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how to get started

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In August of 1989, Charles Amirkhanian and John Lifton joined forces to present the second "Composer-to-Composer Festival" in Telluride, Colorado, an invitational conference created under the auspices of the Telluride Institute which served to bring together composers from around the world to discuss and present their work in both closed day-long sessions (August 14-17, Telluride Elementary School) and public panels and concerts (August 18-20, Sheridan Opera House). The participants included Joan La Barbara, Tom Johnson, Trimpin, Anthony Davis, Jin Hi Kim, Walter Zimmermann, Conlon Nancarrow, Morton Subotnick, Julio Estrada, Laurie Spiegel, Ricardo Dal Farra, Tania Léon, Annea Lockwood, and John Cage.

While there are many things to say about the "Composer-to-Composer Festivals" as they evolved over a brief, four-year history, this particular year gave rise to an unusual confrontation between two of its invited composers – Anthony Davis and John Cage – centering on the subject of improvisation. After Davis reflected at some length in his presentation that his concerns had long had to do with the ways by which improvisation could be effectively incorporated into otherwise fully notated works, Cage responded by essentially dismissing the usefulness of that pursuit.

Now, those cognizant of Cage's life and work will be nodding in agreement, since along with his lack of feeling for harmony, improvisation is ostensibly the aspect of contemporary music practice least in accord with his thinking.

But how true is this assessment, on either front? It is generally known that upon hearing the premiere performance of James Tenney's *Critical Band* (1988) the previous December at the New Music America Festival in Miami, Florida, Cage did an abrupt about-face on the topic. "If this is harmony," he said to virtually anyone who would listen, "I'm all for it!"

But what of improvisation? From Cage's vantage point, and as generally practiced, there were all manner of things to overcome: control, emotion, style, personality, hierarchy, intuition, celebrity, habit, intention. On the surface, then, Cage's dismissal of Davis's preoccupation seems entirely sensible. So it may come as something of a surprise to learn that Cage's published writings and interviews throughout over two decades before suggest a somewhat contrary idea: that while there may be sharp distinctions to be drawn between their motivations, the two composers had not, in a sense, been so dissimilarly inclined.

Some of Cage's earliest compositional efforts involved improvisation, evidenced by his experiments in the 1930s in relation to texts – experimental writings from *transition* magazine, Gertrude Stein, Aeschylus. But these were quickly abandoned. Issues specific to the usefulness of improvisation as a performance practice seem to have resurfaced for him most forcibly in the mid-1960s, when he began to speak publicly on the subject within discussions of something inarguably closer to his heart, i.e. how, as a composer, he might effectively turn intention toward nonintention.

In 1966, in a conversation with Stanley Kauffmann, Cage first expressed his dissatisfaction with improvisation, principally with what he perceived to be its lack of discipline. Yet what's also clear here is that his internal dialogue on the subject remained decidedly exploratory. As he put it at the time,

> "Chance operations are a discipline, and improvisation is rarely a discipline. Though at the present time it's one of my concerns, how to make improvisation a discipline. But then I mean doing something beyond the control of the ego. Improvisation is generally playing what you know, and what you like, and what you feel; but those feelings and likes are what Zen would like us to become free of."

In the same interview Cage stated that in his estimation, most performances of his *Theater Piece* (1960) to date had been poor simply because people didn't understand the need for discipline.

Some fourteen years later, in a 1980 conversation with Cole Gagne and Tracy Caras, Cage asserted that he was "...finding ways to free the act of improvisation from taste and memory and likes and dislikes." Interestingly, this at a time when he was simultaneously engaged with not only various forms of indeterminacy, but with extremely determinate music, i.e. his *Freeman Etudes* for violin (1977-80; 1989-90), which were written down in as exact a notation as he could muster. It is thus all the more interesting to note Cage stating here, and in no uncertain terms, that his developing interest in improvisation was probably freer than anything he'd ever done before, including indeterminate music.

In 1982, in a conversation with Tom Darter, Cage further posited that

> "The difference is that improvisation frequently depends not on the work you have to do (that is, the composition you're playing) but depends more on your taste and memory, and your likes and dislikes. It doesn't lead

> you into a new experience, but into something with which you're already familiar, whereas if you have work to do that is suggested but not determined by a notation, if it's indeterminate, this simply means that you are to supply the determination of certain things that the composer has not determined."

In a particularly "on point" interview with Stuart Smith a year later, Cage reflected on his compositional path over the years, stating that since 1968 he had found two distinct ways of turning intention toward nonintention: through the musicircus (simultaneity of unrelated intentions) and through what he called music of contingency (*improvisation* using instruments in which there is a discontinuity between cause and effect).

Cage's "musicircus" is exemplified by his eponymous 1967 composition, of course, wherein through the chance-determined presentation of multiple performing entities one is treated to a mass superimposition of many different kinds of music. But it's also exemplified by such earlier works as *Cartridge Music* (1960), wherein musicians perform programs on old phonograph pick-ups (cartridges) that they've created following instructions provided in the score. As Cage elaborated on this work in his conversation with Gagne and Caras, "One person's actions unintentionally alter another person's actions, because the actions involve changing the tone controls and the amplitude controls. So you may find yourself playing something and getting no sound whatsoever."

Cage's "music of contingency" is exemplified by such works as his *Child of Tree (Improvisation I)* (1975) and *Branches* (1976), in which plant materials serve as instruments amplified via contact microphones and simple sound systems. As he explained in a 1983 interview with Laura Fletcher and Thomas Moore, "There I give directions for improvisation because the improvisation can't be based on taste and memory since one doesn't know the instruments." Further, "If you become very familiar with a piece of cactus, it very shortly disintegrates, and you have to replace it with another one that you don't know. So the whole thing remains fascinating, and free from your memory as a matter of course." His *Inlets (Improvisation II)* (1977), scored for players of water-filled conch shells and the sound of burning pine cones, is another case in point, since in any performance of this work the performer has "...no control whatsoever over the conch shell when it's filled with water. You tip it and you get a gurgle, sometimes; not always. So the rhythm belongs to the instruments, and not to you."

Other works to note are his *Sound Anonymously Received* (1969), wherein a solo performer is instructed to produce sounds on an unfamiliar sound source (anonymously received), his *Improvisation III* (1980) and *Improvisation IV* (1982),

both employing stereo cassette recordings which are played back with minimal constraints by multiple performers, and his *Improvisation A + B* (1986), an indeterminate composition for a mixed ensemble of clarinets, trombones, percussionists, voice, and cellos. This last is a particularly good example of Cage's "music of contingency," since while the actions of each individual performer are surely required for any performance, the context in which they perform as an ensemble effectively thwarts any possibility of intentional cause and effect.

In a 1984 conversation with Bill Shoemaker, Cage stated unequivocally that what he'd like to do is to

> "...find an improvisation that is not descriptive of the performer, but is descriptive of what happens, and which is characterized by an absence of intention. It is at the point of spontaneity that the performer is most apt to have recourse to his memory. He is not apt to make a discovery spontaneously. I want to find a way of discovering something you don't know at the time that you improvise – that is to say, the same time you're doing something that is not written down, or decided upon ahead of time."

Happily, Shoemaker took Cage's cue, asking whether he'd developed any satisfactory methods using improvisation. Cage gave this lengthy, thoughtful reply:

> "Finding, as with the conch shells in *Inlets*, an instrument over which I have no control, or less control than usual. Another example is if you use as a percussion instrument a music stand which has a faulty relation between the part that holds the music and the three legs that support the stand. If I hold the three legs in my hand – the stand is upside down – and move the top part on the wooden floor, then because of the faulty relationship, I won't always get a frictional sound. But, sometimes, I will. It's a little like driving a bumper car in the fun house, where you have less control than usual over which direction the vehicle takes. That interests me. But, say you have control, then it is a matter of how to occupy your intentions in such a way that you move into areas with which you're unfamiliar, rather than areas based on memory and taste. One of the ways I've found I call 'structural improvisation.' Given a period of time, I will divide it. Say, we have eight minutes. We'll divide it into sections of either one, two, three, or four minutes long, or three parts – four minutes, three minutes, one min-

> ute, in any order – or whatever. Then if I have ten sounds, I can find out through the use of chance operations which of those ten sounds go in the first section, which go in the second section, and which go in the third. Then I improvise using the number of sounds that have been determined for the first section, the number of sounds for the second, and the number of sounds for the third, and I will have an improvisation which is characterized by a change of sound at those different times, no matter what I play."

Two excellent examples of Cage's "structural improvisation" can be seen in compositions dating from 1992, the last year of his life. His *Four⁶* (1992), scored for four players producing sounds in any way over the work's 30 minutes, was premiered by an ensemble comprising Joan La Barbara, William Winant, Leonard Stein, and Cage himself, on July 23, 1992, at Central Park's "Summerstage" in New York City. In this piece, each performer chooses 12 different sounds, unspecified beyond having fixed characteristics (amplitude, overtone structure, etc.), and then performs these sounds as specified in the score within flexible time brackets. Because each performer performs his or her chosen sounds within a context of others doing the (indeterminate) same, the result is a unique and unforeseeable morphology of continuity, one that can't help but change from any one performance to the next.

His *One¹²* (1992) for solo lecturer, first performed by him at the Palazzo dei Priori, Sala dei Notari, in Perugia, Italy (June 22, 1992), is another case in point. Here Cage provides instructions for the creation of a unique, chance-determined score comprising a series of 640 numbers between 1 and 12. The numbers 2-11, when they appear, are to be interpreted as whispered/vocalized vowels/consonants of each of those numbers. The number 1, when it appears, represents an "empty" word (a connective, pronoun, conjunctive, or article), which is articulated; the number 12, a "full" word (a noun, verb, adjective, or adverb), also articulated. The performer follows the fixed sequence of numbers from beginning to end, but since the choice of words for the numbers 1 and 12 is entirely free, this work can be only understood fully as an improvisation.

It should be noted that by the end of the 1989 "Composer-to-Composer Festival," Cage had come to peace with Anthony Davis's position. In part, his acceptance had something to do with his devotion to the essential practices of Zen, wherein acceptance is key. But it may also have had something to do with his nearly lifelong role as "permission giver," since freedom granted can't be conditional. When asked in the "Q & A" portion of his public conversation with Conlon Nancarrow on the last day of the conference whether he might speak to how his views on improvisation had changed, Cage replied as follows:

"I would still criticize improvisation as I used to criticize it, but now I think we can imagine an improvisation which is different from just doing what you want. And much more like improvisation as Anthony Davis seems to think it or do it, that is to say he thinks of improvisation as giving the improvisers a problem to solve, and that's how I find it acceptable too. That is, you can give people freedom in a situation that they see as a problem, then the solutions can be invigorating. But if improvisation is not seen as a problem, then you just get repetition of mannerisms, or you get more of what you already know that you like. And what we want is to extend our enjoyment of life, or extend our enjoyment of music, or relationships of sounds. We want to live, don't we, in a more Mozartean situation? Or as Mozartean as we can get?"

One week after participating in the "Composer-to-Composer Festival," Cage appeared at "Sound Design: An Invitational Conference on the Uses of Sound for Radio Drama, Film, Video, Theater and Music," sponsored by Bay Area Radio Drama and held at Sprocket Systems, Skywalker Ranch, in Nicasio, California. Cage was slated to perform something of his 1982 radio play, *James Joyce, Marcel Duchamp, Erik Satie: An Alphabet*, but on the day his presentation was to occur – Thursday, August 31, at 11:30 a.m. – he had changed his mind.

What he chose to do instead is what is heard here – an impromptu, improvised presentation entitled *How to Get Started*, wherein he extemporized in random order on ten topics of interest, each for a maximum duration of three minutes. Each of these extemporizations was captured on tape, and then played back sequentially, in ever-increasing density, superimposed on top of each new live improvisation. The piece thus grows in complexity from start to finish, so that at the end, the audience hears all ten topics simultaneously – penultimately nine previously recorded and one (the tenth and last) live, and, in the end, all ten on tape.

Cage's ten topics run a gamut between nearly life-long interests on the one hand -- silence (6), harmony (10), time (8) -- and, on the other, emerging ideas about new compositions (1, 3). Experiences garnered at the "Composer-to-Composer Festival" are brought to bear on some (1, 2, 6), while others emphasize specific extant compositions, thought about in the present tense (2, 4, 5, 7, 8, 9). And more than two dozen individuals who are variously relevant to his thinking are sprinkled throughout.

Cage's presentation was fully expressive of an adage by which he lived: If you find yourself in a situation in which you feel dissatisfied, the appropriate thing

to do is not to criticize, which is the purview of the critic, but to identify what it is you think you don't like, and then make something new in "constructive response." Which is, of course, the purview of the artist. But it was also emblematic of Cage's life-long devotion to that which is truly experimental, since at the seasoned age of 76, just three years shy of his death, he continued to question his actions and choices, to listen to others and to create new "constructive responses", and to strive always to take himself, and those around him, into surprising, unknown places and experiences.

On *How to Get Started*

Aaron Levy and Arthur J. Sabatini

Throughout its first decade, Slought Foundation has been dedicated to affirming artistic histories and legacies and the values and integrity of individual artists. To those ends, Slought Foundation has explored alternative styles for exhibition-making and novel approaches to archiving. Every attempt has also been made to reach new publics and communities and to serve as a collaborator in the presentation and exchange of ideas.

Slought Foundation and the John Cage Trust began working together on John Cage's *How to Get Started* in 2009, which opened as a permanent installation in September 2010. With a mutual sense of commitment, both organizations recognized that *How to Get Started* is a unique work that provides an opportunity to reflect on intriguing questions about art, artists, performance, intentions, talk and ideas. It is a work somewhat in the form of a question that, in itself, revolves around notions of ideas and change. Moreover, *How to Get Started* poses others questions. It implicitly asks how it can be accurately preserved and how it can be artistically activated and re-imagined.

Thoroughly engaging, *How to Get Started* is all about ideas! Created in 1989, Cage performed it once at Skywalker Ranch, Nicasio, California on August 31, 1989. Explaining to the audience and sound technicians what he was going to do just moments before he began, Cage's performance was essentially and, uncharacteristically, an improvisation. It was based on simple instructions: a solo performer writes ten discrete "ideas" on note cards and determines an order for them through chance operations. A tape recorder turns on and the speaker begins to talk into a microphone on the first "idea." When finished, the speaker starts talking on the next "idea" while the previously recorded section is played back aloud along with the ambient sound. The second "idea" is then recorded and the process is repeated. The speaker continues through all ten "ideas," the result being a recording of the layered blendings of a solo voice talking to an audience. On the day of Cage's only performance, the technicians present were told what to do and, using the recording and amplification equipment on hand, they successfully produced the rough, live mix that you hear on the CD. (At Slought Foundation, in Philadelphia, *How to Get Started* is installed in a specially designed room for performances.)

In his performance, Cage externalized a dialogue with himself before a live audience, clearly experimenting with a process of thinking and talking in public. In so doing, he realized that the audience became a participant who completed the work. This meant, as he wrote in introductory notes, "that the work takes as many forms as we are."

Another appealing facet of *How to Get Started* is that it intrinsically corresponds to Slought Foundation's reflexive tendencies. Over the years, projects and initiatives have been pursued as "thought-experiments" meant to expand Slought Foundation's agendas and to enact new forms of participation that encourage the circulation of ideas. Cage's distinctive conception in *How to Get Started* patently inserts itself into this practice by raising questions concerning how to consider the relationship between artists' work, ideas, and new organizational structures. Simultaneously, it addresses issues of artistic legacy and how to formulate artists' intentions, how to engage works historically, and how to interpret and re-interpret texts in light of new technologies. In short, though Cage could not have known where his work would end up, these considerations beg the question for Slought Foundation of precisely "*how to get started*."

In order to realize *How to Get Started*, curators Laura Kuhn, Aaron Levy, and Arthur Sabatini, representing the John Cage Trust and Slought Foundation, have actively worked with a number of talented collaborators. Ken Saylor, as exhibition designer, and Peter Price, a composer and sound designer sought ways to install the work in a spirit that acknowledges Cage's ethos and artistic practice. Although seemingly uncomplicated, the design of the space and display, digital recording and playback process, acoustics and other dimensions of *How to Get Started* proved as challenging to conceive as they were rewarding to execute.

For Slought Foundation, *How to Get Started* takes the form of an unexpected gift and opportunity to collaborate on the work and legacy of one of the most significant artists of our era. This is fitting as the range of work presented at Slought Foundation has often directly referenced Cage and those he worked with or influenced during his long career. Insofar as *How to Get Started* will be a permanent installation, it will be a resource for Slought Foundation initiatives and public programs. Slought Foundation and the John Cage Trust are also conscious that the collaboration allows Slought Foundation to be a node of activity for artists, scholars and others interested in Cage's life and work and ideas.

Finally, *How to Get Started* complements Slought Foundation's commitment to presenting new work with an online presence. The process of producing *How to Get Started* virtually enacts what continually occurs at Slought Foundation, as artists and thinkers collaboratively display work and engage in dialogue that are later published and represented on the website. The website - *www.howtogetstarted.org* - will become a repository for recordings by invited artists and others who will perform *How to Get Started* at Slought Foundation. Through this evolving digital archive, audiences can remotely experience access new versions by *How to Get Started*'s participants as well as other materials including the enclosed CD.

Slought Foundation and the Cage Trust look forward to experiencing this project as it unfolds and evolves. Please join us.

How to Get Started
John Cage

Sound Design: An Invitational Conference on the Uses of Sound
for Radio Drama, Film, Video, Theater, and Music
August 29, 30, and 31, 1989
Presented by Bay Area Radio Drama at Sprocket Systems, Skywalker Ranch, Nicasio, California

I want to say that I have enjoyed this experience with you and I'm grateful to Eva Soltes and to Eric Bowersfeldt and Randy Thom and Susan Sanders. And I'm about to be grateful to two others: Dennis Leonard and Bob Schumacher. I haven't known quite what to present to you but gradually what's going to be given has shaped itself. I am at a point of change. One thinks, I suppose, that he's always at a point of change and maybe it isn't true. And I've written down on these ten sheets of paper the things that I think are happening as I start whatever I do next.

Some of these sheets – there are ten – I've jotted down ideas that I've had for a long time. And others are things that – most of them are things that have happened to me recently. I'm not going to read them in the order that I wrote them, nor am I going to read them. I'm going to use them as the basis for a kind of improvisation. Ordinarily when I give a talk, I prepare it. Only once before have I improvised it as I will today. I did that once on a roof in Ann Arbor for the Once Group. And while I was improvising, David Tudor was also improvising.

Today, Dennis Leonard and Bob Schumacher will collaborate to record what I improvise for the first sheet and then I'll wait a little bit and I'm going to use chance operations visibly for you so as to find out which of the next ten sheets I shall read or shall improvise on. And while I'm improvising on the second one, the first one will be played, so that you'll get to hear it for the second time. And that will continue until we get to the end (laughter)!

So, I have these print-outs of a program called *IC*, which is *I-Ching* for the numbers from two to ten. And I have ten sheets here, so my question is – because I'm, well, – I'll tell you that later probably. My question is: Which of these ten sheets I should begin with.

1

Recently I was in Telluride in Southeastern Colorado and I had a dream of a new way to make music. What you do is you take some paper and you turn the two-dimensional thing into a ball so that it's completely crumpled. And then, of

course, you flatten it out. And you read it as with a grid, and what-not, you read it as indications of whatever aspect of music you're then noticing.

I don't mean to say that you do this as a performer. I'm thinking of doing it as a composer. So that I would have the time to measure it attentively. So the changes in whatever aspect of sound that you were paying attention to could be given by the changes in the paper, with both respect to time and to the sounds in it. I thought of the sounds as being single sounds, lasting until they were to stop, not going on to another one.

2

Also in Telluride, we had, among composers, three project sessions in which the composers were able to present their work, talk about it. One of these in Telluride was Walter Zimmermann from Cologne. I was very glad to see him and to hear his new work. It's a kind of use of ostinati. It's a kind of – and the ostinati are not made up of tones that are close together, but rather that are – you can't believe it – an octave apart! You go from a G-sharp in one octave to the G-sharp, say, two octaves above.

And according to some way that he's done it, he makes the most unlikely kind of piano music. As you listen to it, and it lasts for quite a while, you can't tell where you are. And you don't know where you're going.

I've recently written a piece for two pianos. And the two pianists for whom I wrote it, whom I don't know very well – they call themselves, I think, "Double Edge" – were both out of town. I finished it during the summer while they were gone, so that I didn't know what they think of the piece and I was curious about it.

So I called up Grete Sultan, who has two pianos, and I asked her if we could mostly read through it together. Actually, I didn't ask her to do this after it was finished; I did it after I had finished the first part of it. And we both liked it, we enjoyed it. Then when I finished the whole piece, which probably lasts in the neighborhood of thirty to forty minutes, she called me up and asked me whether I would like to hear it read through by Beatriz Roman – a Brazilian pianist who was studying with her – and with her own playing. And I did want to hear it. And I had the same experience.

I'm telling it to you backwards, because I had heard my piece first and then Zimmermann's later. But I'm telling it to you about Zimmermann and then about my work. I had the same experience of not knowing where I was and not knowing about where I was going. In the music, I mean. So the idea is in the air!

3

There's a book by Norman O'Brown which is a putting together of two books: *Finnegans Wake* and Vico. Thinking now of *Roaratorio*, which used as its ruler the name of James Joyce through it, so that by that means the book was shortened to something that was usable as a musical performance. I don't know where my sentence began now, but what I'm trying to get at is the idea that one could make a piece of music, not with one book as I did with *Finnegans Wake*, but you could make an interesting musical form with several books to begin with, using them both in a way to produce sounds. And then you could have those, in the old-fashioned way, you could have them as themes, for instance. Or you could, in my way, be simply superimposed.

4

Eleven years ago I began the *Freeman Etudes* for solo violin. I wrote them for Paul Zukovsky. He's only played the first eight; I finished sixteen of them. In the meantime, János Négyesy has learned all sixteen, which he plays, as Irvine Arditti says, "in the laid-back, California way." That is, he takes an hour-and-a-half to play all sixteen. Perhaps that's not true; perhaps he takes less time. But that's what Arditti said.

I heard Arditti play the *Freeman Etudes* in fifty-six minutes a little over a year ago. And then in November last year I heard Irvine Arditti play the sixteen *Freeman Etudes* in forty-six minutes and I was astonished at the experience. The piece is very difficult and the people reading the music – which I wasn't doing while he was playing it – said that there weren't any mistakes that they noticed. Or had the time to notice! So I went backstage afterward and asked him why he played so fast. And he said, "Well, in your preface to the piece you say 'play as fast as possible'."

One of the things that has kept the *Freeman Etudes* unfinished is that they are impossible, very difficult to write, and they will be literally impossible to play. So why write them? And Paul Zukovsky had lost interest in them, so that the first years of the eleven years that I did write them, I had no encouragement. But now, through Arditti's virtuosity, I am encouraged. And when he said that he played as fast as possible, it suddenly dawned on me how to continue them.

I had thought that I would have to continue them in the foot-button way, in which the player would play as much as he could, and then he would press a foot-button and have a synthesized piece heard. But I didn't like that relationship of human being, so I had stopped. Now it suddenly dawned on me what to do.

When there would be too many notes, as occurs in the second group of sixteen – not in all of them, but particularly in the eighteenth one – I would simply put the note "play as many as possible." Now I discover, as I go back to the *Freeman Etudes* to continue seventeen through thirty-two, I discover that I have forgotten how to write them and that I have to study my notes and so forth to learn again where I was.

I'm having recourse to a musicologist who is studying my work with chance operations and hopefully he will – we'll work together actually when I go back to New York in late September and early October. But since that time is still in the future, I've begun to learn – or think I'm learning – how I wrote the *Freeman Etudes*. And the result is that the seventeenth one is already finished.

But I had an idea which I want him to help me develop, which is that, instead of there being the same number of questions asked, the answers of which constitute the first sixteen, that the number of questions asked would become – or, let us say, the questions that were asked would become more complex as the seventeen through thirty-two goes on. So that the answers received increase in number.

5

In these meetings now and then the audience has been mentioned. I want to speak to you of the article by Marcel Duchamp called "The Creative Act," which he makes clear the position of the audience, which is to say, to finish the work by listening. So that the work takes as many forms as we are.

In recent years I've been fascinated and used in my work the musical work of Marcel Duchamp *Sculpture Musicale*. I don't know if I'm quoting it to you correctly, but it's essentially sounds leaving from different places and lasting, thus forming a musical sculpture. There's something more to it than that, but that's essentially what it is. For me, it has removed the irritation that burglar alarms give, or any such constant sounds. The moment I hear a constant sound, I listen for another, hoping to get a situation around which I could walk.

I made first a piece for – I forget his name. I was invited to Yugoslavia and asked to make a piece for a foyer of an orchestral hall – I called the piece *A Collection of Rocks* – in which I used something between 150 and 200 high school children to spell one another with the same instrument, for instance, and take on a particular place in the foyer. There were two levels. And it was a marvelous experience, hearing these sounds come from different places and last. Ten playing on trumpets so that five would play at once and the other five would spell them. And the sound could last an electronic length of time.

Just now I made *Sculptures Musicales* in the plural, rather than the singular, like Duchamp. I made it in the plural for the dance by Merce Cunningham and his Company, which is called *Inventions*, and which will be performed here later this month in Berkeley. It's an interesting piece because – all it is is – it's more or less only the title. I gave the directions over the telephone and I intend to revise the title. The idea is a slight variation on the Duchamp idea. Namely, that it's plural. How plural it is is not told.

So that in the, say, twenty-six minutes of the dance, a musical sculpture – that is to say more than two sounds, at least three sounds – will start in. What do you call it in a painting when the things start immediately together, in some kind of edge? Hard edge. And they'll finish hard edge, so that the sculpture exists actually in silence, ambient sound. And it doesn't matter what it is. That is to say, the sounds don't matter, so they're chosen, of course, by the people who are going to make them, the performers.

And when are they going to make them? The answer to that question will be given in a circulating way by each of the performers. That is to say, when the Dance Company tours, and it has four musicians at one performance, one of them will tell when and how many sculptures will be made. Each will have chosen his sound. It could be just two sounds lasting as long as one of the players decides in the twenty-six minutes. And in the next performance, another one of the musicians will tell how many and when.

Obviously, I could talk longer about that.

6

You know it, but I'll tell it to you again. In the late '40s, I went into an anechoic chamber at Harvard University, expecting to hear nothing and, instead, heard two sounds. I spoke to the engineer in charge, thinking he could correct the situation. I said, "There are two sounds in that room." And he said, "Describe them." And I did. And he said "The high one was your nervous system in operation. And the low one was your blood circulating." That means that silence is a change of mind. And since other people were taking care of intention, I decided to devote my life to non-intention. So that I've changed my responsibilities from making choices to asking questions.

A young man in Telluride recently said, "If you can do anything you like, why don't you just..." And then he suggested something I should do. And I pointed out that I'm not involved in purposelessness; I'm involved in what is called in Zen Buddhism "purposeful purposelessness."

7

I no longer tour with the Cunningham Company, not because I don't love the work of the Company, but because, in order to do the other things that I've grown interested in doing, I had to leave. I used to get the work done on tour, but now I have a computer and I don't know how to use it, so I need an assistant and so forth. But in the work with Merce Cunningham, what has been its character is that the dance and the music are independent of one another.

And the thing actually that stopped my working with the Cunningham Dance Company was the agreement to make the *Europeras* for the Frankfurt Opera. And I took it because I wanted to explore the possibility of theater in which all of the elements of theater would be non-supportive of one another, but would, each one, be at its own center.

I think what made me want to do this was going to a dance concert in North Carolina in the School of the Arts there and noticing that a rather poor dance that was done was made even more – I would like to use a bad word – tawdry, shabby, or miserable kind of an experience. And what made it so miserable was the lighting, because the lighting was supporting the dance. If they had both done their own business, it could have been something to pay attention to. But since they were doing all the paying of attention... Well, you know what I mean. Anyway, I'm convinced that almost any theater will improve if the lighting is independent of what it illuminates.

8

I was in Leningrad about fifteen months ago. It was a musical festival, and they played my *Music for Fourteen*. They played it very well, people from Moscow. And I had the opportunity later in that short period – it was only five days that I was in Leningrad – I had the opportunity to talk with Sofia Gubaidulina, who had heard the piece *Music for Fourteen*. The characteristic of this piece of mine, which I am continuing, the intention is to build up an orchestra one by one, so that gradually they will realize that they can get along without the conductor.

They're all working in time brackets, flexible time brackets, so that, for instance, a series of notes can begin any time between zero and forty-five seconds and end any time between, say, thirty seconds and one minute fifteen seconds. And the next time bracket will overlap that one. Some time brackets don't overlap but abut, but it gives a flexibility of time. And all the parts are so written, but since they're all written that way, according to chance operations, they come out differently, both structurally and in detail.

As we were talking, Sofia Gubaidulina and I, she said, "I liked the music very much, except for the clocks." She said, "You should realize that there's an inner clock." This has become a great concern of mine for another reason than Gubaidulina's remark. That is, that I've accepted a commission from Margaret Leng Tan, the pianist, to write a piece for her to play. She found my time brackets constraining. She admitted that they gave her discipline, but she said that playing the piano for her was a kind of dance.

So, I put one and one together (laughter) and wrote a piece called – well, I wrote the piece for two pianos, and then I wrote this other piano piece – and since she was going to be moving and she thinks of it as a dance, maybe that gave me the idea that it shouldn't be just one piano, but could be a maximum of four. She could either spread them out in front of her, or she could be surrounded by them. And each one could be different, through being prepared differently. Not extensively prepared as in my earlier works, but as a result of using chance operations I could prepare those notes that were only played once. Anyway, that's been done.

9

I've already talked about this a little bit. My current music has two sections, so to speak, or two ways of going, besides the *Freeman Etudes*. One is that *Music for* – and it's gotten up to *Music for Eighteen* – and, if I can get it to there being music for the full orchestra without government, without a conductor... And the other pieces that I'm writing are called – began with a piece called *Two* (written out, t-w-o) – and then since I wrote *Two* some time ago, I think two years ago, and this piece for two pianos is also called *Two*, it has to be called *Two* in a different way, so it's called *Two*^{2}, with a little two as a superscript. And then we'll get *Two*^{3}, cubed, you see, later on.

Well, since the *Music for* that's gotten up to *Music for Eighteen* is all written the same way so that they will finally produce an orchestral work without a conductor, this series, instead of all being written the same way, they're all written in a way that I can, I try to discover another way of writing music for each one of them. And I've written *Two* and *One* and *Five* and *Seven* and *Four*. And then for the Boston Symphony Orchestra I wrote *1O1* and instead of... I asked them how many people there were in the orchestra, and they didn't know. But they looked up the contract that they have as an institution, of – what do you call it? You know, the way they were organized – and it turned out that they have to have at least 101.

So, I extended to that piece for orchestra the notion of Gubaidulina that there should be an inner clock, even though there is no inner conductor. But when I was asked to make the piece, they said they wanted a short piece between ten

and fifteen minutes, and so I made one for twelve.

And I wrote a long – a two-page note, really – that every person in the orchestra gets with his time brackets. And I explained that the time brackets could be read with a clock or without one, once one understood what the piece was and what his function in it was. And the piece is so simple to understand that that could be done, so that we were able to say – I was able to say, in the note itself, to quote Gubaidulina – that each musician could use his own sense, rather than his clock.

It's essentially a percussion piece in which the strings all play frictionally with a complete *col legno*. And they start the moment the brass and woodwinds have made an initial outburst within the opening time bracket. This outburst comes again about two minutes before the end of the piece and is less contained, so that there's more space in which the instruments play at highest volume and highest pitch.

I have a question on this sheet and I don't see its – oh, I see what the problem is. I speak of this series, which includes the *101*. I speak of it as music as invention, and then at the bottom of the page, I question myself: Do we have new ideas, or do we simply repeat ourselves?

10

A long-standing problem for me has been harmony. It was quite clear to Schoenberg when I was studying with him that I had no sense of harmony. Schoenberg said, "You'll never be able to write music." I said, "Why not?" He said, "You'll always come to a wall and you won't be able to get through." I said, "I'll beat my head against that wall the rest of my life."

I'm now having a changed feeling about harmony. And it was repeated – the feeling came back to me with great strength yesterday – when I heard the music of Pauline Oliveros. Earlier, not quite a year ago, in Miami, I heard another music which is intentionally harmonious. It gives me a new attitude, as Pauline's work gives me a new attitude, toward harmony: namely, that I have a sense of it, or have a feeling for it. That I love it just as much as all my life I've loved no harmony at all. What it is is an attitude toward the togetherness of sounds that is not legal, not theoretical, but which is based, as Pauline so beautifully told us, on the pleasure of making music. And the great pleasure that it was for her and Stuart Dempster to play in a place where there was resonance.

It seems to me that when we are involved with music, that we're involved with... I'm afraid I'm not completing my thoughts. The thing I don't like about,

have liked never about, harmony is its theory, of telling us what's right and what's wrong. That's not what's happening with James Tenney's music in Miami and Pauline's music wherever it is. Each has, so to speak, its own harmony.

When the music of James Tenney began in Miami last December, the accordion began playing a single tone. And then another instrument played the same tone. Nobody listened immediately, because it seemed like they were tuning. They were all playing the same tone! Gradually it became microtonal and gradually people began to listen. And as the performance continued, the microtonality of the intervals became bigger until finally a whole reach of sound was with us.

M

12 numbers without bias between 1 and 581

140 264 165 402 13 40 21 212 331

I

12 numbers without bias between 1 and 1291

670 963 503 788 1164 489 679 397 1049

R

12 numbers without bias between 1 and 1361

177 106 1133 928 1321 1357 1041 129 611

A

12 numbers without bias between 1 and 2148

1606 886 1822 661 1714 925 1618 1347 40