you now hear, we are starting into the second part of the 90-note sequence. Every possible four-note harmony has been expressed linearly now. But as you will remember, from time to time there were chords. These chords either recall the pitches immediately presented or presage the next notes to be heard.

*
S 11  90-note on purple

15:00  (sham near end)

As we continue to listen to the note structure of Sound/Path/Field at double speed, we notice now the continuity of the duration of notes engages continuous awareness of place and the change due to a new note or an interpolated gesture engages wake-up awareness of presencing. As I mentioned at the outset, changes of scale can affect the nature of our attention. The relation of this talk to the piece is just one way I explore scale as a compositional resource.

*
Outdoor and indoor music differ as to kind, not in degree. This is not a distinction between the artificial and the natural, for these concepts interpenetrate each other, especially in the arts. To illustrate this difference, Sound/Path/Field contains two sections of music played inside Hendricks Chapel. These are concert pieces, which also replicate the Sound/Path/Field structure at other ratios of scale.
16:00

I included indoor concert music within of Sound/Path/Field since the entire work will probably only be performed once, whereas the indoor pieces can become part of the concert repertoire. I also wanted to write a piece expressly for the Society for New Music’s ensemble that would commemorate this 35th anniversary celebration. The other piece is for organ solo.
16:30

I composed the chamber work for the Society, called *Society Sound*, and the organ piece, called *Canonical Minutes*, in my normal way, at a desk and piano. But the outdoor portions of the work were composed outside, at various waterfalls in Western New York State.

*
S 13a score to Society Sound

17:00 (Society Sound) (guit at 15”)

This point of time corresponds to the moment in Sound/Path/Field at which the indoor piece *Society Sound* begins. Members of audience may walk into Hendricks Chapel to hear it, or stay outside to hear other sections of the composition. Unlike listening to this talk or a concert piece, the audience is free to choose among alternative actions.

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Many sections of music will be played at different locations by different ensembles in the quad either simultaneously or successively. In order to hear them well, one will have to walk and visit them. Or one can sit somewhere and listen to the combinations of different musics. In this way, each member of the audience can individually engage attention freely and actively.
I trust I have not given the impression that Sound/Path/Field is like this talk. The talk, while designed to be a musical experience, is a map, not the territory of the outdoor piece.

This applies to the two indoor pieces as well, in as much as they are also maps of the whole.

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S 13c Score to Canonical Minutes

18:30

Originally, I didn’t intend to write an organ composition as part of the piece, but since the University organist was interested in participating and we were already using Hendricks Chapel for the chamber piece, I decided to write it. Its structure is based on the harmonies of the 90-note sequence and the notes emanating from the carillon.

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The chamber piece, *Society Sound*, is at the ratio of 10:1 with respect to the whole, and the organ piece, *Canonical Minutes*, is at the ratio 15:1. The chamber piece is texturally complex and phrasal while the organ work is canonic throughout.

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The carillon plays notes that issue from the 29-note cycle that generates the 90-note sequence. Moreover, these notes are almost all embedded in order in the 90-note sequence. Thus the carillon also plays the structure of the whole at a ratio of about 3:1. These notes are identical to the ones played on the synthesized chimes you hear during this talk.

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I set a number of texts for the four choruses, most of them echoing the themes of the work. For instance, here are two lines from the poem “Brahma” by Ralph Waldo Emerson.

Far or forgot to me is near;
Shadow and sunlight are the same

This is sung by all the choruses in slightly different versions.
William Wordsworth explores the theme of transience, in his poem "Ode to Lycoris." It is sung by Neva Pilgrim accompanied by the String Orchestra in the section called “Autumn Song.”
S 13h texts

21:00

Sound/Path/Field is often a lot busier than this talk. For instance, the chorus music may involve multiple text fragments, spoken and sung at once, producing a jumbled, turbulent, babble of sound. This may remind the listener of the sound of swiftly flowing waterfall cascades. There are also units in which the music is very sparse, just a few isolated sounds here and there.

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S 13i black

21:30 (arp at 37.5”)

The design of the entire piece often specifies that a unit have certain characteristics, such as busy or sparse, high or low, quantized or continuous. Such musical contrasts not only animate the piece, but also heighten an awareness of place and presencing.

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S 14 waterfall
22:00

The sights and sounds one encounters on hikes in the woods—or for that matter, a walk in the city—can produce a discriminating awareness of the open range of experience at different levels of scale; and there are dangers and challenges that can focus such awareness.

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S 15a quad

22:30

Before I hiked to waterfalls to compose the music, I spent a good deal of time structuring the piece. Dividing the duration of the work into minute-long units was a priori, inherited from all of my previous outdoor pieces.

I spent time at the quad getting a feel for the size and character of the space. Then I walked about measuring the amount of time it takes to move from one point on the quad to another.

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The next step involved the selection of locations for the musicians to play, how they would be configured at these locations, and how they would move from one location to another. I remember imagining that the process was something like surveying a tract of land in order to design a garden.

Then came the delicate, context-sensitive decisions as to what ensembles would play what where.

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S 16 quad

23:30 (clar upbeat to next)

There were several issues here: how the piece would start and end, the trajectories of musical density and reference, the more local details of contrast and alliance between ensembles, how the musicians would move from place to place without colliding, when the indoor pieces would occur, and so forth. At this point, I had also to determine the nuclear pitch and harmony for each unit.

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The computer program I wrote to generate the 29-note cycle was rewritten to make sure no pitch-class was repeated until nine others had appeared. Then I had to choose which of the many 29-note cycles in the output would be spliced together to produce the 90-note sequence. The choice was based on whether there were ways to embed the 29-note cycle in the 90-note sequence.
24:30

This wasn’t possible with any of the candidates, so I choose the one with the least order or pitch deformations; this became the series of notes in the carillon.

My visits to the quad were in January of 2006 so that the lack of foliage and/or people enjoying themselves outside helped me better assess the structural potentials than at warmer times.

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S 17b yellow
25:00 (noise at 10")

After designing the structure, I began writing the indoor pieces, reinterpreting the structural plan at different time ratios. I therefore built into these pieces exact correlations with the whole work, one’s which can be heard and enjoyed.

By the time the indoor pieces were in first draft it was spring.

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While I was structuring the piece, I began collecting texts for the chorus to sing. I chose poems by Wordsworth and other so-called Romantic poets that treat the suchness of natural settings and the lived experience of time. Some of these texts have Platonic overtones, which do not interest me; I do not believe appearance is a shadow of reality. Rather, how you see is what you get.

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The topics discussed in each unit of this talk are related to Sound/Path/Field, such that each of seven topics was correlated with one of the ensembles. Therefore, the topic associated with a given ensemble occurs in the same units of this talk that the ensemble plays in the piece.
For example, this unit of the talk associates with the unit in the piece at minute 57. It has only one topic, which is the listener’s immediate experience of space and time, because at minute 57 only the Wind Ensemble plays and that ensemble is associated with this topic.
Since many units are scored for more than one ensemble, a unit in the talk may treat many topics at once. The experience of the content of this talk therefore parallels the way the piece unfolds. This is why the talk accumulates information somewhat slowly as topics multiply associate with one another.
S 18c waterfall

27:30

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Experiencing something isn’t divorced from knowing what it is. It’s just that the two modalities are different, one sensual the other cognitive.

What we know of something influences how we feel it, and vice-versa.
And yet, if we treat something we experience with too much emphasis upon what we know, the experience doesn’t teach us much. By keeping what is called “beginners mind” in Zen, we consider our perceptions as primary to thinking. Even though a lot of planning went into Sound/Path/Field, it became what it is only as I composed it.
During the period I was composing the piece, I received a call from a music critic studying at Syracuse University who was writing a thesis on what composers say in program notes. She asked me about my notes and I replied, “I try to make sure the listeners’ heads are turned the right direction so they don’t miss something important.”

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S 20 puppet theatre

29:30

Speaking with Geoffrey Navias, the director of the Open Hand Theater, about its contributions to the piece, we agreed that he would establish installations using huge puppets at various times and places during the piece, some of which may attract people to a particular music event, such as the organ piece within the chapel.
If one could speed up the experience of the piece, as in time lapse photography, one would see the forming and moving of ensembles playing here, going there, within the continuous reconfigurations of the audience from one location to another.
30:30

A kaleidoscopic progression of densities and attention, not always symmetric.

Topologiccial counterpoint.

Conversations between space and time.

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The outdoor music for Sound/Path/Field was written in order from beginning to end with only a few exceptions. As I composed, I consulted charts and notes spelling out details of the plan. I didn’t decide on the texts I was going to set until I was ready to compose a choral section, although I already collected several texts for possible inclusion in the weeks before this stage.

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I prepared a separate notebook for each ensemble and drafted the music in these books. My compositional practice for writing the outdoor music involved a cycle of three activities. First, the night before, I would prepare the notebooks with information from the charts for the units I would compose in the morning. I would then go to bed and awake with ideas about what and how to write the music for that day.
Second, I would travel to a trail and hike to a waterfall, settle down and write the music. As I entered the woods, many ideas and sound images would present themselves.

Third, I would return home and copy everything into the computer to make the score. This would take usually a day and a half, so the compositional cycle was two days long.

*S*
S 23a blue

32:30 (arp at 37.5")
I employed many compositional techniques to embellish and project a unit’s primary note and harmony. However, these methods of composition were so familiar to me that it would better to characterize the process as spontaneous and even improvisational.

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S 23b waterfall

33:30

The woods always provided inspiration:

Place and presencing.

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S 23c waterfall

34:00 (guit at 15”)

It was as if I composed the open space and time into sound.

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Of course the waterfall sound helped, suggesting continual fecundity. Some of the falls were small, others quite tall, some difficult to reach, others by a road, many in parks, a few in uncultivated woods.

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I’m hoping that my experiences while composing Sound/Path/Field will translate into the listeners’ experience. But the social space of a University quadrangle is a different place from the woods even if the architecture of the buildings, paths, and statues can inspire a similar appreciation of space and time.
35:30 (sham near end)

The quadrangle is quite large, maybe 600 by 600 feet, so one definitely feels the space and sky especially in comparison with the surrounding university environment of various buildings clustered together with roads and parking lots.

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S 24b "master score"

36:00

After the score was complete, I went back to revise it, changing details here and there. But I should add that the score is actually twelve scores, for the eight ensembles, the carillon, the two inside pieces and the outdoor theater. When I showed the scores to Bradley Ethington, the director of the Setnor School and conductor of the Symphony Band, he said he wished I could have aligned all the pages of the separate scores into one master score for the piece.
I could do that, but there is no practical reason for it. I am tempted however, for the result would be a curiosity measuring 5 by 75 feet.

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S 25a waterfall

37:00

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The texts I chose not only included poems treating nature but poems about time, Some of these are humorous as in James Merrill’s quip:

Always the same old story—
Father Time and Mother Earth,
A marriage on the rocks

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I stayed away from setting Eastern writings on nature, which form a literary topic in Chinese, Korean, and Japanese literature, partly because my previous outdoor composition, “Coming Down to Earth,” was inspired by the Taoist writings of Chuang-Tzu, suggesting its themes and method of organization. That piece was performed in the middle of the woods in a park outside Rochester, New York.
As I’ve hinted a few times now, the space/time experience I am attempting to project is associated with different strands of classical Buddhist philosophy from India, Tibet, China and Japan. But even Buddhist people from those countries may not notice these influences as such; certainly the sound of the piece is not Asian.

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As I began working on this piece, I reminded myself that sounds tend to permeate each other in a large space. In fact, they may not reinforce each other the way we expect in concert halls, which are designed to amplify and send sound from the stage to the audience. In the open air, the nearest sound may not be the one most noticed.

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S 27 waterfall

39:30 (Clar upbeat to next)

As sounds travel over large distances, they thin out into echoless sonic whisps. Think of the sound of a flock of birds. The same sonic stimulus will affect people in different directions differently. Such things are built into the sonic design of the piece.
Asian literature aside, I don’t even need to cite or quote European literature to find literary parallels. The American writings of Thoreau, Emerson, Whitman, Stein, Williams, Ginsberg, and literary critics could do the job admirably. Nevertheless, I knew too much Wordsworth and Blake, not to suggest or include their writings, not to mention many other European authors and poets.
Sound/Path/Field was designed to allow the listener to find his or her path through the work.

Attention may be intermittent and vary greatly from moment to moment.
S 28b waterfall

41:00

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S 28c waterfall

41:30

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Music can take a lesson from nature; no plant or animal replicates exactly, there is always variation; symmetry only goes so far; typologies stray into each other.
S 29 Indra's net

42:30

I’ve often cited the figure of Indra’s net as a metaphor for the way to hear my music. Imagine an infinite net with a jewel at each intersection of strands. Upon examination of any of the jewels we see within it the entire network reflected exactly.

A self-embedded, holographic representation without beginning or end, a gauge invariant fractal.
Indra's net:

Everything interpenetrates,

the center and periphery are everywhere.

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S 30 list

43:30

The audience will be given programs listing each section of the work, its name, location, and performing ensemble; the program will also provide a map of the performance space. There will be guides for those who want a tour through the piece. The outdoor theater will signal events. No one will be able to hear all of it, including me.

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S 31 me on quad

44:00

All of what I’ve said about the concept and structure of Sound/Path/Field is meant to encourage people to come to it with an open mind, there to see and hear things of interest and have a good space/time,

As Milton puts it: “Untwisting all the chains that ty The hidden soul of harmony.”

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S 32 waterfall

44:30

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