NOTATION AND PERFORMANCE PRACTICE IN
AVANT-GARDE MUSIC OF THE 1960s:
THE CHANGING COMPOSER/PERFORMER RELATIONSHIP

by

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A Thesis submitted to the Faculty
of Wesleyan University in partial fulfillment of
the requirements for the degree of Master of Arts

Middletown, Connecticut May 1984
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PREFACE

The world of musical notation and of notational symbols in general has always been a strong interest of mine. Seeing John Cage's unique and beautiful manuscripts for the first time in 1970 was an auspicious occasion and was a determining factor in my wanting to become a composer. From 1971 to 1972, before I had learned traditional music notation, I devised my own notations for each new piece I wrote according to my needs. I was often drawn to the performance of other composers' works out of an attraction to the notational scheme used and the elegance of the layout. It is out of a desire to return to my roots, as it were, and to take a more critical look at my early influences that I have decided to write this thesis.

While there are a number of books on the subject of avant-garde music notation of the 1950s and 1960s, such as those by Erhard Karkoschka, Hugo Cole and Howard Risatti,¹ none of these deals in depth with any one piece nor is their primary focus the underlying philosophical premise that these notations reflect. This thesis is a beginning attempt to remedy this lack.

The musical works which are my source for investigation within this thesis are analyzed with respect to (1) how the notation is interpreted; (2) how the work is structured; (3) the degree to which the performer influences the final musical result; and (4) how justified the composer is in considering his creation a composition (has the composer in fact really 'composed' anything?).

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I have attempted to make this work of interest to performers and composers alike.

I would like to thank the C. F. Peters Co. for permission to quote excerpts from Cage: Variations III and Wolff: Burdocks. Thanks also to Universal Edition for permission to quote excerpts from Stockhausen: Spiral and Cardew: Memories Of You.

I am especially grateful to Neely Bruce for his supervision and guidance during the writing of this work.
INTRODUCTION.

The history of Western music notation up to the 1950s is one of increasing specificity. This history reflects developments in measuring technology such as the metronome, instrument building technology which allowed for greater dynamic control, and an increasing desire by composers to dictate elements of a performance which previously had been left to performers' discretion and aural tradition: phrasing dynamics, tone color, articulation and tempo, what we might call expressive qualities. The precision of a composer's musical conception must always be matched by a similar notational precision, especially when that composer is concerned about not being personally involved in performance of his work. To accurately realize a composer's intentions, a performer must know how to read the musical notation involved and must have the skills necessary to translate notational symbols into the appropriate action. These demands reached almost superhuman proportions by the early 1950s.

With the advent of the twelve-tone row and serialism came the development of total serialism, continuing from where Webern had left off. Total serialism was an attempt to apply the concept of the series to other parameters of a composition besides pitch: rhythm, dynamics, articulation, tone color and tempo. The young composers of this time, most notably Pierre Boulez and Karlheinz Stockhausen, were obsessed by the desire to create a music whose every nuance was dictated by the
overriding logic of the series.¹ For the performer this meant having to produce twelve distinct dynamic levels and articulations, often within close proximity to each other as in the Structures Ia (1955) for two pianos by Boulez, where every note has its own dynamic and mode of attack. An even more extreme example can be found in the Klavierstück No. I (1954) by Stockhausen, where within one nine-note chord there are six different dynamics, each finger being requested to produce its own level. In addition to the problems of accurately responding to abrupt changes in loudness and articulation were the problems of rhythmic complexity. In many of the pieces from this era, where 'irrational' rhythms are the norm, this complexity was so great that no performer could accurately perform what was requested, and rhythmic interpretation such as rubato was out of the question; the performer was expected to be a machine. Never before had music reached such heights of compositional complexity and notational specificity. The irony of total serialism was that, even in the case of electronic realization where performance deviation was not an issue, the music was perceived as sounding anything but highly organized as intended. It was instead random and chaotic.

At the same time as total serialism was in vogue in Europe (and independently in America in the works of Milton Babbit), John Cage was working out his concepts of chance and indeterminacy in America² and was gathering under his wing a group of young composers with similar interests. Cage had first gone to Europe in 1949 with his Sonatas and Interludes for prepared piano, a work whose main interest was its use of novel timbres and highly organized rhythmic structure. He re-
turned in 1954 (having first been visited in New York by Boulez in 1952), but it was not till his visit in 1958 with the performance of his *Concert for Piano and Orchestra* (1958) that his ideas began to attract widespread attention. Cage was invited back in 1959 to be a lecturer at the Darmstadt Summer Courses for New Music, a place which had earned a reputation previously as being the hotbed of total serialist thinking. It was here that Cage had the opportunity to meet with young composers from all over the world, composers who were searching for a way out of the totally determinist, straightjacket world of total serialism.

Inherent in Cage's philosophy were the views that: (1) the individual parts of a full score need not be in a fixed relationship to one another; (2) sections of a composition could be mobile with respect to one another (an idea which Boulez had already explored but not after first meeting Cage); (3) the composer could leave room for the unexpected by leaving many if not all of the aspects of a performance indeterminate at the time of composition (composing in such a way that the results are unpredictable); (4) it was not necessary or even desirable for a composer to determine the flow of his music (as implied in the above); and (5) any sound could be considered musically.

As can be seen, Cage's primary influence was in the area of structure. His ideas served to free composers from the compulsion to totally control every aspect of a composition and, furthermore, removed their attention from ways of ordering sound and refocused it on the very materials of a composition itself, namely sound. Cage's unique notations were also of inspiration to other composers. While developments
in musical notation up to this time were primarily extensions of an already existing system, scores from the late fifties onward often bear no relation at all to traditional music notation. Individual composers developed their own idiosyncratic notational systems and styles which, even for the same composer, might change from piece to piece. The manuscripts of Sylvano Bussotti (who was also trained as a graphic artist) could never be mistaken for anyone else's. Composers such as Anestis Logothetis, Robert Moran, and Roman Haubenstock-Ramati created scores which resembled works of visual art more than pieces of music. Very often a composer's instructions on how to read his notations were much longer than the score itself. This interest in new notations is characteristic of scores from this period and was in response to thinking about new methods of (1) notating rhythm; (2) ensemble coordination; (3) structuring time; (4) sound production; (5) communicating intent (how to most easily achieve the desired result); and (6) rethinking the role of the composer and performer.

The six works chosen as the basis for this thesis are: I Am Sitting in a Room (1969) by Alvin Lucier, Les Moutons de Panurge (1969) by Frederic Rzewski, Memories Of You (1964) by Cornelius Cardew, Spiral (1968) by Karlheinz Stockhausen, Burdocks (1970-71) by Christian Wolff, and Variations III (1963) by John Cage. These pieces were chosen for a number of reasons: (1) They are either written in non-traditional notation or, as in the Rzewski work, they utilize a novel way of reading traditional notation; (2) They are works by well-known composers who were especially influential at that time; (3) I have had some personal experience with all of them either through realization
or performance; and most importantly (4) They all illustrate to
various degrees changes in attitude with respect to the composer/performer relationship from what up to that point had been the usual model.

These six pieces are, however, very different from each other stylistically. The Rzewski, Cardew, and Lucier works will all terminate at some point (Lucier's will reach a point of diminishing returns), whereas the Cage, Wolff, and Stockhausen could all be performed indefinitely. Both the Lucier and Rzewski works are directional and in that respect have more in common with the past than do the others. The Lucier, Cardew, and Stockhausen works are all solo pieces, the Wolff and Rzewski works are for an ensemble, and the Cage could be either solo or ensemble.

These works will be discussed in what I consider to be the order of increasing indeterminacy.
I

TASK-ORIENTED NOTATION IN

I AM SITTING IN A ROOM

BY ALVIN LUCIER
A prose score is one which gives performance instructions, musical or otherwise, by means of verbal indications. One advantage in using such a notation scheme is that sounds and sound processes which would be inconvenient, if not impossible, to notate in any traditional sort of way can be achieved with relative ease by specifying a task or tasks which will yield the desired results. A simple example would be to request from a pianist that he produce a random, rapid succession of attacks throughout the range of the instrument at various dynamic levels for ten seconds. To notate this exactly might take many hours, and to play it as written might take days of practice though the musical results will be for all intents and purposes the same. The above example is not uncommon and could be found within a relatively traditionally notated piece.

There is, however, a vast body of scores which depend entirely on verbal instructions for their conveyance of information. Composers such as Pauline Oliveros, Christian Wolff, Karlheinz Stockhausen, Cornelius Cardew, and Robert Ashley have made extensive use of the prose score to initiate group improvisation and sound exploration, often with social and/or spiritual intent. The prose score is generally best used to describe the process of creating a music without any reference to the resulting sound; to focus the performer on the means rather than the ends. It is in this way that composer Alvin Lucier has used the prose score to convey his intentions with his piece.
I Am Sitting In A Room.

The score describes a process of manipulating a recording of text, the text itself describing this process:

I am recording the sound of my speaking voice and I am going to play it back into the room again and again until the natural resonant frequencies of the room reinforce themselves . . . What you will hear, then, are the natural resonant frequencies of the room articulated by speech.

A different text could be used as suggested while still attaining the same musical results, though the strength of this work is in large part due to Lucier's self-referential text and his manner of speaking.¹

It should be noted that no attempt at musical description has been made in Lucier's score. What does the work sound like? The results are dependent on a number of factors: the quality of the recording equipment, the quantity of microphones and their placement, the volume of the playback, the placement of the speakers, the number of times through the process, the acoustic properties of the room in which it is realized, and the particular qualities of the performer's own voice. None of the above information is suggested in Lucier's score. If done properly, however, the results will be similar: a gradually emerging sound world of gentle reverberations becoming more and more prominent as the text dissolves. It is as if this other sound world were lying dormant, ghostlike within the words themselves. Like many of Lucier's works, the idea is to create a situation where the music unfolds on its own, where the musical results are not consciously affected by the performer. Like Music for Solo Performer, for example, there is an attempt at divorcing the performer from his
usual role of interpreter. In this work dating from 1965, the performer's brain waves (alpha waves to be precise) are highly amplified and the resulting clicks and pops are used to elicit sounds from various percussion instruments. These alpha waves are only produced by the brain when a person is in a relaxed state of meditation or non-thinking; it is the performer's task to allow this state of mind to occur. The music in this case could not be further removed from the influence of the performer's tastes, training, personality, or technical skills. It is truly ego-less performance. I Am Sitting In A Room is similar to Music For Solo Performer in that the resulting musical process as established by the composer is beyond the influence of the person doing the realization. Where these works differ, however, is that unlike the latter, there is some leeway in I Am Sitting In A Room for the performer's personality to be felt, both in the choice of text and in its manner of presentation. This commitment to task-oriented performance, to letting a musical process unfold on its own, has been one of Lucier's central concerns since the mid-60s and owes an obvious debt to the ideas of John Cage.

In order to realize I Am Sitting In A Room, the following equipment is necessary: 1 microphone, 2 tape recorders, 1 loudspeaker, and 1 amplifier. The text is first recorded onto tape recorder 1. This is then rewound and transferred to tape recorder 2, where it is played back into the room and re-recorded onto tape recorder 1. This process is continued through many generations.

All the generations spliced together in chronological order make a tape composition the length of which is determined by the length of the original statement and the number of generations recorded.
Since the piece can be realized without expensive equipment or specialized musical skills, and in the privacy of one's own home, we may consider it a sort of modern-day parlor music.

Lucier asks that one make versions that can be performed in real time, that is, where the piece is not presented as a previously prepared tape but rather as a live performance. Lucier makes no suggestions as to how this is to be accomplished. One method may be to set up two tape recorders: one which is constantly recording and one which is constantly playing back. A tape loop of the text may be prepared either live or in advance which will run continuously, passing through the playback head of tape recorder 1 before it passes through the record head of tape recorder 2. In this way the text will be continuously recycled without having to break continuity by rewinding and splicing as in Lucier's instructions. What we have is an

I Am Sitting In A Room machine. The texts for this set-up may be as follows:

1. If the tape loop has been prepared in advance:

"I am sitting in a room different from the one you are in now. I am recording the sound of my speaking voice and I am going to make a tape loop of text which will be played back again and again into the room that you are now sitting in ..."

or

2. If the tape loop is being prepared live:

"I am sitting in a room, the exact same room as the one you are in now. I am recording ..."

One statement that is conspicuously absent from Lucier's in-
structions is that the piece should be realized in a room that is without ambient sound. Any extraneous sounds which might creep into the recording would destroy the purity of the musical process. Lucier has been meticulous in his recordings of the work, the most recent version being done in his own livingroom.² I assume that he did not always take the first recording of each generation. How is this problem of ambient sound to be dealt with in a live performance as outlined above? Perhaps the only way would be to set up the recording equipment, microphone, and speaker inside a soundproofed glass enclosure. There would then be an additional microphone which would broadcast the sound from this enclosure into the room where the audience was seated. This would make a beautiful installation piece.

Unlike much of this composer's work, I Am Sitting In A Room is not a static piece. It most resembles a traditional composition in that it is directional, it is goal-oriented. The work will eventually reach a point where no further transformation of the text can occur. It is perhaps because of this sense of direction generated by the piece that it is among Lucier's best known and most popular works.
WHEN IS A GOOD PERFORMANCE NOT A GOOD PERFORMANCE?

ANTI-VIRTUOSITY IN LES MOUGINS DE PANURGE

BY FREDERIC RZEWUSKI
Frederic Rzewski's *Les Moutons de Panurge* (1969) is one of the earliest examples of what can be called 'process music,' that is, a clearly defined, set amount of musical material which is then subjected to a performing process that in some way expands this material, usually by arithmetic procedure (repetition, additive sequence, etc.). Works in this genre tend to be modal in character: material being short melodic phrases repeated over and over as in *In C* (1964) by Terry Riley or else one long melody as in *Les Moutons de Panurge*. The title is a reference to the François Rabelais character Panurge who, while on board a cargo ship filled with sheep, attempts to demonstrate to his friend the peculiar nature of these animals by leading one of them off the edge and into the water. The subsequent reaction from the rest of the fold may be seen as an analogue to the manner in which *Les Moutons de Panurge* is performed: the notes of a 65-note melody are played 1, 1-2, 1-2-3, 1-2-3-4, etc. (see example 1) till the last note is reached at which point the entire melody is played through once again. After that the notes are subtracted from the beginning: 2-3-4—... 65, 3-4-5—... 65, 3-4-5—... 65, ... 63-64-65, 64-65, 65. At the end of this process the last note is held. All players begin together. Any number of performers playing any kind of instruments may be used and the line may be transposed to any octave, but there must be at least two players in any given range. Dynamics are loud throughout.

If these were the complete instructions the work would not be
all that interesting. It would be too predictable. The surprise
element comes from Rzewski's instruction that if a player gets lost,
he is to stay lost and not try to get back in synchronization with
the other players. In other words, he is to maintain his independence.
Was Rzewski's experience of performers such that he could not imagine
his piece played accurately from beginning to end and so built in this
fail-safe feature, or does he actually want people to get lost? If an
ensemble can play the piece perfectly from beginning to end without
making mistakes, should it? Is this a valid performance? Should the
tempo be increased to the point where at least one player gets lost?
Should it be decided beforehand who will get lost and when? On the
other hand, if performers are so inexperienced that everyone is lost
within the first few minutes of the piece, should it be performed at
all? These are all questions which must be answered by the ensemble
doing the work. Certainly it is more interesting for the ensemble to
very gradually get off, though there tends to be a snowballing effect,
no two players remaining in unison by the end of the piece. It takes
great concentration to be able to maintain one's independence after
getting lost, especially if one is only off by an eighth note (see
example 2). By far the most difficult section of the piece to play
is the very end (see example 3). One's eyes are constantly moving
back and forth, faster and faster, though, unlike the beginning of
the piece, we do not have the benefit of always returning to the same
place. Taking notes off is more difficult than adding them on. The
beginning, as well as the end, needs to be rehearsed separately. It
is helpful to remember at all times where one has to return to. Ulti-
mately the entire melody should be memorized; ideally one should be able to perform the piece entirely without the score.

Endurance is a major factor to be considered when staging a performance of *Moutons*. Even at a tempo of a half note = 80, a complete performance will last over fifteen minutes. The work is obviously best suited for keyboard, percussion, and string instruments.

Wind and brass players especially will have a problem with stamina. One solution to this problem may be to have them refrain from playing when tired while having them maintain their place in the reading, jumping back in when rested. This procedure has the further advantage of creating changes in ensemble color as a result of instruments dropping out and re-entering. Listening to the same timbres consistently for long periods of time can be numbing.

Due to the method of reading the score, Rzewski has been able to generate a work of considerable length while at the same time confining his notations to a single page. For the players, the notation is convenient in that it saves space and eliminates page turns. (If totally written out with approximately seventy notes per page, the score would be over sixty pages long!) It would of course be a simpler task to read the music in a fully notated version. This would, however, require page turners for each part, and reading the score in this manner would leave less chance for performer error, an error on which a successful performance depends. Reading the score in this straightforward manner would also reduce the performance task to one of mere endurance. In the case of *Les Moutons de Panurge*, a virtuoso, perfect performance is undesirable. Rzewski is not as concerned about
the working out of an arithmetic process as he is about the randomly occurring polyphony which is a result of human fallibility.

The score to Les Moutons de Panurge is presently unavailable from any publisher though it has been reprinted in the Michael Nyman book Experimental Music (London: Studio Vista, 1974). The instructions indicate that non-musicians may take part in a performance by playing percussion instruments ad lib. These instructions further state that at the end of a performance everyone should break into a free improvisation. I have never heard of a performance done in this fashion, though I trust these were Rzewski's intentions. The only available recording of the work is on Opus One records and is by the Blackearth Percussion Ensemble. While the instructions indicate that a gradual accelerando is to take place during the course of the piece, the version heard on this record is at a steady tempo throughout. This recording was made under Rzewski's supervision. The players on this recording stay together for most of the performance and do not break apart till the very end. Given the virtuosity of the performers, I suspect this was a deliberate decision; after speaking with Rzewski in April of 1984 my suspicion was confirmed. I mentioned the discrepancy with respect to tempo, and he told me that the piece could be done in any number of ways. The music has obviously taken on a life of its own.

The following sixty-five-word text (as many words as there are notes in Les Moutons de Panurge) summarizes my ideas concerning this piece. This text may be performed in the same manner as Rzewski's composition.
a process piece/the same process as this text/this process guaranteeing a lot of music from a very few notes/free instrumentation leaves it open to any ensemble/no conductor/no fixed score/democracy in action/freedom to lose one's way introduces element of unpredictability/all performances are unique and different/mistakes being essential to a good performance how well should it be rehearsed?
Opening six notes of melody

Opening six notes of melody as actually performed

Rzewski: Les Moutons de Panurge - Example 1
Rzewski: Les Moutons de Panurge

Example 2: Eighth-note displacement

Example 3: Last 15 notes of melody
NOTATIONAL AMBIGUITY IN MEMORIES OF YOU

BY CORNELIUS CARDENW
Memories Of You, by the late English composer Cornelius Cardew, is best thought of perhaps as a theatre piece or dance, though unlike many purely theatrical works by composers, such as those by Mauricio Kagel, for instance, Cardew's work does involve the voluntary production of sounds. The score prescribes a situation outside of time; notations indicating where, in physical proximity to a grand piano, a sound is to be produced. Though one is certainly justifiable in considering Memories Of You an interdisciplinary work, I have chosen to discuss it because it was written by an established composer and does have as its focus a musical instrument. It would most likely be performed on the concert stage on a program of musical works and was, in fact, written for the virtuoso pianist David Tudor.

Cardew specifies the use of three different objects for the purpose of producing sounds (see instructions). Chains of events are grouped according to those materials. There is a sequence of events using sound maker C at floor level, one using C above floor level, and one with C both on and above floor level. There is a sequence using sound maker B at floor level and a sequence using B above floor level. Both of these sequences contain one event with a sound to be produced both on and above floor level. There is also a sequence using sound maker A (curiously containing only two events, one at floor level and one at both levels). There are various points of intersection where two materials are to be used simultaneously (see score). The total
distribution of events is as follows:

- Solely C events: 7 above floor level, 3 at floor level
- Solely B events: 3 above floor level, 4 at floor level
- Solely A events: 0 above floor level, 1 at floor level
- Both A and B events: 1 at both levels
- Both B and C events: 1 at floor level, 1 above floor level, and 1 at both levels

There are a total of 22 events.

Structural organization is according to material of sound production and not location. In fact, there does not appear to have been any conscious ordering of the locations. Judging by the list of suggested sound-producing objects it would seem that they should not in themselves be sound makers. If this is so, what then are we to make of the instruction that a sound should begin and/or end at the point indicated? Does Cardew mean that the attack should begin and/or end at these points? Let us illustrate this confusion with two possible interpretations of a single notation:

\[ \text{Illustration} \]

In the first instance we will consider the indicated location as the beginning and/or ending of a sound. This means that our object must be a sound producer in itself; let's say a harmonica. A possible interpretation might be to play a note on the harmonica starting at
this point and gradually walk to a different position, possibly the
position indicated by the next notation in the score. Or perhaps one
may start at this position, blow a note while running around the piano,
and finally end at this same point. Or one may start from underneath
the piano, playing a note while crawling out from underneath and
stopping when one has reached the indicated position standing up.

In the second instance we will consider the indicated location
as the beginning and/or ending of the **attack**, implying that our object
is not in itself a sound producer; let's say it is a superball. One
may then toss the ball into the piano to satisfy the notational require-
ment. How can the given location be the end point of an attack? This
impossibility leads one to believe that Cardew does in fact mean sound,
but how to reconcile this with the fact that he recommends objects for
the production of sounds which are in themselves not capable of pro-
ducing any sound? They are used only to strike another object. This
sort of ambiguity is not uncommon among experimental compositions written
with unique notations. Sometimes this ambiguity is deliberate. The
less precise a notation is, the more it aligns itself with a folk tra-
dition and the greater is the need for musicological research. It
would be most instructive if we had video tapes of Cardew performing
this work himself; unfortunately we do not, and it is impossible to
consult him.

Another question that arises in regard to the performance in-
structions is: What does it mean to make a sound at floor level? Does
this mean to get down on one's knees before making a sound? Or does
it mean to actually strike the floor? What about the notation indi-
cating a sound made above floor level? Does one inch qualify? Per-
haps the final instruction gives us an answer. "0 = sound made both
on the floor and above the floor." For the first time he states
clearly "on the floor" and "above the floor." Why does he obscure his
intentions by previously using the terms "at floor level" and "above
floor level"? This adds weight to our argument that the three objects
are indeed not themselves sound producers of some sort but are to be
used solely to initiate attacks. If this is what Cardew intends, then
why didn't he use the unambiguous phrase 'against the floor'? This
would certainly leave little doubt. Our conclusions do, however, fail
to make sense in light of the first performance instruction which
states: "The sound should begin and/or end at the point indicated."
How could the point indicated be the end of an attack?

It is at this point that the prospective performer will either
put the piece away or else decide to take matters into his own hands.
A number of solutions (interpretations) are possible:

1. The three objects can in themselves produce sounds
(harmonica, guitar, cap gun, etc.), and sometimes they must be struck
against the floor; they are either struck or they do the striking.

2. As above, but the indication "on the floor" does not
necessarily mean to strike the floor; it could mean to bend down or
crouch or lie down in order to produce the sound, allowing movement
from point to point.

3. The three objects are to be used for attack purposes only,
the locations indicating where the sound is made. A location away from
the piano would not mean that one could throw the object into the piano
from that point.
Once the issue of interpretation has been resolved, we may turn our attention towards the practical aspects of performance. What should one do with the score? I would place music stands around the piano (a minimum of four) and place a copy of the score on each. Depending on the size and weight of the objects used, they may either be carried throughout, perhaps placed in pockets, or else placed on music stands or tables. The use of multiple scores is suggested so that one does not have to constantly be referring back to one location; this might interrupt the flow of the performance. Having decided upon the three objects that one will be using and the physical set-up of the performing space, one must then create the scenario. As the score is totally absent of notations indicating timing (duration, of events, pauses, tempo) and expression (dynamics, emotional qualities), how is one to proceed? According to what criteria? Like a script for a play, the materials and structure are given but must be brought to life by the performer. Timing is everything. The score serves as a vehicle for one's own personality, and Cardew probably had the theatricality of David Tudor in mind when he composed it. A performance will be as creative, interesting and full of surprises as the performer decides and is capable of.

In light of the fact that Memories Of You leaves all of the essential qualities of performance up to the performer, has Cardew really composed anything? I would say yes. The limitations of a definite number of events (22), the finite number of sound-producing objects (3; I used only twice), the logical structure (chains of events using one object at a time either on or above floor level), and of
course the presence of a grand piano around which the piece is performed, all contribute towards creating a work with an identifiable presence irrespective of the details of actual performance. For Cardew to have been more detailed in his instructions, for example: "Slowly lift a wooden stick 3 feet off the ground and let it drop ... do this approximately 3 feet to the left rear of the piano ... afterwards jump up suddenly and run to the front of the piano ... wait 8 seconds ..." would be to give the details of one of an infinite number of realizations, variations of which would not significantly change the piece. This sort of detail (and we could get much more extreme) might also put off a prospective performer.

One can criticize a performance of Memories Of You as being correct only in the sense that one either followed or did not follow the performance instructions properly. Any stylistic criticisms will be in regard to the performer and his ability to entertain. Of course, the work itself can be criticized as being conceptually weak, not detailed enough or whatever, but this is a different issue. One objection towards composing a work where only structure or basic idea is given is that any other attempts at creating a work in a similar genre by another composer will only succeed in creating the same piece unless one amplifies and expands on the idea in question. When a work is only an idea (though Cardew's is much more than a concept piece), it precludes work done by others in the same area. Why is this not the case with a Bach fugue, for example? Precisely because the main identifying characteristic of a Bach fugue is not the structure but rather the thematic material upon which the fugue is constructed. There is no
such material in Memories Of You; in this case the structure is the composition. It would be absurd to think that anyone who writes a fugue after Bach is merely writing another Bach fugue.

Is Cardew's title mere poetics, or is he trying to inform the performer and audience about extra-musical concerns? Perhaps the work addresses the love/hate relationship that many composers were having at that time regarding the piano and the whole history of high European culture that that instrument, above all, represents. Perhaps feelings of wanting to break with that tradition while still feeling firmly rooted in it were at work. There is a definite flirtatious quality about the piece. A successful performance will depend on the performer reconciling the ambiguities inherent in the notation, discerning what Cardew's poetic intentions might have been, and bringing to the work one's own natural abilities as a musician, actor, and entertainer.
Cardew: Memories Of You

Score (excerpt)
Cardew: Memories Of You

Instructions

Each circle gives the location of a sound relative to a grand piano. The sound should begin and/or end at the point indicated.

Durations and dynamics are free, and so are total time and points of entry of all sounds within that time.

All sounds are to be played once only.

Circles forming horizontal chains are to occur in the order given (reading from left to right); those forming vertical chains may be read in any order.

Every chain has a letter affixed to it. These letters (A, B, C) refer to any three objects for making sounds. Thus, all sounds in a chain headed B are to be made with the object B. (Suggested objects: side drum or bass drum stick, matchbox, comb, hand, glass ashtray, plastic lid, etc.)

Where a sound occurs at the intersection of two chains headed by different letters, both objects are to be used in making the sound.

The pedal may be engaged throughout the piece.

Sounds made at floor level are indicated by ø.

Sounds made above floor level are indicated by O.

Sounds made both on the floor and above the floor are indicated by Ø.
IV

TRANSFORMATIONAL NOTATION IN SPIRAL

BY KARLHEINZ STOCKHAUSEN
Spiral by Karlheinz Stockhausen is a work involving short-wave radio sounds and solo performer. Sonic material is derived from the radio and, in the words of Stockhausen, is "imitated, transformed and transcended." The music is structured into events which are separated by pauses of indeterminate length. When realizing these events the performer is concerned with four characteristics of the events' morphology: Register (R), Intensity (i), Duration (D), and the number of rhythmic subdivisions of the event (G) produced by articulating the event with loud, sudden attacks. A segment can consist of a single note or chord, a fast group of up to seven notes or chords, or a unified mass. An event contains a number of these segments and is realized with the performer's instrument or voice alone or with the addition of sounds derived from the radio. There should be a balance of both.

The score consists of one page with a total of 222 events grouped into sections with between ten and forty events each. One may begin and/or end a performance of Spiral at any of these ten sections. The entire score need not be played at any given performance. The total duration is free.

In the score, "+" and "−" signs indicate changes in the four basic parameters as described above. All other characteristics of the sound are to be kept as constant as possible from event to event. The choice of which sign affects which parameter is up to the player's discretion unless otherwise indicated. While these plus and minus signs
make up the bulk of the score, there also exist other notations. These
indicate various embellishments and specific types of transformations.
For example, "AKK" is an indication to condense the segments of the
previous event into an arpeggio and repeat it with the number of seg-
ments and in the rhythm of the previous event (see example 1). "E"
indicates an echo of the previous event in some way.

\[
\text{(- - - -)}
\]

means to repeat the previous event several times, each time expanding
all of the intervals so that all differences become greater and greater
(high becomes higher, low becomes lower, soft becomes softer, loud
becomes louder, short becomes shorter, long becomes longer, etc., all
with respect to a median value chosen by the performer. The opposite
of this sign is:

\[
\text{(- - - -)}
\]

which means to contract all of the intervals of the previous event till
the smallest possible differentiation is reached. There are a number
of other such notations, the most conspicuous being the one which
Stockhausen refers to as the "Spiral-Sign."
This is an indication to repeat the previous event several times, each
time transposing it in all of its parameters (as indicated inside the
rectangle), and finally transcending the limit of one's performing
techniques that have been used up to this point. For these events "all
visual and theatrical possibilities are brought into play." This
Spiral-Sign occurs once only during seven of the ten sections of the
piece, each time with a different internal notation. If Spiral can be
said to have a purpose, then this event is an invitation to fulfill
that purpose; that is, to take what is given, the short-wave radio
sounds, and to integrate and gradually transform this material into
something new and, by doing so, to transcend what one considers to be
one's limitations as a musician and human being.

Doesn't almost everyone possess a short-wave receiver? And
hasn't everyone a voice? Wouldn't it be an artistic form of life
for everyone to transmute the unforeseen that one can receive from
a short-wave radio into new music, that is, into a consciously
formed sound process, which calls forth all intuitive, mental,
sensory and formaory capacities, letting them become creative
in order that this consciousness and these capacities may spiral
upwards?"1

While this statement may be a bit naive, it nevertheless gives us a
feeling for what Spiral is about. We may consider Spiral a spiritual
music, not in the sense that it sounds 'spiritual' but rather in the
sense of embodying the process of self-awareness and transformation.
The practice of incorporating pre-existing or found musical material
which is transformed into a totally other music is central to many other
works of Stockhausen, including Hymnen, which uses national anthems as
basic sound material; Opus 1970, which utilizes the music of Beethoven;
Telemusik, which uses folk music of various cultures; Kurzwellen, which
also uses short-wave sounds as its basic transformational material; and the scores of *Miyut* and *Mantra*, both for live acoustic instruments with live electronic modification. Integration and transformation are key concepts in Stockhausen's work; he never uses his material in a mere collage fashion.

How does one interpret the transformational signs in *Spiral* and relate them to the four parameters as previously mentioned? For R (register), D (duration), and i (intensity) this is clear-cut. A "+") means either higher, louder, or longer. A "-") means either lower, softer, or shorter. For G (rhythmic segmentation) this is also clear-cut when dealt with in isolation; either more or less segments, but when both D and G are affected, the possibilities become manifold. Example 2 gives a working out in traditional notation of an event and the six possible ways in which it can be transformed regarding its duration and segmentation. Below are a number of excerpts from the score with explanations:

\[
\begin{align*}
& + + + + + \\
D & - - - - - 
\end{align*}
\]

1. Five events getting progressively shorter; and louder, higher, and more segmented though not at the same time.

\[
\begin{align*}
& - + - - + - - + \\
& \# + + = + + = + =
\end{align*}
\]

2. Nine events getting progressively higher while other parameters diminish or occasionally increase.
3. Four events with a gradual diminishing of all parameters.

During a performance of Spiral the performer is constantly referring to past events and anticipating future events. The performer must have an excellent ear and virtuoso technique; he must imitate as closely as possible sounds made by a totally different medium and must retain, analyze according to different parameters and process this sonic information, all on the spur of the moment. One is also asked to extend oneself to exhaustion as with the Spiral events. Spiral is therefore a performer's piece and the success of a performance rests more on the creativity, openness, and technical ability of the performer than it does on the strength of the score as a composition.²
Stockhausen: Spiral

Example 1
Stockhausen: Spiral

Example 2

= D + G  \[\text{further subdivide a segment}\]

= D - G  \[\text{tie two segments together}\]

- D + G  \[\text{further subdivide a segment and leave the last one off}\]

- D - G  \[\text{leave off a segment}\]

+ D + G  \[\text{add a segment}\]

+ D - G  \[\text{leave off a short segment and tie the last two}\]

For + D = G, the event merely gets spread out, for - D = G (slow down) it contracts (speeds up). In both cases the rhythmic proportioning remains the same.
PERFORMER INDEPENDENCE AND INTERDEPENDENCE

IN BURDOCKS BY CHRISTIAN WOLFF
To turn the making of music into a collaborative and transforming activity (performer into composer into listener into composer into performer, etc.) the cooperative character of the activity to be the exact source of the music. To stir up, through the production of the music, a sense of the political conditions in which we live and of how they might be changed, in the direction of democratic socialism.

This statement, taken from the C. F. Peters Co. catalogue of contemporary music, was written by Christian Wolff in 1975 in response to the question of how he would describe his music. It is clear from the above that Wolff’s music is composed with utilitarian purposes in mind. His compositions very often resemble games which are designed to heighten the level of interdependence among the performers; decisions as to the course of the music being made during actual performance.

Burdocks, a composition dating from 1970-71, is actually a collection of ten pieces for various numbers of performers, each piece having different requirements and placing different demands on the performer. Any number of these may be played on a given program, either successively, simultaneously, or variously overlapped.

In addition, some of the individual pieces contain sections which may be played successively, simultaneously or variously overlapped, as in section I which is in five parts: (a), (b), (c), (d), and (e):

One or more groups of players (orchestras) can play each of (a) to (e) simultaneously, overlapping or in succession. E.g., one group can play (a), three others each independently, at the same time, can play (d), while two play (e) one after the other; then
the first, third and fifth group can, each independently, play (b), sometime during which the second and sixth group each, at different points, start to play (c).
Arrangements of this kind (and they might well be simpler) should be worked at in advance and, if necessary, one or more conductors choose to signal them in the course of performance.

The structural possibilities are almost endless. There is so much varied material in Burdocks and so many ways of interpreting much of that material that one could conceivably attend a dozen performances of the piece and never suspect that one was hearing the same work. There are, however, a number of coherent musical entities: short melodies, for example, which, if performed, would identify the work immediately to anyone familiar with the material. Some parts are more determinate than the rest. The extreme diversity of this material and the structural flexibility with which it may be presented could be thought of as a reflection of our day to day experiences with all of their diversity, unpredictability, and seemingly unrelated occurrences and incongruities. In the words of Christian Wolff:

... the piece offers a various, somewhat unruly, if not sticky, quantity of material, whose character is, however, still intended to allow clear articulations and transparency, both a festive, busy feeling, and a more quiet one.¹

Our discussion of Burdocks will center around sections IX, IV, X, and III, all verbal scores. We will view these scores with an eye to compositional structure and performer responsibility.

Section IX is primarily of structural/interactive concern (see instructions). The element of unpredictability produced by not knowing whether or not a previous player intends to play a second note and how long to wait for it, coupled with the direction to play immediately afterwards, produces a feeling of hesitancy which is an aural trademark
of much of this composer's music. While this instruction alone would create a purely monophonic music, the added suggestion to play something else when you are not otherwise occupied (and this something else could be Beethoven) allows for polyphony to take place and further increases performer concentration. There are now two things to juggle, a feat which will become more and more difficult towards the end. The instruction to conclude (by unverbalized group consent) by getting faster and faster makes for an exciting ending and means that unless one player's second note directly follows his first, the next player is likely to immediately jump in without waiting. There will be a constant spiraling upwards of motion until the sequence of ordered sound production breaks apart. This needs to be well rehearsed and, if done properly, can be very effective.

Section IX has a definite gestalt and the instructions are rather unambiguous. Contrast this with section X (see instructions). What is one to make of these instructions? Is one to make like a bird and flap one's arms? Should one crawl on all fours? How literally are these instructions to be taken? The performer/ensemble input here is critical to the realization of this movement. The instructions are so vague. How long should this be performed? Presumably till no one wants to do it anymore. Why would a composer deliberately create such a piece? Perhaps Wolff himself had no specific idea in mind as to how to proceed with its realization. Perhaps like a Zen koan, this instruction is designed to free the mind from habitual ways of thinking about sound, to release creative energy by forcing the performer to come up with a valid realization to a seemingly impossible instruction (surely Wolff does not
want one to pretend to fly, or to crawl around like an animal; this would be too simple).

Section IV, by contrast, is a piece with a clearly defined gestalt which allows for performer interaction and decision-making within limits; furthermore, the overall dynamic level is indicated. Unlike most other parts of Burdocks, section IV has a finite ending; the piece will, on its own, come to an end. The instruction to play as simultaneously as possible with the other players generates again that quality of hesitancy which is so characteristic of Wolff's music (see instructions). If this is a quality consciously sought after, then Wolff has discovered the most simple and direct means of achieving it. The act of realizing the instructions as faithfully as possible generates the desired effect.³

The above simplified diagram for five players gives an idea as to the rhythmic quality of the piece. If played precisely it would be monophonic; the piece ending when the first player has played with the last. This is the most determinate of all the verbal scores found in Burdocks. While Wolff could have provided us with just such a diagram to play off of, it would not have given the desired effect. It would not have taken into account the variability of players (15 or more) nor
the variability of durations and pauses. And how could one notate the
surprises of one player waiting a long time to play and then suddenly,
without warning, playing a grace note, everybody reacting as quickly as
possible to play in unison? The aim is to increase one's concentration
and presence and to heighten one's sense of responsibility. Musical
precision is not the goal. It is perhaps for this reason that listen-
ing to a work such as Burdocks without actually participating in its
creation can to some be an unsatisfying experience. A lay audience is
concerned with what a piece sounds like and not with the inner machi-
nations of the minds of the performers, the extra-musical philosophical
underpinnings of a work. A performance of a Wolff composition almost
always sounds sloppy and haphazard, although, as previously mentioned,
this is also what may give it its particular charm.

Section III is a curiosity (see instructions). The instructions
are for each player to produce approximately 511 sounds, each somewhat
different than the next. Approximately 511 sounds! Such a precise
quantity with an approximation! Should one count each sound that one
makes? It is rather difficult to approximate 511 by feel alone,
especially over the course of a long period of time. There are no cri-
teria for the kind of sound, duration, pauses, dynamics, pitch, etc.
The piece could last for hours. What if everyone finishes within 15
minutes save for one lone player who is only up to 76? Must everyone
wait for him? Could he meet with an unexpected accident? And what
constitutes a sound? Can it be nondeliberate? Is a lot of uninter-
rupted noise considered as one sound? As Cage has informed us, it is
impossible not to make sounds. Our own bodies are producing sound con-
timuously. And what of the instruction to make each one somewhat different than the next? Does this mean 511 different sounds or only that no two consecutive sounds should be the same? To what degree should the sounds be different? It is of course impossible for them not to be different, at least on a microscopic level, and of course they will be different by virtue of their occurring at different points in time. Should one plan one's course of action ahead of time? The instructions leave the player free to do almost anything, including imitating the other players. They also leave him free to steal the show in a way that the other pieces do not. One may be as obtrusive as one desires, indeed as one might be in real life; the player is free to do just whatever it is that one normally does in social situations. The deliberate ambiguity in this and other works by Christian Wolff forces the performer into creatively making decisions and thereby hopefully stretching his attitudes toward sound, sound-making, and group activity.

In one performance of Burdocks that I was involved in, I performed section III solo at the same time that other sections were taking place. Before the performance I counted the number of words in the general instructions to the piece and found that they were just under 500. I decided that, for my task, I would read aloud this text and occasionally interject other sounds from time to time, bringing the total number of sounds made close to 511. In this way I didn't need to keep track of how many sounds I was making. My 'extra' sounds were imitations of ones I heard other performers making as they performed their respective material. I decided that the intentional starting and stopping of my vocal chords constituted one sound. In this way I
justified my occasional repeating of entire sentences or paragraphs in one breath at high speed as just a single sound.

While performing the piece I became overly conscious of the degree to which I was commanding attention; often my reading was overtly dramatic. I was constantly torn between wanting to be as unobtrusive as possible and wanting to ham it up. Perhaps this self-consciousness was exaggerated by the fact that I was performing this section solo.

Obviously a piece of this sort is not so much an entertainment for an audience as it is a vehicle for a performer's own self-exploration and confrontation.

Wolff claims to be working towards the creation of a democratic/socialist society. One would assume that in order for his work to be able to contribute to that cause, it should be accessible to as wide a range of people as possible and to those not involved in the creation of art music. Be that as it may, Wolff's scores are available only from a well-known publisher of art music, a firm which also charges exorbitant rates for these scores. One must additionally pay royalty fees to perform his works. This music's manner of distribution and style assures that only musicians with a strong interest in experimental music will be involved with it. Its lack of a steady beat and harmonic and melodic organization assures that this music will not be attractive to the average person.

Wolff's concepts are radical only in relation to the classical tradition which, due to its instrumentation, manner of presentation and distribution, it is a part of. Many of the ideas which Wolff hopes to encourage--group participation, democratic decision-making, etc.--are
already part of the common experience of improvising musicians everywhere, whether they be involved with jazz, folk, rock, African music, Indian music, or any number of musics not dependent on notation.

Involvement in a performance of a Wolff piece can be an enjoyable experience and may indeed heighten one's concentration and one's awareness of social interaction, but what of the audience, especially an audience that may not be aware of the rules of the game? Can observation of such a performance do anything to change people's attitudes in the direction that Wolff envisions? Perhaps it needs to be taken out of the concert hall where no one would be a mere observer. At least one should have the choice to participate or not, a choice which is not available in the usual performance situation.

Ultimately, we are left with the music—good, bad or indifferent, and it is on this level that, to an audience of music appreciators at least, it must prove itself.
III

Orchestra of any number. Each player makes about 511 sounds, each one different in some way.

IV

At least fifteen players in an orchestra. Each player chooses one to three sounds, fairly quiet. Using one of these each time, play as simultaneously as possible with the next sound of the player nearest to you; then with the next sound of the next nearest player; then with the next nearest after him, and so forth until you have played with all the other players (in your orchestra, or if so determined beforehand, with all players present), ending with the player farthest away from you.

IX

At least five in an orchestra. Each player in his orchestra is designated by a number, starting with 1, then 2, 3, 4, etc. (the numbers need not follow the players' order of location). Player 1 starts, playing one or two sounds (with or without pause, of any duration, between); as soon as he stops, player 2 plays directly (as in hockey) one or two sounds; as soon as he stops, player 3 follows, and so on until the last player in the orchestra has played, when player 1 picks up from his last sound, and so forth.

Each player should know the two or three players preceding him in order.

Since each player can play either one or two sounds with optional pause between, the player following can play directly after the first sound if he assumes that that is where his predecessor is stopping, or he can wait for a second sound. If the first player had not intended to play two sounds, but his follower has not picked up the first, he must furnish him with another.

Each player, while waiting for his turn to pick up a sound, is encouraged to play something else, drawing if he wishes on other parts of Burdocks; but he must break off immediately his time to play comes.

To conclude accelerate the movement of the sounds until it becomes impossible to follow.

X

Flying, and possibly crawling or sitting still.
VI

WHEN IS A PIECE NOT A PIECE?

INDETERMINACY IN

VARIATIONS III BY JOHN CAGE
Variations III is just one of many scores written by John Cage which are "indeterminate as to performance." In other words, the outcome of a performance cannot be predicted by the composer, because the musical parameters have not been determined by him; hence the term indeterminate. Neither pitch, rhythm, dynamics, tone color nor structure has been specified. These must be realized (concretized) by the performer(s) either before or during the performance. The score for Variations III consists of 42 undifferentiated circles on clear plastic with an additional blank plastic sheet. In order to prepare a version of Variations III one must do the following: let the 42 circles fall on an 8½ x 11 piece of paper. Remove all solitary circles, then remove all smaller groups of circles that are separate from the larger group so that a single maze of circles remains, none of them isolated from at least one other. Readings can now be made with the aid of this score which will give information necessary for performance.

Starting with any circle, observe the number of circles which overlap it. Make an action or actions having the corresponding number of interpenetrating variables (i+n). This done, move on to any one of the overlapping circles, again observing the number of interpenetrations, performing a suitable action or actions, and so on.

While going through the procedures a number of questions arise. Can one let the circles fall without in any way influencing where they fall? What if resulting large groups of circles have the same number of circles in them? This actually happened the first time I tried it (see example 1). As Cage makes no mention of what to do in this case,
I decided to start anew (see example 2). While removing the unnecessary circles I found it impossible not to affect the remaining ones. An isolated circle can be at the bottom of a maze of other circles. Cage must have come across this problem but offers no solution. I decided to make three copies of my score and then to cut out the isolated circles (see example 3) and on the other to cut out everything that was not essential thereby leaving a final workable score (see example 4). Of course one does not have to remove the unnecessary circles at all. just ignore them. The blank plastic sheet is to be laid over the final score but its function is never explained. The crucial term "inter-penetrating variable" is also not fully explained. I have assumed it to mean an interruption of the primary action that one is engaged in. The instruction that one is to then move on to one of the overlapping circles I have taken to mean: one of the overlapping circles that has not yet been interpenetrated; else one could go around and around forever. Can one do a number of circle droppings till one is found which is somehow more aesthetically pleasing to the performer or which has more or less actions to be performed as so desired? While Cage does not address this issue it is probably within the spirit of the piece to accept the initial results and plan accordingly.

My resulting score is rather simple: 7 actions, 2 of which each has two interpenetrating variables and 5 each having three ($1 + n$). An example of an action with 3 interpenetrating variables might be the following:

- begin playing Roll Over Beethoven by Chuck Berry

1--stop and make a peanut butter sandwich
- continue playing Roll Over Beethoven

2--notice a truck going past the window (choose this)

- continue playing Roll Over Beethoven

3--stop and take off your shirt

- finish playing Roll Over Beethoven

The possibilities are endless. The instructions state that "some or all of one's obligations may be performed through ambient circumstances (environmental change) by simply noticing or responding to them." The possibility arises that one could do absolutely nothing during a performance except to notice what is going on in the environment and somehow fit these occurrences into the context of the score--an interesting task for the performer perhaps but unintelligible to an observer.

It is Cage's often voiced declaration that his desire is to let sounds be just sounds and that he attempts this by arranging his composing means so that his own tastes do not come into play. In this respect he succeeds with Variations III. He does, however, leave enormous room for the performer to more or less freely express himself. Cage merely gives up his responsibility to the performer. The work is not a composition at all but is only a score. It cannot even be considered as a structured improvisation. The structure is too vague and imperceptible, and in fact Cage deplores improvisation for the very fact that one relies on previously acquired taste. Cage's final instruction that "any other activities are going on at the same time" is an admission that there is nothing special about his work. There is no need to pay any attention, or perhaps he leaves it up to the audience to decide
where the attention should be, a situation similar to walking down the street. Is Cage attempting to recreate this situation in a concert setting so as to wake us up to the multiplicity that surrounds us? Expecting something else most of us miss the point. For the rest of us who get the point there is still nothing there. We go to concerts to be entertained and to take a rest from our everyday world, a world which, for most of us, is a lot less interesting than going to a concert.

Of course, my criticisms are totally anathema to the notion that Cage is expounding. He would say that it is not the composer's job to do something to an audience, but it is rather the audience who must do the doing. While I understand the need to accept whatever comes our way in life and to be as alive as possible, to take responsibility for our lives, this stance makes the composer impervious to musical criticism. It is this stance, which many composers use as a shield, which I find objectionable.

Variations III is, then, like the more famous 4'33", a composition about context rather than content. In 4'33" this context is designed to bring the world of environmental sound to the attention of the listener and to promote the notion that music is not a rarefied, isolated activity but rather one that is constantly going on around us. Cage asks that the listener become more attentive to his everyday sonic environment and to consider it as music. Variations III has no such single-minded purpose. The entire world of intentional and unintentional musical and nonmusical activity is potentially contained within this score. Better yet, the score can possess all of these possibilities. The content is whatever one chooses, including the music of other com-
posers. It would not be inaccurate to suggest that at this very moment you and I may be performing Variations III ourselves or that we might be being included in someone else's realization depending on who is doing the contextualizing. Such a desire on the part of John Cage, to embrace the entire world of sound and action in his compositions and to thereby call everything his own, strikes this writer as a bit megalomaniacal. We are always performing John Cage's music.

Cage's lively and energetic personality and his prolific activity as composer, lecturer and writer have been a constant source of inspiration among experimental music composers. His work has also done much to deceive those less experienced, especially the young, who may consider that the mere act of putting pen to paper automatically makes one a composer. For many, the notion of craft has been tossed out the window. When a composition allows for almost anything to take place, then what has been composed?
Example 1

Cage: Variations III
Example 2

Cage: Variations III
(reduction)
Example 3

Cage: Variations III
Example 4

Cage: Variations III

Final Score
POSTFACE

My original intention in writing this thesis was to give an idea of the incredible plethora of notational symbols and approaches to music notation that thrived during the 1960s. It quickly became apparent that it was impossible, for me at least, to discuss notation without at the same time considering style, performance practice, and the art of music composition in general; thus I abandoned my original intention. While this present writing will hopefully be of interest to performers of contemporary music of two decades, hence its main purpose was to help me to clarify and voice my opinions regarding what I see as the role of the composer. There are two main issues which my six analyses have helped to illustrate and which I now want to summarize. One is the issue of the composer receiving credit for work not done by him, and the other is what I see as a lack of compositional craftsmanship. My criticisms apply especially to Cage's Variations III, Stockhausen's Spiral, parts of Wolff's Burdocks, and to a lesser degree Cardew's Memories Of You. I will discuss these as separate issues though, of course, they are interrelated.

There was a great deal of rhetoric during the 1960s about 'liberating the performer,' a rhetoric that was as much a part of the times as 'express yourself' and 'do your own thing.' This 'liberation' was due to the benevolence of the composer who wished to free his poor oppressed performer friends from the tyranny of having to play what was
composed by another musician; as if one does not play other people's music out of choice! John Cage expressed his feelings on the subject when he said, "A composer is someone who tells other people what to do," a situation which he finds distasteful. What is truly offensive, however, is the composer who abdicates his responsibility to take command of his music only to depend on the creative energy of other musicians to determine the course and character of 'his' music, which he then lays claim to. This was often justified by claiming that one was interested in the process by which the music came into being and not in the end result. While this is certainly a valid position to take, the presence of an audience reduces this form of music-making to one of self-indulgence. It is like watching a party from outside the window. One must actively experience the process going on for it to be enjoyable.

The freeing up of compositional structure that led to an increased dependence on performer decision-making also led, naturally enough, to a concern for material over form; the desire to "let sounds be just sounds," as expressed by Cage, as if it were possible to be totally objective and human at the same time. Often the 'composer' merely gathers sounds and presents them without any compunction at all to shape the material. One example of this sort of composing is Alvin Lucier's Sferics. This is a recording of ionospheric disturbances picked up by antennae. Aside from overdubbing, no shaping of the material has taken place. The sounds are quite interesting but soon lose their appeal due to the consistency of timbre, dynamic level, and texture.

On the other extreme is the case where no material at all has
been specified, as in Cage's *Variations III*. The score is empty structure into which any sound or action could take place. We do not trust a friend whose personality seems to change radically each time we meet, and it is no different with a piece of music.²

Some may argue that the role of the composer has changed. I say it is still the role of the composer to work with the art of movement, of tension and release, to absorb an audience and take them somewhere they have not been before. Any music which does not do this is 'muzak' and little more. Perhaps musicians who work with sound in a non-discoursive, unstructured fashion, such as those working in the fields of sound sculpture, installation, and ambient sound, should be referred to as 'sound artists' or 'sonic architects.' These names seem much more appropriate to their way of working. One thing is certain: Music which deliberately does not 'go anywhere' should be presented outside of the concert hall setting, a setting which is anachronistic to this way of dealing with sounds. A listener should be free to come and go as he pleases when presented with music which does not demand close, attentive listening, where no overall formal structure is to be perceived.

A few words about music notation: It is no longer an area of intense interest as it was in the 1950s and 1960s. For many composers notation has become obsolete for they no longer require the services of performers to bring their musical conceptions to fruition. A whole new breed of improvising musicians has cropped up: people who have cultivated their own sound and who perform solo or with associates familiar with that person's sound (though I do not consider these
musicians composers). In these situations, musical ideas are generally communicated verbally. Recording technology is helping to make notation obsolete, as are developments in computer music technology. New computerized musical instruments are capable of recording and storing many tracks of sound, all under the command of one person. Entire orchestral pieces can be constructed layer upon layer, and any part may be edited at any time with the results quickly audible. By means of digital sampling almost any sound can be stored and retrieved and used in a composition. Many computer programs will even notate the music for you in traditional notation, though these are still in the beginning stages of development. It is conceivable that future composers will be notationally illiterate or that their notational skills will have more to do with computer programming than with putting notes down on paper. Those composers who are still using notation (and these are in the majority) are using it in a more or less traditional fashion to write music which is determinate and discursive in nature.

There is, of course, musical exploration and experimentation going on today, particularly in the areas of alternate tuning systems, psychoacoustics, computer synthesis, and world musics (integration of musical elements from many different cultures), but one thing is certain: Regardless of one's choice of medium, style, and manner of presentation, the future of musical composition belongs to those with strong materials and ideas, and the vision and craft needed to shape those materials into convincing, substantive, and unique works of art.
ENDNOTES

Preface


Introduction

1. For a more detailed account of this era, see Paul Griffith, Modern Music, the Avant Garde Since 1945 (New York: George Braziller, 1961).

2. For a detailed explanation of the concepts of chance and indeterminacy, see John Cage, Silence (Middletown: Wesleyan University Press, 1961).

I.

1. I have realized the work with a group of people, all reading the text at the same time. We kept Lucier's text as is but changed all of the personal pronouns to plurals.

2. As recorded for Lovely Music/Vital Records, VR 1013. The work had been previously issued as Source Record no. 3 in issue no. 6 of Source Magazine (Sacramento: Composer/Performer Edition, 1969 /defunct/). This version is one-third the duration of the one released on Lovely.

II.

1. In 1982 I arranged a performance of the work for an orchestra of electric guitars.

IV.

1. From the liner notes to the Deutsche Grammophon recording made by oboist Heinz Holliger, DG 2561109 (unavailable in the U.S.)

2. Compare the Heinz Holliger recording with the one made by oboist Joseph Celli on O.O. Records #1.
V.

1. From the liner notes to the Wergo recording of Burdocks; Wer 60063.

2. There is something a little disturbing to this writer about Wolff's lack of concern as to what this other interjected material may be, though he does at least suggest that it be material from other parts of Burdocks.

3. Wolff has never created a tape composition for the obvious reason that no social/musical interaction can take place. It would be interesting to see just what the musical characteristics of such a piece would be were Wolff to embark on such an undertaking.

Postface

1. Very often today the 'composer' is little more than a contractor, engaging musicians to more or less freely improvise under the banner of one person's name and a catchy title. This is very common among musicians involved in 'free improvisation.' It is not an issue of music but rather one of status. These musicians often refer to themselves as composers, but the closest that many of them have come to composing is writing a flow chart for improvisation.

2. Even Cage has abandoned indeterminacy. His recent scores are traditionally notated (as objects occurring in time) though he still employs chance operations to arrive at the exact details of the work.
SELECTED BIBLIOGRAPHY


