My first impulse was to work in scoring and performance-process as such, both of which are represented in the score. I was first moved to think about such things by observing mobiles of Alexander Calder and the very spontaneous painting techniques of Jackson Pollock. Both of these things I vaguely remember becoming aware of in Boston around 1948 or ’49 and I had very much the impulse to do something in “our kind of music,” which would have to do with this highly spontaneous performing attitude—improvisational attitude, that is—from a score which would have many possibilities of interpretation. Under the influence of Calder, I considered this kind of thing to be a mobility, which is to say a score that was mobile—a score that had more than one potential of form and performance realization. I moved to Denver, Colorado, in 1950, and continued to think a great deal about spontaneity in performance and mobility in scoring techniques. But it was a considerable leap or difficulty to conceive of a score that would in itself be something and in itself imply many more things.

While in Denver, I was teaching arranging and composition—Schillinger techniques—and at that time I experimented by painting somewhat in the style of Pollock to get the feeling of what it was like to work that spontaneously. I was also thinking in terms of mobile scoring. Quite a few of the scores that I did between 1950 and 1952 were in a sense fixed scores, but composed in a very spontaneous and rapid manner in order to try—as I phrased it at that time—to put something down which was very fresh from my conception, and before I could apply all my knowledge of propriety and so forth in regard to performance. In other words, I was working as a composer as if I were performing spontaneously.

The works that I remember at this time (between 1950 and 1952) which were most in that manner were pieces for string quartet in which I wrote
in a graphic, line-drawing style, very rapidly, all four parts of the string quartet. Then later, I went back and applied real tones and durations to the parts, while following the very spontaneous lines that I had created. In other words, I was trying to compose or get the outlines and character of a string quartet piece in hardly more time than it would take to perform it—or maybe even less time than it would take to perform it. But this was an attempt at correlating my own conception with an extremely rapid way of “composing,” which was, I have said, almost like improvising myself—in other words, realizing a graphic drawing in my own way.

There are three works composed in Denver just before composing Folio: Three Pieces for Piano, 1951; Music for Violin, Cello, and Piano, which was also 1951, I believe; and Perspectives for Piano, 1952. All three of these works are technically based on Schillinger principles of generative units and cellules, rhythmic groups, and so forth. But the basic kind of aesthetic is one of a mobile. In the case of all these three pieces, they are fixed mobiles, yet the conception was one of mobility, in which I allowed the various lines of the compositions to form in highly spontaneous ways. The title of the piece, Perspectives, suggests that it’s oriented around a visual kind of parallel with conception and listening. The “perspectives” are of a relatively small amount of material, but the material is seen from many different angles—as one can look at a mobile from many different angles and see different relationships of the units, one to the other.

During this time between 1950 and 1952 in Denver, as I’ve said, I was experimenting with lots of things, and also beginning to work in a notebook. (The notebook still exists in my files in America somewhere.) But the notebook has many, many sketches of kinds of scores I thought of that would allow for multiple realizations of a sonic image and also deal with new notational possibilities and flexibility, as well as higher degrees of spontaneity in the performance. The two pages on the inside back cover of the publication Folio were from that notebook. One is a general page of sketches and the other one is the first sketch for the piece called November 1952, subtitled Synergy. The notebook contains many thoughts, conceptions, sketches, and so forth for quite a few pieces. After working in the notebook for a while and beginning to get a feeling of what could be done, I began working on the pieces which now exist in the collection called Folio (published by Associated Music Publishers).

December 1952 exists as a kind of centerpiece or focal point within Folio. October 1952 is in standard notation, but all of the rests are left out, which, in my opinion, would throw the performer into the necessity of performing in a very spontaneous way as far as time is concerned. And the score for October 1952 is very clear as to proportional relationships; the durations are different one from another, but the spaces, the silences between, have to be done in a very spontaneous manner. November 1952: Synergy is a score which is intentionally much more ambiguous as a
score than October 1952. I still have standard notation and durations and dynamics and so forth, but I took a regular piece of music paper and put lines in between the normal staves of a piece of music paper in order to create a field. On top of this field were placed the various suggestions of duration, the various clusters of durations, and things which indicate varying relationships of high to low, long and short, and such. November 1952: Synergy is intended for the performer to perform in a very spontaneous manner, very quickly. Where the eye falls, it sees a certain duration or group of durations. And then the performer is to perform them. The eye can move from any point to any other point on the page so the piece could be realized—improvised through, worked through—for any amount of time. It can also be played by any number of instruments simultaneously. So it is beginning to be a collective kind of improvisational piece based on very simple elements which, to me, suggest ways of performing, various realizations possible from that one graphic thing. At this time, I was considering and had conceived of the idea of two kinds of mobility: one the physical mobility of the score itself, and the other the conceptual mobility—which is to say the performer’s mental approach to the piece—holding in mind the considerable number of different ways of moving, moving the mind around a fixed kind of graphic suggestion, or actually physically moving the score itself.

December 1952 specifically is a single page, something like a photograph of a certain set of relationships of these various horizontal and vertical elements. In my notebooks at this time I have a sketch for a physical object, a three-dimensional box in which there would be motorized elements—horizontal and vertical, as the elements in December are on the paper. But the original conception was that it would be a box which would sit on top of the piano and these things would be motorized, in different gearings and different speeds, and so forth, so that the vertical and horizontal elements would actually physically be moving in front of the pianist. The pianist was to look wherever he chose and to see these elements as they approached each other, crossed in front of and behind each other, and obscured each other. I had a real idea that there would be a possibility of the performer playing very spontaneously, but still very closely connected to the physical movement of these objects in this three-dimensional motorized box. This again was somewhat an influence from Calder: some of Calder’s earliest mobiles were motorized and I was quite influenced by that and hoped that I could construct a motorized box of elements that also would continually change their relationships for the sake of the performer and his various readings of this mechanical mobile. I never did realize this idea, not being able to get motors and not really being all that interested in constructing it.

There were many other ideas in this notebook, similar to this. One— influenced by Buckminster Fuller, actually—was to be a large sphere
made up of triangulated strips. Each one of those strips seemed to me wide enough to write music. And the idea, which seems a little weird and strange now, probably—and even then, I guess—was that this sphere would float in water and the performer, by gently blowing on it, would make it revolve and turn. The sphere on the water could turn on any of its axes, and therefore each thing that appeared on the face of the sphere directly in front of the performer would be what he played at that moment. There would be completely composed material on those strips that made up the sphere. But each time, each performance, different elements would appear. Naturally that would create a completely different and very unpredictable continuity, which is to say, form. But still, all of the material on that sphere would have been elements I had composed. This would be a really mobile score, with all of the music composed—unlike the concept of December 1952, in which the material is not composed, but the suggestions of relationships are all that is given.

Not having constructed the mechanical box, which was the origin of the idea for December 1952, it occurred to me that, on a piece of paper, I could represent a vision of these horizontal and vertical elements of different thicknesses in a way which would be one representation of that thing. I describe it, I believe, in the score to Folio: it was like a photograph of these elements at one moment. But one should consider them constantly in movement in all dimensions. So, that idea was transferred from the mechanical box mobile. This then made the score become what I call the conceptual mobile. The performer was asked to consider these elements in this manner only at the moment—and they could be changed continually. Of course I then rely upon the performer and his “conceptual mobility potential” to create the variations and the differences and the changeability of the score. But what appears in the publication of December 1952 in Folio is directly derived from the conception of a physical motorized mobile score. Many others of these were thought about, and sketched out, and exist in the notebooks. But I tended to be more “practical” and less “mechanical” about the realizations. (Much later a student of mine named Joe Jones—better known as “Brooklyn” Joe Jones—realized some of these sketches. He had a greater tendency to buy motors and objects and to create some of these conceptions that I had in 1950–52.) So, December 1952 was generated from that very early concern with trying to create something which was a score comparable to a visual mobile.

In December 1952 the elements were placed and their thickness and length and horizontality or verticality were fixed by a kind of program I worked out based on the use of random-sampling tables. The random-sampling tables I discovered in Denver or New York—I can’t remember where—were just a feast of numerical things. These were a collection of something like 10,000 numbers that are cybernetically randomized so that
there is no prejudice within the sequence of them. Working with nonprejudiced material, one could get a very bland and consistent kind of result. So when I used these random-sampling tables, I introduced prejudice so that there would be different degrees of density, and so forth. This is not so apparent in December 1952 because of the nature of the score and what I knew would be its performing techniques. I did not need to prejudice the things in order to achieve varieties of density and textural contrasts. However, on December's original score there's a scale of numbers on the left margin and a scale on the bottom of the page, forming in geometry an abscissa and an ordinate. And then, working out a program which would allow the piece to generate itself as I wished it to, I would find a number on the left vertical scale and a second number on the horizontal scale along the bottom of the page. At the intersection of these two numbers, drawing the left one horizontal to the right, drawing the number on the bottom vertically up—at the intersection of these (which are called indices)—at the center would be a point in this total space. Once I achieved this point, my cybernetic program would then give me a number which would indicate whether from this point a line would move to the right or to the left on a horizontal plane, or up or down on the vertical plane. Once I found this out, I would get the duration—that is, the length of that line, horizontal or vertical. Then another number would give me the thickness of that line. So every single element of what is seen on the page of December 1952 was constructed based on this kind of program. It seemed clear to me that a piece that was not going to be performed from left to right did not need to be composed from left to right. In other words, I could not predict the movements of a performer from one point to any other point, and rather than compose it just by taste or some kind of imaginary continuity structure which would then not exist in the performance, I chose to consider the entire area a field of activity and within this field, by this coordinate technique, the various elements were placed and their thickness and direction were determined. At a certain point—and certainly by taste—I stopped filling this space. It could have gone on and on and on until the entire thing had become black, obviously. What one sees today when one looks at the score of December 1952 is the collection which I assembled through a process of random-sampling tables, and the fact that I chose to stop at the point where I considered that the number of elements in the field was sufficient to stimulate the kind of performance-action that I was interested in provoking.

I originally considered that the various thicknesses indicated loudness. When David Tudor first performed the piece (which was considerably later than when it was written), he suggested that the various thicknesses could indicate clusters, which is obviously a very good idea—except that most instruments can play only one note at a time. So, the musicians have to consider the linear thicknesses only as being various loudnesses.
As is stated in the publication of *Folio*, the performer may start from any of those points and move to any other of those points at any time, at any speed, with any number of instruments, and for any length of time of performance. Each performer is free to read the page from any of the four quadrant positions, which is right-side up, upside down, sitting on the right margin, or on the left margin. This is a kind of physical mobility. If one happened to be a musician with an instrument able to play clusters or more than one note at a time, one can see that by setting the score page on one of its sides, there would be more clusters available to play than if it were sitting on the bottom (where the signature is). But any reading, from any of these four positions, and from any point to any other point, is possible. One could begin a performance very quietly by choosing to read only the thinnest lines at the beginning, and moving from point to point in various frequencies, playing only the very thinnest. Or, one could start very loudly by playing the thicker lines. Such things are all within the potential of a performer’s decision or determination of how he will perform the piece.

People would like to know about this piece, and so would I! Why would one, namely me, try to do such a thing as this piece? I don’t think anyone can trace the origins of a new idea, or the psychology of why one person does it rather than another—except within the experience of myself in relationship to composers that I met in New York, such as Cage and Feldman and Wolff, the four of us sort of being the first aleatoric composers. But one characteristic of me—which is very distinct from any of their histories or tendencies as far as I know—is that I began being a musician as a trumpet player, and playing a lot of jazz. In a certain way I think this influenced my tendency to be interested in flexibility and improvisatory aspects of music. I don’t think there is any music of mine that sounds in any way influenced by jazz, but I think the influence was very much in the kind of poetic relationship to the act of performing. I continue to seem to be a very performance-oriented composer, which is to say I am very, very intrigued and interested in the performance itself. I very much like conducting and rehearsing the music. I am not so much interested in the piece ultimately being a monument as I am in the piece existing as a kind of field of the activity of music-making which can exist between sympathetic and reasonable kinds of people.

However, it is clear that within the arena of art, the influences on me to create a graphic music and a mobile music were the work of Jackson Pollock and Alexander Calder. This I can distinctly see in my background as being the motivation. However, why these occurred to me, why my particular poetics were sympathetic to them, is somewhat because of my very good experiences, my feeling of joy and communication in having been a jazz musician. I don’t believe that either Cage or Feldman or Wolff ever played jazz. As a matter of fact, when I first began working in this
area of graphic scores, which were then to be realized spontaneously and improvisationally, the reaction of John Cage to these scores in particular was highly dubious, to say the least. Cage, at this time in 1952, was composing things by chance, by literally flipping coins, and putting things into continuities using this technique which was completely apart from his choice or taste or from anyone’s choice or taste, apart from the taste of the performer. In these scores of Cage, once the coins were flipped, the resulting continuity was played that way always, even according to a stopwatch, which is a high degree of control and eliminates almost totally the possibility of a performer being flexible, or of multiple interpretations of the performance itself.

What specifically interested me was this: to create a score, put something together that would provoke performers to work together and to react to their own poetics, their instantaneous communication with themselves and with the people around them. When a score like December 1952 is done by more than one person it becomes a collective improvisation. But improvisation was not at all a part of Cage’s theory or feeling or even sympathy at that time. His statement to me was that, “Ah, you’re just going to find that everybody will play their own clichés.” And in a sense the flipping of coins on Cage’s part was to eliminate the possibility of clichés, either from himself or from the performer.

However, I didn’t believe that I would get back from the performance of such a thing as December 1952 a collection of clichés. And I must say to this day, I have not found that performers take that kind of liberty or fall into that kind of thing. I had the feeling then, and I do now—and it’s been confirmed for eighteen years or so—that from the basis of these general suggestions, such as in December 1952 or November 1952: Synergy, a performer can be provoked into going beyond his clichés into working quite apart from just the quotation of things. The performances that I know of these pieces, and have conducted of these pieces (which are now very many), have a very special quality. And their quality is not at all the quality of Cage’s kind of chance music or of a kind of totally free music, which would include the possibility of quotation. By scoring these graphic suggestions, I considered that I was activating and keeping busy one area of the performer’s mind while provoking another area of his mind, an activity in which it was possible to create “new” kinds of forming and “new” kinds of note-to-note realization. And for my part, I have found that this has been true. Subject to anyone else knowing differently, I believe that within Folio are the first scores which could be called graphic scores in our particular period of contemporary music and the first improvisational scores.

As a matter of fact, in either November 1952 or December 1952 is also the first time, I think, that random-sampling tables were used—a technique in which one must create a kind of program, then activate it—in
this case manually, not having had a computer. But the entire technique of the assemblage was very close to a kind of computer programming in construction. I am very interested to know if anyone has any information contrary to the fact that these were the first mobile scores, graphic scores, and that aspect of the random-sampling table construction principles. It seems to me close to some of the things that Xenakis has done, quite independently. Xenakis tends to use programs of activity and to derive continuities and contexts using such computer-like techniques. In 1954 I composed a piece called *Indices*, the title of which is obviously derived from the random-sampling construction of *December 1952*. There were 175 or so pages of score for instruments, and the entire thing is notated in standard notation. But it was again composed by this coordinate technique of abscissa and ordinate, which is to say frequency and duration.

To go back to the origins of these aleatoric ideas, it seems to me that Feldman’s 1951 graph music pieces—which are not in the usual sense “graphic scores”—are the first scores that I know of in our kind of music which allow the performer to fill in the notes. But the Feldman pieces were always structured by him. They were not in any way “open form,” and that is what adds the element that interested me very much. I think Cage’s chance music, the flipping of coins, was obviously an aleatoric first. But I think also that Feldman was the first composer to allow the performer to choose notes. And what interested me was the allowing of almost a totally free—but based on the graphics—improvisatory manner, and interesting me more than anything was the flexibility and the open-form aspect of it. This is only of historical interest, but I would like to know if there were others working with such elements at the time. Certainly all of these things in Feldman and Cage and my own work predate the open-form work of Stockhausen, etc. But there may be other works that I don’t know about.

As to the performing of *December 1952*, I’ll just speak about one particular performance that I made of the piece. When it was first written, as I have said, Cage was very unsympathetic to it. And David Tudor, with whom we were in direct contact at that time, was not inclined at all to improvisation. So he did not perform *December 1952* or any of the *Folio* pieces for a long time. Much, much later, he did a version of *December 1952* to which Merce Cunningham choreographed a dance. The first piece that is within the now-published collection of *Folio* that David Tudor did play was the *Four Systems*, which was written for him and dedicated to him in 1954. But his approach to that piece was not at all improvisational. He used a ruler and calipers and various things in order to find exactly, vertically, what pitches were involved and their durations. In other words, he transcribed the graphic score of *Four Systems* into a kind of standard notation, within his tradition of realizing some scores of Cage at that time. But this didn’t interest me. I could have taken
any one of these scores and made a final fixed version. That was not my point—although I didn’t at all object to David approaching *Four Systems* in that way. But he approached it not in an improvisational way, but as a kind of graphic thing from which he then made a fixed version.

Let me see if I can give some suggestion as to how a group of people performed *December 1952*, at least under my direction. This performance was in Darmstadt in 1964 in conjunction with a series of lectures I gave there called “Notation.” I had twenty-three musicians including Francis Pierre on harp, Severino Gazzelloni on flute, the Kontarsky brothers on piano, and so forth: extraordinary, extraordinary musicians and each one of these twenty-three people had a copy of the score of *December 1952* on their stands in front of them. They were allowed to read them in any of the four coordinate positions. I, as conductor, also had a score in front of me on the podium.

The performers are instructed that the top of the page is the top of their register and the bottom of the page is the bottom of their register, no matter what instruments they play. Piccolo obviously will be in a higher frequency field than the contrabass, but, nevertheless, the top of the page and the bottom of the page are equal to both musicians as their frequency field. Left-to-right is generally considered to be time, and continuity can be from any point to any other point. The thickness of the line indicates relative loudness. As conductor, in a sense, the person who is “conducting” this piece is, in my opinion—whether it’s me or not—a kind of producer of the piece. In other words, the person who is bringing about the performance may determine the kinds of sounds that may be produced in relationship to the score.

For instance, I have a tape of a performance done by Gordon Mumma at the Once Festival, which I think was before 1964, before my performance in Darmstadt. Gordon, being of a different temperament and poetics from me, I suppose, chose to realize the piece with a group of musicians with whom he determined that only the least characteristic sounds of the instruments would be used—which is to say squeaks and squawks rather than full-bodied tones. In Darmstadt, I chose—because of the musicians and because of Darmstadt in a certain sense—to try and produce an improvisational work which used mostly the normal sounds of the instruments. In other words, it was a little sneaky on my part, I think, but I wanted to produce a piece that sounded extraordinarily good, and sounded almost as if it had been a Darmstadt piece. Now, Darmstadt was the center of serialism and rational justifications of serialism. So when I say sneaky, what I mean is that I wanted to see what kind of a piece I could produce that would be more shocking. It would not be very shocking if I produced a piece which was all squeaks and squawks and sounds that were not known to Darmstadt. It was more extraordinary, it seemed to me (and very often still seems to me), to choose to do it using relatively
normal sounds of the instruments. In a certain sense, when the piece was performed in Darmstadt, the extraordinary fact was that the score was reproduced on the left-hand side of the program page, and on the right-hand side was the program. And when it came to December 1952 by Earle Brown, everyone looked to the left and looked at this score which was extraordinarily unlike what they heard.

Now this becomes a very big discussion. People very often say, “Well, why do you need that page called December 1952?” Because, once we rehearsed it—we rehearsed for six hours for that performance, I believe—we had rehearsed the nature of improvising in relation to that page; we didn’t rehearse a version. And once a performer becomes familiar with the way of realizing it, there is nothing to prohibit a performer from playing sounds very close to one another, which is to say fast, rapidly. So one can get from that, in any one instrument, a very fast, complicated continuity, such as daahh, doot, bop bitt, doot buttum, bot, eee, dut, ooo dittun dootumbop, bop, beee, buttum, bop beeeeee bop, bup, ooohhh, etc. And this doesn’t seem, when one looks at the score, to be inherent (especially when you get twenty-three people working like that). It seems that it should be much less complicated, much less involved than that. Nevertheless, it does get that involved. And with the kind of performers that I had in this performance, we achieved a fantastic result. I have two recordings of it. One is the final rehearsal, and the other is the performance; the two of them being different, naturally. What we rehearsed was the way of performing, not a performance itself.

As I have said, many people hearing a performance and seeing the score, including the musicians themselves, very often say, “Well, why do you need this piece of paper?” Well, in my opinion, the piece of paper is absolutely essential. I have conducted this piece in the same concert as I have conducted a piece by Anestis Logothetis whose graphic music you may know. Logothetis’s graphic music looks totally different than December 1952. And in performance the result is totally different. Now, unless one simply talks a lot, one cannot get from musicians the differences of quality between a score like December 1952, which looks very geometric and pure, and a score of Logothetis, which looks extremely noisy and messy. Two kinds of performances result: one, the December score, results in a rather clean performance, and the Logothetis produces a kind of noisy performance. This still doesn’t answer all the questions. But I guarantee that if I had not produced the piece of paper with those elements on it called December 1952, that I never would have been able to perform the piece.

I think that the performance in Darmstadt in 1964 was at least one, if not the very first performance of a group improvisational piece in Europe. Since 1964, and especially now, we have many, many improvisational groups. There’s a group around Frederick Rzewski in Rome,
a group around Cornelius Cardew in London, there’s a group with Vinko Globokar and Carlos Alsina here in Berlin, and it’s called the Free Music Group of Paris. I think that that performance in Darmstadt was in some way a key, for better or for worse—and a lot of people think for worse, I’m sure. But without that score, I would not have, number one, been invited to lecture on notation in Darmstadt, nor would they have performed it in Darmstadt. I hesitate to think that this is because of the power of the printed image. But nevertheless, in rehearsing, and in introducing performers to making a performance of December 1952, the first rehearsals especially, the first hours, I can point out to them exactly the kind of sound, the kind of frequency, the way in which they approach the piece, and we begin very slowly by putting one note before another. After one hour or two hours, the performers become flexible, they begin to understand it; and I will say that after three hours—which is to say into the second three-hour rehearsal—the performers can almost visualize what is in front of them, and they do not have to literally read it, although what they play is directly relevant from their experience of rehearsing and doing it.

In Darmstadt I wrote in the program note that if the audience enjoys the performance, they must give the credit to twenty-four people, including me as conductor. If they don’t like it, they should blame me if they wish, because we wouldn’t be doing this if I hadn’t written the piece of paper called December 1952 in December 1952. However, I do believe it’s essential to give credit to the people who take part in this.

As the twenty-fourth person, the conductor of this piece, I, in a sense, work with the orchestra as my instrument. When I put my left hand at the top of my head, it indicates that I want the musicians to realize the score in their high register. When my left hand is at my waist, it indicates that they are to realize the graphics in their low register. In the performance, I choose timbre and select combinations of instruments. In other words, I can have all the musicians working constantly, or I can stop them, start them, change tempi, change instrumentation (which is to say color). In other words, always considering that the orchestra is my instrument—just as the cellist has the cello and on the cello he can play in different colors, different frequencies, different tempi, so the conductor functions, in my opinion and in my practice, as another musician who has the orchestra as his instrument. Within that, there is the total possibility of the musicians realizing and being soloists. It’s a collection of twenty-three people plus conductor, putting together a collective performance. It is a very good experience, and the musicians almost invariably enjoy it very much, and that’s somewhat what I have always wanted (though not always wanted exclusively)—the putting together of a collective performance of a piece of music. I don’t only do this, of course: that was one moment in my life, December 1952, and I’ve gone on to other things. But
this was an extraordinarily important moment in my life as a composer. And I continue to support it (even though I do very many other things) and hope very much to make it work.

NOTE

On November 27, 1970, the late, esteemed composer Earle Brown recorded this monologue about the background and history of his seminal work called December 1952. He did so at the request of Marceau C. Myers, then dean of the Conservatory of Music at Capitol University in Columbus, Ohio. For this publication his monologue—copyright Earl Brown Music Foundation—has been transcribed by Brian Jones and lightly edited, first by Michael Hicks and then by Susan Sollins-Brown, Earle Brown’s widow, who was with the composer in Berlin at the time. The full original recording may be heard on the Web site of the Earle Brown Music Foundation, http://www.earle-brown.org/archive.focus.php?id=726 (accessed December 29, 2007). This site contains many useful audio and other files in its online archive. American Music thanks the foundation for permission to publish this edited transcript.