Lectures

and

writings

by

JOHN

CAGE
SILENCE
Many of these lectures and articles have been delivered or published elsewhere in the past two decades. The headnote preceding each one makes grateful acknowledgment of its precise source.
THE FUTURE OF MUSIC: CREDO

I BELIEVE THAT THE USE OF NOISE

Wherever we are, what we hear is mostly noise. When we ignore it, it disturbs us. When we listen to it, we find it fascinating. The sound of a truck at fifty miles per hour. Static between the stations. Rain. We want to capture and control these sounds, to use them not as sound effects but as musical instruments. Every film studio has a library of “sound effects” recorded on film. With a film phonograph it is now possible to control the amplitude and frequency of any one of these sounds and to give to it rhythms within or beyond the reach of the imagination. Given four film phonographs, we can compose and perform a quartet for explosive motor, wind, heartbeat, and landslide.

TO MAKE MUSIC

If this word “music” is sacred and reserved for eighteenth- and nineteenth-century instruments, we can substitute a more meaningful term: organization of sound.

WILL CONTINUE AND INCREASE UNTIL WE REACH A MUSIC PRODUCED THROUGH THE AID OF ELECTRICAL INSTRUMENTS

Most inventors of electrical musical instruments have attempted to imitate eighteenth- and nineteenth-century instruments, just as early automobile designers copied the carriage. The Novachord and the

THE FUTURE OF MUSIC: CREDO
Solovox are examples of this desire to imitate the past rather than construct the future. When Theremin provided an instrument with genuinely new possibilities, Thereminstes did their utmost to make the instrument sound like some old instrument, giving it a sickeningly sweet vibrato, and performing upon it, with difficulty, masterpieces from the past. Although the instrument is capable of a wide variety of sound qualities, obtained by the turning of a dial, Thereminstes act as censors, giving the public those sounds they think the public will like. We are shielded from new sound experiences.

The special function of electrical instruments will be to provide complete control of the overtone structure of tones (as opposed to noises) and to make these tones available in any frequency, amplitude, and duration.

Which will make available for musical purposes any and all sounds that can be heard. Photoelectric, film, and mechanical mediums for the synthetic production of music.

It is now possible for composers to make music directly, without the assistance of intermediary performers. Any design repeated often enough on a sound track is audible. Two hundred and eighty circles per second on a sound track will produce one sound, whereas a portrait of Beethoven repeated fifty times per second on a sound track will have not only a different pitch but a different sound quality.

Whereas, in the past, the point of disagreement has been between dissonance and consonance, it will be, in the immediate future, between noise and so-called musical sounds.

The present methods of writing music, principally those which employ harmony and its reference to particular steps in the field of sound, will be inadequate for the composer, who will be faced with the entire field of sound.
The composer (organizer of sound) will be faced not only with the entire field of sound but also with the entire field of time. The "frame" or fraction of a second, following established film technique, will probably be the basic unit in the measurement of time. No rhythm will be beyond the composer's reach.

NEW METHODS WILL BE DISCOVERED, BEARING A DEFINITE RELATION TO SCHOENBERG'S TWELVE-TONE SYSTEM

Schoenberg's method assigns to each material, in a group of equal materials, its function with respect to the group. (Harmony assigned to each material, in a group of unequal materials, its function with respect to the fundamental or most important material in the group.) Schoenberg's method is analogous to a society in which the emphasis is on the group and the integration of the individual in the group.

AND PRESENT METHODS OF WRITING PERCUSSION MUSIC

Percussion music is a contemporary transition from keyboard-influenced music to the all-sound music of the future. Any sound is acceptable to the composer of percussion music; he explores the academically forbidden "non-musical" field of sound insofar as is manually possible.

Methods of writing percussion music have as their goal the rhythmic structure of a composition. As soon as these methods are crystallized into one or several widely accepted methods, the means will exist for group improvisations of unwritten but culturally important music. This has already taken place in Oriental cultures and in hot jazz.

AND ANY OTHER METHODS WHICH ARE FREE FROM THE CONCEPT OF A FUNDAMENTAL TONE.

THE PRINCIPLE OF FORM WILL BE OUR ONLY CONSTANT CONNECTION WITH THE PAST. ALTHOUGH THE GREAT FORM OF THE FUTURE WILL NOT BE AS IT WAS IN THE PAST, AT
ONE TIME THE FUGUE AND AT ANOTHER THE SONATA, IT WILL BE RELATED TO THESE AS THEY ARE TO EACH OTHER:

Before this happens, centers of experimental music must be established. In these centers, the new materials, oscillators, turntables, generators, means for amplifying small sounds, film phonographs, etc., available for use. Composers at work using twentieth-century means for making music. Performances of results. Organization of sound for extra-musical purposes (theatre, dance, radio, film).

THROUGH

THE PRINCIPLE OF ORGANIZATION OR MAN'S COMMON ABILITY TO THINK.

It was a Wednesday. I was in the sixth grade. I overheard Dad saying to Mother, "Get ready: we're going to New Zealand Saturday." I got ready. I read everything I could find in the school library about New Zealand. Saturday came. Nothing happened. The project was not even mentioned, that day or any succeeding day.

M. C. Richards went to see the Bolshoi Ballet. She was delighted with the dancing. She said, "It's not what they do; it's the ardor with which they do it." I said, "Yes: composition, performance, and audition or observation are really different things. They have next to nothing to do with one another." Once, I told her, I was at a house on Riverside Drive where people were invited to be present at a Zen service conducted by a Japanese Roshi. He did the ritual, rose petals and all. Afterwards tea was served with rice cookies. And then the hostess and her husband, employing an out-of-tune piano and a cracked voice, gave a wretched performance of an excerpt from a third-rate Italian opera. I was embarrassed and glanced towards the Roshi to see how he was taking it. The expression on his face was absolutely beatific.

A young man in Japan arranged his circumstances so that he was able to travel to a distant island to study Zen with a certain Master for a three-year period. At the end of the three years, feeling no sense of accomplishment, he presented himself to the Master and announced his departure. The Master said, "You've been here three years. Why don't you stay three months more?" The student agreed, but at the end of the three months he still felt that he had made no advance. When he told the Master again that he was leaving, the Master said, "Look now, you've been here three years and three months. Stay three weeks longer." The student did, but with no success. When he told the Master that absolutely nothing had happened, the Master said, "You've been here three years, three months, and three weeks. Stay three more days, and if, at the end of that time, you have not attained enlightenment, commit suicide." Towards the end of the second day, the student was enlightened.
EXPERIMENTAL MUSIC: DOCTRINE

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 the boundaries, structure, and expression of 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 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?

For, when, after convincing oneself ignorantly that sound has, as its clearly defined opposite, silence, that since duration is the only characteristic of sound that is measurable in terms of silence, therefore any valid structure involving sounds and silences should be based, not as occidentally traditional, on frequency, but rightly on duration, one enters an anechoic chamber, as silent as technologically possible in 1951, to discover that one hears two sounds of one's own unintentional making (nerve's systematic operation, blood's circulation), the situation one is clearly in is not objec-
tive (sound-silence), but rather subjective (sounds only), those intended and those others (so-called silence) not intended. If, at this point, one says, "Yes! I do not discriminate between intention and non-intention," the splits, subject-object, art-life, etc., disappear, an identification has been made with the material, and actions are then those relevant to its nature, i.e.:

A sound does not view itself as thought, as ought, as needing another sound for its elucidation, as etc.; it has no time for any consideration—it is occupied with the performance of its characteristics: before it has died away it must have made perfectly exact its frequency, its loudness, its length, its overtone structure, the precise morphology of these end of itself.

Urgent, unique, uninformed about history and theory, beyond the imagination, central to a sphere without surface, its becoming is unimpeached, energetically broadcast. There is no escape from its action. It does not exist as one of a series of discrete steps, but as transmission in all directions from the field's center. It is inextricably synchronous with all other sounds, non-sounds, which latter, received by other sets than the ear, operate in the same manner.

A sound accomplishes nothing; without it life would not last out the instant.

Relevant action is theatrical (music [imaginary separation of hearing from the other senses] does not exist), inclusive and intentionally purposeless. Theatre is continually becoming that it is becoming; each human being is at the best point for reception. Relevant response (getting up in the morning and discovering oneself musician) (action, art) can be made with any number (including none [none and number, like silence and music, are unreal]) of sounds. The automatic minimum (see above) is two.

Are you deaf (by nature, choice, desire) or can you hear (externals, tympani, labyrinths in whack)?

Beyond them (ears) is the power of discrimination which, among other confused actions, weakly pulls apart (abstraction), ineffectually establishes as not to suffer alteration (the "work"), and unskilfully protects from interruption (museum, concert hall) what springs, elastic, spontaneous, back together again with a beyond that power which is fluent (it moves in or out), pregnant (it can appear when-where-as what-ever [rose, nail, constellation, 485.73482 cycles per second, piece of string]), related (it is you yourself in the form you have that instant
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taken), obscure (you will never be able to give a satisfactory report even to yourself of just what happened).

In view, then, of a totality of possibilities, no knowing action is commensurate, since the character of the knowledge acted upon prohibits all but some eventualities. From a realist position, such action, though cautious, hopeful, and generally entered into, is unsuitable. An experimental action, generated by a mind as empty as it was before it became one, thus in accord with the possibility of no matter what, is, on the other hand, practical. It does not move in terms of approximations and errors, as "informed" action by its nature must, for no mental images of what would happen were set up beforehand; it sees things directly as they are: imperfectly involved in an infinite play of interpenetrations. Experimental music—

QUESTION: —in the U.S.A., if you please. Be more specific. What do you have to say about rhythm? Let us agree it is no longer a question of pattern, repetition, and variation.

ANSWER: There is no need for such agreement. Patterns, repetitions, and variations will arise and disappear. However, rhythm is durations of any length coexisting in any states of succession and synchronicity. The latter is liveliest, most unpredictably changing, when the parts are not fixed by a score but left independent of one another, no two performances yielding the same resultant durations. The former, succession, liveliest when (as in Morton Feldman’s Intersections) it is not fixed but presented in situation-form, entrances being at any point within a given period of time.—Notation of durations is in space, read as corresponding to time, needing no reading in the case of magnetic tape.

QUESTION: What about several players at once, an orchestra?

ANSWER: You insist upon their being together? Then use, as Earle Brown suggests, a moving picture of the score, visible to all, a static vertical line as coordinator, past which the notations move. If you have no particular togetherness in mind, there are chronometers. Use them.

QUESTION: I have noticed that you write durations that are beyond the possibility of performance.

ANSWER: Composing’s one thing, performing’s another, listening’s a third. What can they have to do with one another?

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EXPERIMENTAL MUSIC: DOCTRINE/15
QUESTION: And about pitches?

ANSWER: It is true. Music is continually going up and down, but no longer only on those stepping stones, five, seven, twelve in number, or the quarter tones. Pitches are not a matter of likes and dislikes (I have told you about the diagram Schillinger had stretched across his wall near the ceiling: all the scales, Oriental and Occidental, that had been in general use, each in its own color plotted against, no one of them identical with, a black one, the latter the scale as it would have been had it been physically based on the overtone series) except for musicians in ruts; in the face of habits, what to do? Magnetic tape opens the door providing one doesn't immediately shut it by inventing a phonogène, or otherwise use it to recall or extend known musical possibilities. It introduces the unknown with such sharp clarity that anyone has the opportunity of having his habits blown away like dust.—For this purpose the prepared piano is also useful, especially in its recent forms where, by alterations during a performance, an otherwise static gamut situation becomes changing. Stringed instruments (not string-players) are very instructive, voices too; and sitting still anywhere (the stereophonic, multiple-loud-speaker manner of operation in the everyday production of sounds and noises) listening...

QUESTION: I understand Feldman divides all pitches into high, middle, and low, and simply indicates how many in a given range are to be played, leaving the choice up to the performer.

ANSWER: Correct. That is to say, he used sometimes to do so; I haven't seen him lately. It is also essential to remember his notation of super- and subsonic vibrations (Marginal Intersection No. 1).

QUESTION: That is, there are neither divisions of the "canvas" nor "frame" to be observed?

ANSWER: On the contrary, you must give the closest attention to everything.

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QUESTION: And timbre?

ANSWER: No wondering what's next. Going lively on "through many a perilous situation." Did you ever listen to a symphony orchestra?

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QUESTION: Dynamics?

ANSWER: These result from what actively happens (physically, me-
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happens (physically, me-
chanically, electronically) in producing a sound. You won't find it in the
books. Note that. As far as too loud goes: "follow the general outlines of
the Christian life.

QUESTION: I have asked you about the various characteristics of a
sound; how, now, can you make a continuity, as I take it your intention is,
without intention? Do not memory, psychology—

ANSWER: "—never again."

QUESTION: How?

ANSWER: Christian Wolff introduced space actions in his composi-
tional process at variance with the subsequently performed time actions.
Earle Brown devised a composing procedure in which events, following
tables of random numbers, are written out of sequence, possibly anywhere
in a total time now and possibly anywhere else in the same total time next.
I myself use chance operations, some derived from the I-Ching, others from
the observation of imperfections in the paper upon which I happen to be
writing. Your answer: by not giving it a thought.

QUESTION: Is this athematic?

ANSWER: Who said anything about themes? It is not a question of
having something to say.

QUESTION: Then what is the purpose of this "experimental"
music?

ANSWER: No purposes. Sounds.

QUESTION: Why bother, since, as you have pointed out, sounds are
continually happening whether you produce them or not?

ANSWER: What did you say? I'm still—

QUESTION: I mean— But is this music?

ANSWER: AII you like sounds after all when they are made up of
vowels and consonants. You are slow-witted, for you have never brought
your mind to the location of urgency. Do you need me or someone else to
hold you up? Why don't you realize as I do that nothing is accomplished
by writing, playing, or listening to music? Otherwise, deaf as a doornail,
you will never be able to hear anything, even what's well within earshot.

QUESTION: But, seriously, if this is what music is, I could write it as
well as you.

ANSWER: Have I said anything that would lead you to think I thought
you were stupid?