Second edition

Experimental Music

Cage and Beyond

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I Towards (a definition of) experimental music

Objections are sometimes made by composers to the use of the term *experimental* as descriptive of their works, for it is claimed that any experiments that are made precede the steps that are finally taken with determination, and that this determination is knowing, having, in fact, a particular, if unconventional, ordering of the elements used in view. These objections are clearly justifiable, but only where, as among contemporary evidences in serial music, it remains a question of making a thing upon which attention is focused. Where, on the other hand, attention moves towards the observation and audition of many things at once, including those that are environmental – becomes, that is, inclusive rather than exclusive – no question of making, in the sense of forming understandable structures, can arise (one is a tourist), and here the word 'experimental' is apt, providing it is understood not as descriptive of an act to be later judged in terms of success and failure, but simply as of an act the outcome of which is unknown. What has been determined? John Cage (1955)

When a composer feels a responsibility to make, rather than accept, he eliminates from the area of possibility all those events that do not suggest this at that point in time vogue for profundity. For he takes himself seriously, wishes to be considered great, and he thereby diminishes his love and increases his fear and concern about what people will think. There are many serious problems confronting such an individual. He must do it better, more impressively, more beautifully, etc. than anybody else. And what, precisely, does this, this beautiful profound object, this masterpiece, have to do with Life? It has this to do with Life: that it is separate from it. Now we see it and now we don't. When we see it we feel better, and when we are away from it, we don't feel so good. John Cage (published in 1959, written in 1952)

For living takes place each instant and that instant is always changing. The wisest thing to do is to open one's ears immediately and hear a sound suddenly before one's thinking has a chance to turn it into something logical, abstract or symbolical. John Cage (1952)

In this opening chapter I shall make an attempt to isolate and identify what experimental music is, and what distinguishes it from the music of such avant-garde composers as Boulez, Kagel, Xenakis, Birtwistle, Berio, Stockhausen, Bussotti, which is conceived and executed along the well-trodden but sanctified path of the post-Renaissance tradition.* Since, as the Chinese proverb has it, 'One showing is worth a hundred sayings' I propose to take a practical instance – Cage's *4′33″* – dating from the same inauguration period of experimental music as the three statements quoted above, and use it as a point of reference. I have selected the so-called silent piece not because it is notorious (and mis-understood) but simply because it is the most empty of its kind and therefore for my purposes the most full of possibilities. It is also – certainly for Cage – a work that has outlived its usefulness, having been overtaken by the revolution it helped to bring about. ('I no longer need the silent piece' Cage said in an interview in 1966.) I shall build the discussion around Cage's questioning of the traditional unities of composing, performing and listening: 'Composing's one thing, performing's another, listening's a third. What can they have to do with one another?' In normal circumstances it might seem puzzling to make this separation, but even at such an early point in the history of experimental music *4′33″* demonstrates very clearly what composition, realization and audition may or may not have to do with one another.

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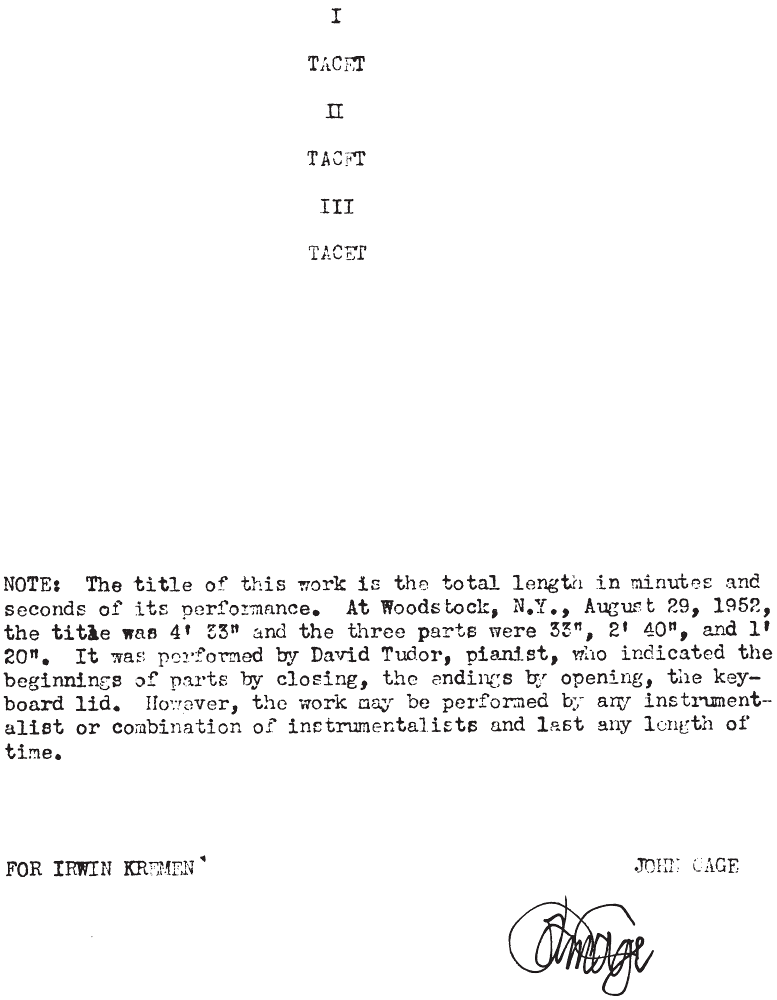
* For obvious reasons I have deliberately chosen to concentrate on the *differences* between the experimental and the avant-garde. Interestingly enough Morton Feldman's professed independence of both experimental and avant-garde standpoints (as I will show, Feldman's music *is* experimental as I define it) leads him to these recent conclusions:

The distinctions between the experimental and the avant-garde ultimately depend on purely musical considerations. But as Cage's statements show it would be foolish to try and separate sound from the aesthetic, conceptual, philosophical and ethical considerations that the music enshrines. As Alan Watts wrote of the difficulties for the western mind in understanding Chinese philosophy, 'the problem is to appreciate differences in the basic premises of thought and in the very methods of thinking.' And Boulez was aware of such differences: 'Nothing is based on the "masterpiece", on the closed cycle, on passive contemplation, on purely aesthetic enjoyment. Music is a way of being in the world, becomes an integral part of existence, is inseparably connected with it; it is an ethical category, no longer merely an aesthetic one.' Boulez was in fact comparing non-western ethnic traditions to the western art music tradition, but his statement nonetheless expresses the position of experimental music very clearly.

> What music rhapsodizes in today's 'cool' language, is its own construction. The fact that men like Boulez and Cage represent opposite extremes of modern methodology is not what is interesting. What is interesting is their similarity. In the music of both men, things are exactly what they are – no more, no less. In the music of both men, what is heard is indistinguishable from its process. In fact, process itself might be called the Zeitgeist of our age. The duality of precise means creating indeterminate emotions is now associated only with the past.

And for the newly-awakened political consciousness of Cornelius Cardew and John Tilbury – which now leads them to denounce their past attitudes and activities expressed in this book – overriding similarities reside in the elitist, individualistic, bourgeois culture which has spawned both the experimental and the avant-garde.

1 John Cage's *4′33″*



I

TACET

II

TACET

III

TACET

NOTE: The title of this work is the total length in minutes and seconds of its performance. At Woodstock, N.Y., August 29, 1952, the title was 4' 33" and the three parts were 33", 2' 40", and 1' 20". It was performed by David Tudor, pianist, who indicated the beginnings of parts by closing, the endings by opening, the keyboard lid. However, the work may be performed by any instrumentalist or combination of instrumentalists and last any length of time.

FOR IRWIN KREMEN

JOHN CAGE

Composing

Notation

The score of *4′33″* presents, by means of the roman numerals I, II and III, a three-movement work; each movement is marked 'TACET'. A footnote (the only actual 'note' in Cage's score!) indicates that at the first (and most talked-about) performance David Tudor chose to take four minutes and thirty seconds over the three sections. Since 'TACET' is the word used in western music to tell a player to remain silent during a movement, the performer is asked to make no sounds; but – as the note makes clear – for any length of time, on any instrument.

As notation, then, *4′33″* is early evidence of the radical shift in the methods and functions of notation that experimental music has brought about. A score may no longer 'represent' sounds by means of the specialized symbols we call musical notation, symbols which are read by the performer who does his best to 'reproduce' as accurately as possible the sounds the composer initially 'heard' and then stored. Edgard Varèse once drew attention to some of the disadvantages of the mechanics of traditional notation: with music 'played by a human being you have to impose a musical thought through notation, then, usually much later, the player has to prepare himself in various ways to produce what will – one hopes – emerge as that sound.' *4′33″* is one of the first in a long line of compositions by Cage and others in which something other than a 'musical thought' (by which Varèse meant a pattern of sounds) is imposed through notation. Cornelius Cardew wrote in 1963: 'A composer who hears sounds will try to find a notation for sounds. One who has ideas will find one that expresses his ideas, leaving their interpretation free, in confidence that his ideas have been accurately and concisely notated.'

Processes

Experimental composers are by and large not concerned with prescribing a defined *time-object* whose materials, structuring and relationships are calculated and arranged in advance, but are more excited by the prospect of outlining a *situation* in which sounds may occur, a *process* of generating action (sounding or otherwise), a *field* delineated by certain compositional 'rules'. The composer may, for instance, present the performer with the means of making calculations to determine the nature, timing or spacing of sounds. He may call on the performer to make split-second decisions in the moment of performance. He may indicate the temporal areas in which a number of sounds may be placed. Sometimes a composer will specify situations to be arranged or encountered before sounds may be made or heard; at other times he may indicate the number and general quality of the sounds and allow the performers to proceed through them at their own pace. Or he may invent, or ask the performer to invent, particular instruments or electronic systems.

Experimental composers have evolved a vast number of processes to bring about 'acts the outcome of which are unknown' (Cage). The extent to which they are unknown (and to whom) is variable and depends on the specific process in question. Processes may range from a minimum of organization to a minimum of arbitrariness, proposing different relationships between chance and choice, presenting different kinds of options and obligations. The following list is of necessity only partial because any attempt to classify a phenomenon as unclassifiable and (often) elusive as experimental music must be partial, though most processes conform to what George Brecht termed 'The Irrelevant Process' (especially if 'selection' is taken to include 'arrangement'):

2 Christopher Hobbs's *Voicepiece*

VOICEPIECE

Voicepiece is for any number of vocalists (not necessarily trained singers), and lasts for any length of time. Each performer makes his own part, following the instructions below. It may be found desirable to amplify the vocal noises, since it is difficult to vary the amplitude of these predominantly quiet sounds. Any of the other sounds may be amplified. Loudspeakers should be placed around and among the audience. The performers should sit in the auditorium, and may move around freely during the performance. The piece may take place in darkness, in which case each performer will need a small torch by which to read his part.

Determination of Events

Open a telephone directory at random, and begin reading at the top of the left-hand page. Read only the last four figures of each number. Each set of four figures constitutes one event. As many sets are read as will provide a programme of actions to fill the time available for the performance. Read down the page, omitting no numbers.

Interpretation of the Numbers

The first of the four figures in a set refers to various types of sound production, according to the following system: –

Figure 1 indicates singing, with words. The words may be in any language, and any dialect. Use any literature from which to obtain texts, except these instructions. Do not in invent your own text. The literature, and thus the language, etc. may be changed any number of times during the course of a performance but such changes should be made between, not during events.

Figure 2 indicates singing, without words. The note(s) may be sung to any sound provided that the mouth is open for their production.

Figure 3 indicates humming (mouth closed).

Figure 4 indicates whistling. If you cannot whistle use instead any one vocal noise other than described in figures 6-8.

Figure 5 indicates speech. The remarks in figure 1 apply here also. Very quiet speech may be interpreted as whispering, very loud speech as shouting (see below)

Figures 6, 7 and 8 indicate vocal noises, produced with lips, throat and tongue respectively.

Figure 9 indicates a vocal noise produced by any means other than those described above, eg. with the cheeks.

Figure 0 indicates any vocal sound not included in the above categories, eg. screaming.

The second of the four figures in a set refers to the duration of the event. 0 is very short, 9 is very long. The other numbers represent roughly equal gradations between these extremes. Each event may contain any number of sounds of any duration, depending on the overall duration of the event. The sounds may be made at any point within the event, with or without silence preceding and/or succeeding any sound.

The third figure of the set refers to pitch and amplitude. 0 is very low/very quiet, 9 is very high/very loud. Both these characteristics apply only in a general way to the event. Not all the sounds in an event need be very high and very loud or whatever.

Pitch and amplitude will apply in different degrees to the various sounds. In categories 1-4, pitch is the primary consideration, and, in general, amplitude will follow on from it It is, for example, very difficult for an untrained singer to produce extreme low sounds at anything other than a very low amplitude. In categories 5-9, amplitude is more easily varied, especially if amplification is available, and pitch should be left to take care of itself.

The fourth figure of the set refers to silence after an event. 0 is no silence, 1 is a very short pause, and so on. 9 represents a very long silence.

October 1967

'In general, bias in the selection of elements for a chance-image can be avoided by using a method of selection of those elements which is independent of the characteristics of interest in the elements themselves. The method should preferably give an irregular and unforeseen pattern of selection.'

1 CHANCE DETERMINATION PROCESSES

These were first used by Cage who still favours them – the *I Ching* (the ancient Chinese Book of Oracles) used to answer questions about the articulation of his material (*Music of Changes*, 1951, *Mureau*, 1971); observation of the imperfections on paper (*Music for Piano*, 1952–6); the random overlaying of shapes printed on perspex and readings taken to make various determinations (*Variations I–III* and *VI*, 1958–67); a star map (*Atlas Eclipticalis*, 1961–2) and the computer (*HPSCHD*, 1969). Other composers have also used this type of chance process: random number tables or the telephone directory are to be used in La Monte Young's *Poem* (1960), and in Christopher Hobbs' *Voicepiece* (1967) random techniques are used to produce a programme of vocal action for each individual performer. George Brecht uses shuffled cards in *Card Piece for Voices* (1959) as does Cage in *Theatre Piece* (1960). The importance of Cage's chance methods of the early 50s, according to Dick Higgins, lay in the placing of the 'material at one remove from the composer by allowing it to be determined by a system he determined. And the real innovation lies in the emphasis on the creation of a system' (or process).

2 PEOPLE PROCESSES

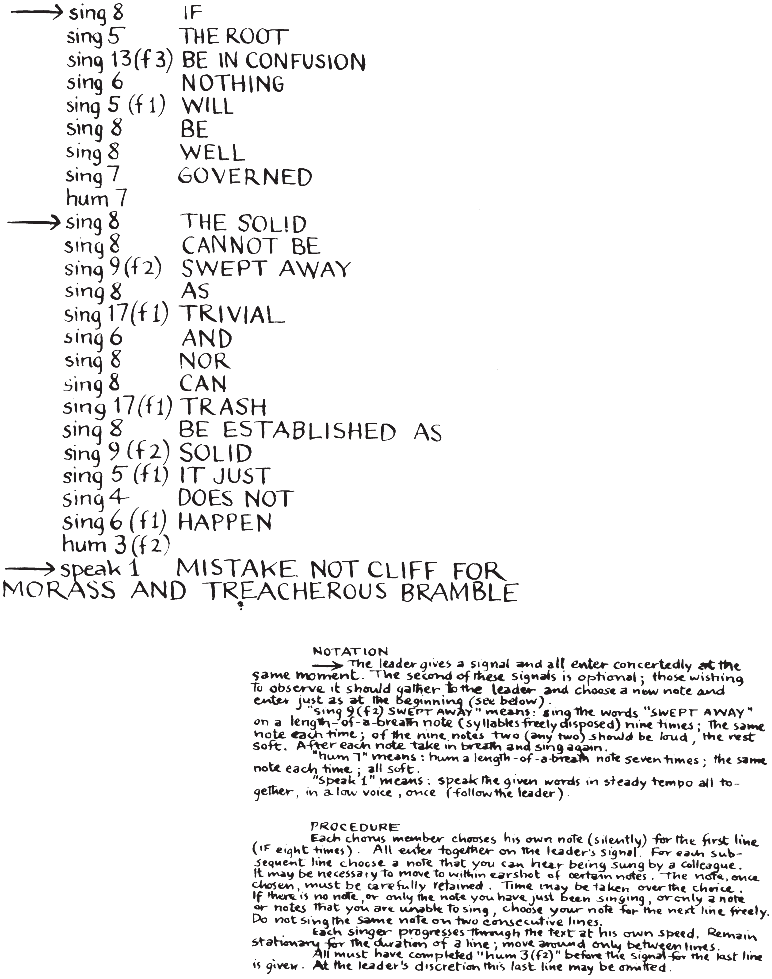
These are processes which allow the performers to move through given or suggested material, each at his own speed. Morton Feldman was certainly the first to use this procedure in *Piece for Four Pianos* (1957); Cardew uses it in all seven paragraphs of *The Great Learning* (1968–71). It could of course be used to establish the determinations of chance processes. One particular form of this process, where each person reads the same notation, has been described by Michael Parsons:

> The idea of one and the same activity being done simultaneously by a number of people, so that everyone does it slightly differently, 'unity' becoming 'multiplicity', gives one a very economical form of notation – it is only necessary to specify one procedure and the variety comes from the way everyone does it differently. This is an example of making use of 'hidden resources' in the sense of natural individual differences (rather than talents or abilities) which is completely neglected in classical concert music, though not in folk music.

Differences of ability account for the (possible) eventuality of players getting lost in Frederic Rzewski's *Les Moutons de Panurge* (1969) (once you're lost you're encouraged to stay lost) and the (probable) deviations from the written letter of the classics by the members of the Portsmouth Sinfonia.

3 CONTEXTUAL PROCESSES

These are concerned with actions dependent on unpredictable conditions and on variables which arise from within the musical continuity.



3 Paragraph 7 of Cornelius Cardew's *The Great Learning*

→ sing 8 IF
sing 5 THE ROOT
sing 13(f3) BE IN CONFUSION
sing 6 NOTHING
sing 5 (f1) WILL
sing 8 BE
sing 8 WELL
sing 7 GOVERNED
hum 7
→ sing 8 THE SOLID
sing 8 CANNOT BE
sing 9(f2) SWEPT AWAY
sing 8 AS
sing 17(f1) TRIVIAL
sing 6 AND
sing 8 NOR
sing 8 CAN
sing 17(f1) TRASH
sing 8 BE ESTABLISHED AS
sing 9 (f2) SOLID
sing 5 (f1) IT JUST
sing 4 DOES NOT
sing 6 (f1) HAPPEN
hum 3 (f2)
→ speak 1 MISTAKE NOT CLIFF FOR MORASS AND TREACHEROUS BRAMBLE

NOTATION

→ The leader gives a signal and all enter concertedly at the same moment. The second of these signals is optional; those wishing to observe it should gather to the leader and choose a new note and enter just as at the beginning (see below).

"sing 9(f2) SWEPT AWAY" means: sing the words "SWEPT AWAY" on a length-of-a-breath note (syllables freely disposed) nine times; the same note each time; of the nine notes two (any two) should be loud, the rest soft. After each note take in breath and sing again.

"hum 7" means: hum a length-of-a-breath note seven times; the same note each time; all soft.

"speak 1" means: speak the given words in steady tempo all together, in a low voice, once (follow the leader).

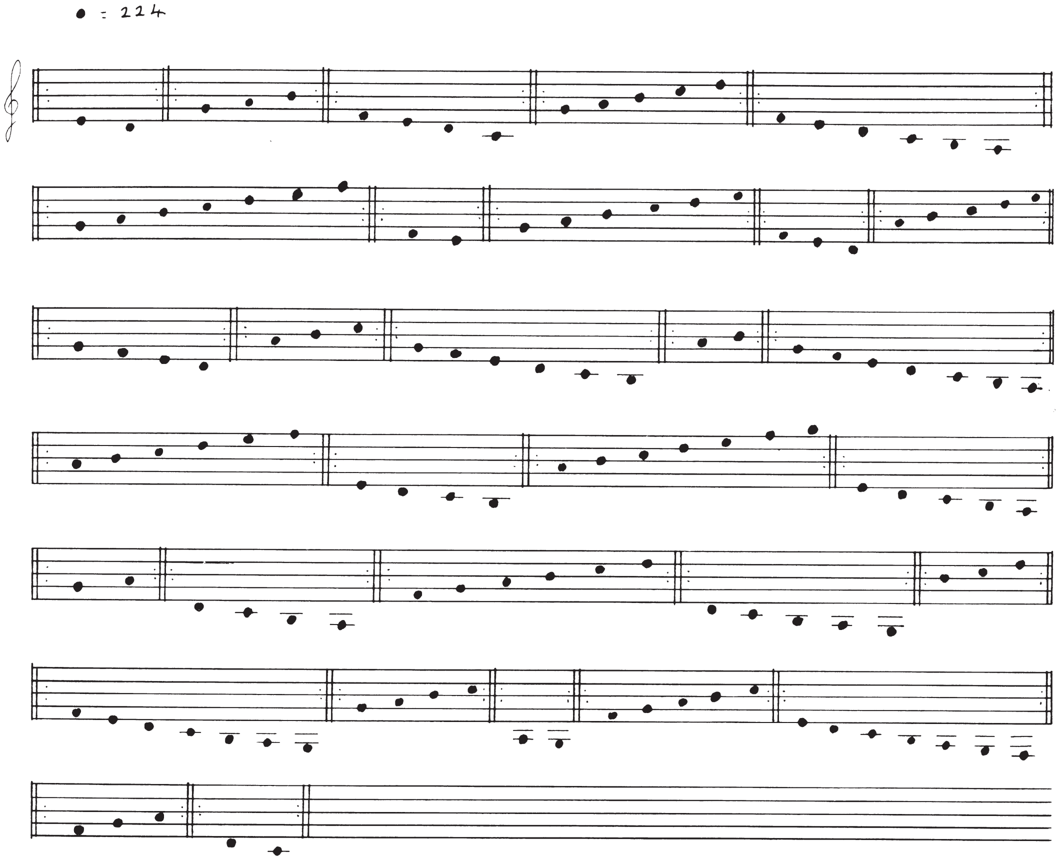
PROCEDURE

Each chorus member chooses his own note (silently) for the first line (IF eight times). All enter together on the leader's signal. For each subsequent line choose a note that you can hear being sung by a colleague. It may be necessary to move to within earshot of certain notes. The note, once chosen, must be carefully retained. Time may be taken over the choice. If there is no note, or only the note you have just been singing, or only a note or notes that you are unable to sing, choose your note for the next line freely. Do not sing the same note on two consecutive lines.

Each singer progresses through the text at his own speed. Remain stationary for the duration of a line; move around only between lines.

All must have completed "hum 3(f2)" before the signal for the last line is given. At the leader's discretion this last line may be omitted.

The selection of new pitches in *The Great Learning* Paragraph 7 is an example of this process, originated by Christian Wolff whose music presents a comprehensive repertoire of contextual systems. One of the 'movements' of *Burdocks* (1970), for instance, is for an orchestra made up of at least fifteen players, each of whom chooses one to three sounds, fairly quiet. Using one of these each time, you have to 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. Rzewski's 'improvisation plan' for *Spacecraft* (1968) also perhaps falls into this category, as do the last two paragraphs of Cardew's *The Great Learning*, and (in an entirely different way) Alvin Lucier's *Vespers* (1968).



4 Hugh Shrapnel's *Cantation I* for piano. The first figure is played by the left hand; after a while the second figure is added with the right hand, then the third figure with the left hand, and so on all through the piece, so that the first note of the new figure coincides with the first note of the existing figure to start with. The tempo is strictly maintained throughout; dynamics are loud and duration between fifteen and thirty minutes.

4 REPETITION PROCESSES

These use extended repetition as the sole means of generating movement – as, for example, in John White's *Machines*, in the 'gradual process music' of Steve Reich, Terry Riley's *Keyboard Studies*, or a piece like Hugh Shrapnel's *Cantation I* (1970). Riley's *In C* (1967) and Paragraph 2 of Cardew's *The Great Learning* use repetition within a 'people' process (or vice versa). In repetition processes the 'unforeseen' may arise (*pace* Feldman) through many different factors, even though the process may, from the point of view of structure, be totally foreseen.

5 ELECTRONIC PROCESSES

These take many forms and are dealt with at length in Chapter 5. A straightforward example is David Behrman's *Runthrough* (1970). This asks only for a particular electronic set-up consisting of generators and modulators with dials and switches and a photocell distributor which three or four people use for improvisation. Behrman writes that 'because there is neither a score nor directions, any sound which results from any combination of the switch and light positioning remains part of the "piece". (Whatever you do with a surfboard in the surf remains a part of surfboarding.)'

The Unique Moment

Processes throw up momentary configurations which have no sooner happened than they are past: the experimental composer is interested not in the uniqueness of *permanence* but in the uniqueness of the moment. This is a concept which is clearly expressed in Jung's statement about the *I Ching*:

> The actual moment under actual observation appears to the ancient Chinese view more of a chance hit than a clearly defined result of concurring causal chain processes. The matter of interest seems to be the configuration formed by chance events in the moment of observation, and not at all the hypothetical reasons that seemingly account for the coincidence. While the Western mind carefully sifts, weighs, selects, classifies, isolates, the Chinese picture of the moment encompasses everything down to the minutest nonsensical detail, because all of the ingredients make up the observed moment.

By contrast the avant-garde composer wants to freeze the moment, to make its uniqueness un-natural, a jealously guarded possession. Thus Stockhausen (1956):

> A sound which results from a certain mode of structure has no relevance outside the particular composition for which it is intended. For this reason the same 'prepared' element, the same sound or the same 'object' can never be utilized in different compositions, and all the sounds which have been created according to the structural pattern of one composition are destroyed when the composition is completed.

And one finds Boulez, seemingly disconcerted by the impermanence of his sounds, constantly trying to fix them with ever greater precision by obsessive revising, refining and reworking, in the hope of sculpting his sounds into more permanent finality. This attitude is hallowed by tradition, as is shown by Webern's approval of 'the way Beethoven worked and worked at the main theme of the first movement of the "Eroica" until it achieved a degree of graspability comparable to a sentence of "Our Father" '.

Identity

The identity of a composition is of paramount importance to Boulez and Stockhausen, as to all composers of the post-Renaissance tradition. But identity takes on a very different significance for the more open experimental work, where indeterminacy in performance guarantees that two versions of the same piece will have virtually no perceptible musical 'facts' in common. With a score like Cardew's *Treatise* (1963–6) aural recognizability is both impossible and irrelevant since the (non-musical) graphic symbols it contains have no meanings attached to them but 'are to be interpreted in the context of their role in the whole'. The performer may choose to realize for example, as a circle, some sort of circular sound, movement or gesture; but it is more likely that he will interpret it in a 'non-representational' way by a melody, or silence, or counting, or turning off the lights, or tuning in to a radio signal, or whatever. Each performer is invited by the absence of rules to make personal correlations of sight to sound. These will naturally change from one performance to another, whose time scale will be totally different. What price identity here with a score which is in no way a compendium or reduction of all possible realizations?

As regards the relationship between one performance and another Cage wrote in 1958:

> A performance of a composition which is indeterminate of its performance is necessarily unique. It cannot be repeated. When performed for a second time, the outcome is other than it was. Nothing therefore is accomplished by such a performance, since that performance cannot be grasped as an object in time.

Recordings of the most open processes are also misleading. Both Cage and Cardew have drawn attention to this. Talking of a composition which is indeterminate of its performance, Cage says that a recording of such a work 'has no more value than a postcard; it provides a knowledge of something that happened, whereas the action was a non-knowledge of something that had not yet happened.' Cardew is concerned about the practical problem of reproducing improvisation where documents such as tape recordings are essentially empty; they preserve chiefly the form that something took, give at best an indistinct hint as to the feeling, and cannot of course convey any sense of time and place. From his experience with AMM he found that it is impossible to record with any fidelity a kind of music that is actually derived from the room in which it is taking place – its size, shape, acoustical properties, even the view from the window, since what a recording produces is a separate phenomenon, something really much stranger than the playing itself. 'What we hear on tape or disc is indeed the same playing but divorced from its natural context.'

Difficulties also arise when one tries to explain the most open processes. A description of a particular performance may tell you little of its musical concepts, and a description of the score may tell you too much about possible interpretations to be of any use. With Cage's *Cartridge Music*, Behrman's *Runthrough* or Lucier's *Vespers* the difficulties are less obvious because the type of sound in any one version will be recognizably similar to that of another (though a lot of other aspects will be different). But separate performances of Cage's *Fontana Mix* (1958) or of Cardew's *Treatise* may exhibit no family likenesses. Cage's own